



SAFETY DATA SHEET ACETONE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	ACETONE
Product number	586
Synonyms; trade names	DIMETHYL KETONE, 2- PROPANONE, PROPAN-2-ONE, ACETONE MIN 99.5%, ACETONE PH, ACETONE HIGH PURITY, MX-THINNERS HTS 10208, ACETONE HP, MX-THINNER HTS 10268, ACETONE INDUSTRIAL, ACETONE PHARMA GRADE, ACETONE – HÖGANÄS, ACETONE PHARMA – INV. LACKADE, ACETONE PHARMA, ACETONE NF, ACETONE EP, ACETONE GLD, ACETONE STATOIL, ACETONE LOW BENZENE SSL, ACETONE ELB, ACETONE CZ, ACETONE T, ACETONE RECTAPUR, ACETONE, ACETONE LOW BENZENE, ACETONE CHEM PURE
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EU index number	606-001-00-8
EC number	200-662-2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Lab Reagent Industrial Solvent Production of Rubber Oilfields Surface coating Chemical Intermediate Polymers Process Additive Monomer Binder Release Agent Formulation Resin. Cosmetics For further information, see attached Exposure Scenario.
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar 536 Grants Crescent Greenougue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	586

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Eye Irrit. 2 - H319 STOT SE 3 - H336
Environmental hazards	Not Classified

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2.2. Label elements

EC number 200-662-2

Hazard pictograms



Signal word Danger

Hazard statements
 H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary statements
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261 Avoid breathing vapour/ spray.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information
 EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name ACETONE
 REACH registration number 01-2119471330-49-XXXX
 EU index number 606-001-00-8
 CAS number 67-64-1
 EC number 200-662-2
 Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Keep the affected person warm and at rest. Get prompt medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.

Ingestion Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. DO NOT induce vomiting. Get medical attention immediately.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

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Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation Drowsiness, dizziness, disorientation, vertigo. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion Central nervous system depression.

Skin contact Prolonged contact may cause redness, irritation and dry skin.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat according to symptoms: No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is flammable. Heating may generate flammable vapours. Oxides of the following substances: Carbon. Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No smoking, sparks, flames or other sources of ignition near spillage. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation. Warn everybody of potential hazards and evacuate if necessary.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

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Methods for cleaning up

Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Provide adequate ventilation. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. No smoking, sparks, flames or other sources of ignition near spillage. Stop leak if possible without risk.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Avoid contact with skin and eyes. Provide adequate ventilation. Vapours may accumulate on the floor and in low-lying areas. Keep away from heat, sparks and open flame. Avoid the formation of mists. Eliminate all sources of ignition. Static electricity and formation of sparks must be prevented. Protect against direct sunlight. Mechanical ventilation or local exhaust ventilation may be required. Use explosion proof electric equipment. Take action to prevent static discharges. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep away from flammable and combustible materials. Earth container and transfer equipment to eliminate sparks from static electricity. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Suitable container materials: Stainless steel. Polyethylene-lined mild steel. Glass.

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Ingredient comments

WEL = Workplace Exposure Limits

DNEL

Industry - Dermal; Long term : 186 mg/kg/day
 Industry - Inhalation; Short term : 2420 mg/m³
 Industry - Inhalation; Long term : 1210 mg/m³
 Consumer - Oral; Long term : 62 mg/kg/day
 Consumer - Dermal; Long term : 62 mg/kg/day
 Consumer - Inhalation; Long term : 200 mg/m³

PNEC

- Fresh water; 10.6 mg/l
 - marine water; 1.06 mg/l
 - water; 21 mg/l
 - Sediment; 3.04 mg/kg
 - Soil; 33.3 mg/l
 - STP; 29.5 mg/l

8.2. Exposure controls

Protective equipment



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Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.
Personal protection	Wear anti-static footwear
Eye/face protection	The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. Butyl rubber. glove thickness 0.5mm To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear rubber apron. Wear rubber footwear.
Hygiene measures	Provide eyewash station. Wash hands after handling. Avoid contact with eyes.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type AX. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	47.5
pH	pH (diluted solution): 5-6 50
Melting point	-94.7°C
Initial boiling point and range	55.8 - 56.6°C
Flash point	-17°C Closed cup.
Evaporation rate	0.5 (diethyl ether = 1)
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 14.3 % Lower flammable/explosive limit: 2.5 %
Other flammability	No information available.
Vapour pressure	24.1 kPa
Vapour density	2
Relative density	0.79 @ 20°C
Bulk density	0.79 kg/l
Solubility(ies)	Soluble in water.
Partition coefficient	: -0.24
Auto-ignition temperature	465°C
Decomposition Temperature	No information available.

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Viscosity	0.32 mPa s @ 20°C
Explosive properties	No information available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	1.358 - 1.359
Particle size	No information available.
Molecular weight	58.09
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	This product contains a maximum VOC content of 790 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Does not decompose when used and stored as recommended.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Forms explosive mixtures with air. Avoid the following conditions: Chlorinated hydrocarbons.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Amines. Strong reducing agents. Alkalis - inorganic. Alkalis - organic.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Fire creates: Carbon monoxide (CO). Carbon dioxide (CO ₂).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	5,800.0
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Species	Rat
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Notes (oral LD ₅₀)	OECD 401
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Acute toxicity - dermal

ACETONE

Acute toxicity dermal (LD₅₀ mg/kg) 15,800.0

Species Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 76.0

Species Rat

ATE inhalation (vapours mg/l) 76.0

Skin corrosion/irritation

Skin corrosion/irritation May cause skin irritation.

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Drowsiness, dizziness, disorientation, vertigo. Vapours have a narcotic effect. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.

Ingestion May cause nausea, headache, dizziness and intoxication. Gastrointestinal symptoms, including upset stomach. Central nervous system depression.

Skin contact Irritating to skin. Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

SECTION 12: Ecological information

12.1. Toxicity

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Toxicity	Not considered toxic to fish.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC50, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout) LC50, 96 hours: > 100 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 8800 mg/l, Daphnia magna
Acute toxicity - microorganisms	, : 1000 mg/l, Activated sludge
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 28 days: 2.212 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability	The product is readily biodegradable.
Biodegradation	Water - Degradation (%) 91: 28 days The substance is readily biodegradable.
Chemical oxygen demand	2.21 g O ₂ /g substance

12.3. Bioaccumulative potential

Bioaccumulative potential	The product is not bioaccumulating. BCF: 3,
Partition coefficient	: -0.24

12.4. Mobility in soil

Mobility	The product is soluble in water.
Adsorption/desorption coefficient	Water - : 1.5 @ 20°C
Henry's law constant	3311 Pa m ³ /mol @ 25°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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12.6. Other adverse effects

Other adverse effects	No information required.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Do not puncture or incinerate, even when empty. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids. Waste is classified as hazardous waste.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General	Wear protective clothing as described in Section 8 of this safety data sheet.
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14.1. UN number

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UN No. (ADR/RID)	1090
UN No. (IMDG)	1090
UN No. (ICAO)	1090
UN No. (ADN)	1090

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ACETONE
Proper shipping name (IMDG)	ACETONE
Proper shipping name (ICAO)	ACETONE
Proper shipping name (ADN)	ACETONE

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•2YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

ACETONE

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

This product may impact SEVESO storage regulations.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

ACETONE

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

ECHA Disseminated REACH Dossier

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

15/03/2019

Version number

3.001

Supersedes date

27/03/2018

SDS number

586

ACETONE

SDS status

Approved.

Hazard statements in full

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Signature

Lisa Bland



Exposure scenario Use in Coatings - Consumer

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use in Coatings - Consumer
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.
Product category	PC1 Adhesives, sealants. PC4 Anti-freeze and de-icing products. PC8 Biocidal products PC15 Non-metal-surface treatment products. PC24 Lubricants, greases and release products. PC31 Polishes and wax blends. PC5 Artists supply and hobby preparations. PC9a Coatings and paints, thinners, paint removers. PC9b Fillers, putties, plasters, modelling clay. PC10 Building and construction preparations not covered elsewhere.
Main sector	SU21 Consumer uses

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
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Use in Coatings - Consumer

Concentration details

PC1 Adhesives, sealants. Covers concentrations up to 30 %. PC4_1 Washing car window Covers concentrations up to 1 %. PC4_2 Pouring into radiator Covers concentrations up to 10 %. PC4_3 Lock de-icer Covers concentrations up to 50 %. PC8_1 Laundry and dish-washing products PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) Covers concentrations up to 5 %. PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) Covers concentrations up to 15 %. PC9a_1 Water-borne latex wall paint Covers concentrations up to 1.5 %. PC9a_2 Solvent-rich, high-solid, water-borne paint Covers concentrations up to 27.5 %. PC9a_3 Aerosol spray can PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover) Covers concentrations up to 50 %. PC9b_1 Fillers and putty PC9b_2 Plasters and floor equalisers Covers concentrations up to 2 %. PC9b_3 Modelling clay Covers concentrations up to 1 %. PC9c Finger paints Covers concentrations up to 50 %. PC24_1 Liquids Covers concentrations up to 100 %. PC24_2 Pastes Covers concentrations up to 20 %. PC24_3 Sprays Covers concentrations up to 50 %. PC31 Polishes and wax blends. Covers concentrations up to 50 %.

Amounts used

Use in Coatings - Consumer

PC1_1 Glues, hobby use

For each use event, covers use amounts up to 9 g.

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

For each use event, covers use amounts up to 6390 g.

PC1_3 Glue from spray

For each use event, covers use amounts up to 85.05 g.

PC1_4 Sealants

For each use event, covers use amounts up to 75 g.

PC4_1 Washing car window

For each use event, covers use amounts up to 0.5 g.

PC4_2 Pouring into radiator

For each use event, covers use amounts up to 2000 g.

PC4_3 Lock de-icer

For each use event, covers use amounts up to 4 g.

PC8_1 Laundry and dish-washing products

For each use event, covers use amounts up to 15 g.

PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

For each use event, covers use amounts up to 27 g.

PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)

For each use event, covers use amounts up to 35 g.

PC9a_1 Water-borne latex wall paint

For each use event, covers use amounts up to 2260 g.

PC9a_2 Solvent-rich, high-solid, water-borne paint

For each use event, covers use amounts up to 744 g.

PC9a_3 Aerosol spray can

For each use event, covers use amounts up to 215 g.

PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover)

For each use event, covers use amounts up to 491 g.

PC9b_1 Fillers and putty

For each use event, covers use amounts up to 85 g.

PC9b_2 Plasters and floor equalisers

For each use event, covers use amounts up to 13800 g.

PC9b_3 Modelling clay

For each use event, avoid swallowing amounts more than 1 g.

PC9c Finger paints

For each use event, avoid swallowing amounts more than 1.35 g.

PC24_1 Liquids

For each use event, covers use amounts up to 2200 g.

PC24_2 Pastes

For each use event, covers use amounts up to 34 g.

PC24_3 Sprays

For each use event, covers use amounts up to 73 g.

PC31_1 Polishes, wax/cream (floor, furniture, shoes)

For each use event, covers use amounts up to 142 g.

PC31_2 Polishes, spray (furniture, shoes)

For each use event, covers use amounts up to 35 g.

Frequency and duration of use

Use in Coatings - Consumer

Covers daily exposures up to 8 hours (unless stated differently).

Covers exposure up to 1 application perday

PC1_1 Glues, hobby use

PC1_4 Sealants

PC4 Anti-freeze and de-icing products.

PC8_1 Laundry and dish-washing products

PC9b_3 Modelling clay

PC9c Finger paints

Covers frequency up to 365 days/year, , .

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

PC9a_3 Aerosol spray can

Covers frequency up to 1 days/year, , .

PC1_3 Glue from spray

PC9a_2 Solvent-rich, high-solid, water-borne paint

PC24_3 Sprays

Covers frequency up to 6 days/year, , .

PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)

Covers frequency up to 128 days/year, , .

PC9a_1 Water-borne latex wall paint

PC24_1 Liquids

Covers frequency up to 4 days/year, , .

PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover)

Covers frequency up to 3 days/year, , .

PC9b_1 Fillers and putty

PC9b_2 Plasters and floor equalisers

Covers frequency up to 12 days/year, , .

Covers frequency up to 2 days/year, , .

PC24_2 Pastes

Covers frequency up to 10 days/year, , .

PC31_1 Polishes, wax/cream (floor, furniture, shoes)

Covers frequency up to 29 days/year, , .

PC31_2 Polishes, spray (furniture, shoes)

Covers frequency up to 8 days/year, , .

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

Application duration: 6 hours

PC1_1 Glues, hobby use

PC1_3 Glue from spray

PC9b_1 Fillers and putty

Application duration: 4 hours

PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover)

PC9b_2 Plasters and floor equalisers

Application duration: 2 hours

PC1_4 Sealants

Application duration: 1 hour

PC9a_1 Water-borne latex wall paint

PC9a_2 Solvent-rich, high-solid, water-borne paint

Application duration: 130 minutes

PC31_1 Polishes, wax/cream (floor, furniture, shoes)

Application duration: 75 minutes

PC8_1 Laundry and dish-washing products

Application duration: 30 minutes

PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

Use in Coatings - Consumer

PC9a_3 Aerosol spray can.
 PC31_2 Polishes, spray (furniture, shoes)
 Application duration: 20 minutes
 PC4_3 Lock de-icer
 Application duration: 15 minutes
 PC4_2 Pouring into radiator
 PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)
 PC24_1 Liquids
 PC24_3 Sprays
 Application duration: 10 minutes
 PC4_1 Washing car window
 Application duration: 1 minute

Human factors not influenced by risk management

Potentially exposed body parts PC1_1 Glues, hobby use PC1_3 Glue from spray PC1_4 Sealants PC9b_1 Fillers and putty Covers skin contact area up to 35.73 cm². PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue) Covers skin contact area up to 110 cm². PC4_2 Pouring into radiator PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC9a_1 Water-borne latex wall paint PC9a_2 Solvent-rich, high-solid, water-borne paint PC24_3 Sprays PC31 Polishes and wax blends. Covers skin contact area up to 428.75 cm². PC4_3 Lock de-icer Covers skin contact area up to 214 cm². PC8_1 Laundry and dish-washing products PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover) PC9b_2 Plasters and floor equalisers Covers skin contact area up to 857.5 cm². PC9b_3 Modelling clay PC9c Finger paints Covers skin contact area up to 254.4 cm². PC24_1 Liquids PC24_2 Pastes Covers skin contact area up to 468 cm².

Other given operational conditions affecting Non-industrial exposure

Setting Indoor.
Temperature Assumes activities are at ambient temperature (unless stated differently).
Room size Covers use in room size of 20 m³. Unless otherwise stated. PC4 Anti-freeze and de-icing products. PC9a_3 Aerosol spray can PC24_1 Liquids Covers use in a one car garage (34 m³) under typical ventilation.
Ventilation rate Covers use under typical household ventilation.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Use in Cleaning Agents - Consumer

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use in Cleaning Agents - Consumer
Process scope	Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.
Product category	PC3 Air care products. PC4 Anti-freeze and de-icing products. PC8 Biocidal products PC9a Coatings and paints, thinners, paint removers. PC9b Fillers, putties, plasters, modelling clay. PC9c Finger paints. PC24 Lubricants, greases and release products. PC35 Washing and cleaning products PC38 Welding and soldering products, flux products
Main sector	SU21 Consumer uses

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
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Use in Cleaning Agents - Consumer

Concentration details

PC1 Adhesives, sealants. Covers concentrations up to 30 %. PC4_1 Washing car window Covers concentrations up to 1 %. PC4_2 Pouring into radiator Covers concentrations up to 10 %. PC4_3 Lock de-icer Covers concentrations up to 50 %. PC9a_1 Water-borne latex wall paint Covers concentrations up to 1.5 %. PC9a_2 Solvent-rich, high-solid, water-borne paint Covers concentrations up to 27.5 %. PC9a_3 Aerosol spray can PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover) Covers concentrations up to 50 %. PC9b_1 Fillers and putty PC9b_2 Plasters and floor equalisers Covers concentrations up to 2 %. PC9b_3 Modelling clay Covers concentrations up to 1 %. PC9c Finger paints Covers concentrations up to 50 %. PC24_1 Liquids Covers concentrations up to 100 %. PC24_2 Pastes Covers concentrations up to 20 %. PC24_3 Sprays Covers concentrations up to 50 %. PC35 Washing and cleaning products PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) Covers concentrations up to 15 %. PC35 Washing and cleaning products PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) PC8_1 Laundry and dish-washing products Covers concentrations up to 5 %. PC38 Welding and soldering products, flux products Covers concentrations up to 20 %. PC3_1 Air care, instant action (aerosol sprays) Covers concentrations up to 50 %. PC3_2 Air care, continuous action (solid and liquid) Covers concentrations up to 10 %.

Amounts used

Use in Cleaning Agents - Consumer

PC1_1 Glues, hobby use

For each use event, covers use amounts up to 9 g.

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

For each use event, covers use amounts up to 6390 g.

PC1_3 Glue from spray

For each use event, covers use amounts up to 85.05 g.

PC1_4 Sealants

For each use event, covers use amounts up to 75 g.

PC4_1 Washing car window

For each use event, covers use amounts up to 0.5 g.

PC4_2 Pouring into radiator

For each use event, covers use amounts up to 2000 g.

PC4_3 Lock de-icer

For each use event, covers use amounts up to 4 g.

PC35 Washing and cleaning products

PC8_1 Laundry and dish-washing products

For each use event, covers use amounts up to 15 g.

PC35 Washing and cleaning products

PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

For each use event, covers use amounts up to 27 g.

PC35 Washing and cleaning products

PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)

For each use event, covers use amounts up to 35 g.

PC9a_1 Water-borne latex wall paint

For each use event, covers use amounts up to 2760 g.

PC9a_2 Solvent-rich, high-solid, water-borne paint

For each use event, covers use amounts up to 744 g.

PC9a_3 Aerosol spray can

For each use event, covers use amounts up to 215 g.

PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover)

For each use event, covers use amounts up to 491 g.

PC9b_1 Fillers and putty

For each use event, covers use amounts up to 85 g.

PC9b_2 Plasters and floor equalisers

For each use event, covers use amounts up to 13800 g.

PC9b_3 Modelling clay

For each use event, avoid swallowing amounts more than 1 g.

PC9c Finger paints

For each use event, avoid swallowing amounts more than 1.35 g.

PC24_1 Liquids

For each use event, covers use amounts up to 2200 g.

PC24_2 Pastes

For each use event, covers use amounts up to 34 g.

PC24_3 Sprays

For each use event, covers use amounts up to 73 g.

PC3_1 Air care, instant action (aerosol sprays)

For each use event, covers use amounts up to 0.1 g.

PC3_2 Air care, continuous action (solid and liquid)

For each use event, covers use amounts up to 0.48 g.

PC38 Welding and soldering products, flux products

For each use event, covers use amounts up to 12 g.

Frequency and duration of use

Use in Cleaning Agents - Consumer

Covers daily exposures up to 8 hours (unless stated differently).

Covers exposure up to 1 application per day

Unless otherwise stated.

PC1_1 Glues, hobby use

PC1_4 Sealants

PC3 Air care products.

PC4 Anti-freeze and de-icing products.

PC35 Washing and cleaning products

PC8_1 Laundry and dish-washing products

PC9b_3 Modelling clay

PC9c Finger paints

PC38 Welding and soldering products, flux products

Covers frequency up to 365 days/year, , .

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

PC9a_3 Aerosol spray can

Covers frequency up to 1 days/year, , .

PC1_3 Glue from spray

PC9a_2 Solvent-rich, high-solid, water-borne paint

PC24_3 Sprays

Covers frequency up to 6 days/year, , .

PC35 Washing and cleaning products

PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)

Covers frequency up to 128 days/year, , .

PC9a_1 Water-borne latex wall paint

PC24_1 Liquids

Covers frequency up to 4 days/year, , .

PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover)

Covers frequency up to 3 days/year, , .

PC9b_1 Fillers and putty

PC9b_2 Plasters and floor equalisers

Covers frequency up to 12 days/year, , .

PC9a_3 Aerosol spray can.

Covers frequency up to 2 days/year, , .

PC24_2 Pastes

Covers frequency up to 10 days/year, , .

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

Application duration: 6 hours

PC1_1 Glues, hobby use

PC1_3 Glue from spray

PC9b_1 Fillers and putty

Application duration: 4 hours

PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover)

PC9b_2 Plasters and floor equalisers

Application duration: 2 hours

PC1_4 Sealants

PC38 Welding and soldering products, flux products

Application duration: 1 hour

PC9a_1 Water-borne latex wall paint

PC9a_2 Solvent-rich, high-solid, water-borne paint

Application duration: 130 minutes

PC35 Washing and cleaning products

PC8_1 Laundry and dish-washing products

Application duration: 30 minutes

Use in Cleaning Agents - Consumer

PC35 Washing and cleaning products
 PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)
 PC9a_3 Aerosol spray can.
 Application duration: 20 minutes
 PC3_1 Air care, instant action (aerosol sprays)
 PC4_3 Lock de-icer
 Application duration: 15 minutes
 PC4_2 Pouring into radiator
 PC35 Washing and cleaning products
 PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)
 PC24_1 Liquids
 PC24_3 Sprays
 Application duration: 10 minutes
 PC4_1 Washing car window
 Application duration: 1 minute
 PC3_2 Air care, continuous action (solid and liquid)
 Application duration: 8 hours
 PC3_1 Air care, instant action (aerosol sprays)
 Covers exposure up to 4 applications per day

Human factors not influenced by risk management

Potentially exposed body parts PC1_1 Glues, hobby use PC1_3 Glue from spray PC1_4 Sealants PC3_2 Air care, continuous action (solid and liquid) PC9b_1 Fillers and putty Covers skin contact area up to 35.73 cm². PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue) Covers skin contact area up to 110 cm². PC4_2 Pouring into radiator PC35 Washing and cleaning products PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC9a_1 Water-borne latex wall paint PC9a_2 Solvent-rich, high-solid, water-borne paint PC24_3 Sprays Covers skin contact area up to 428.75 cm². PC4_3 Lock de-icer Covers skin contact area up to 214 cm². PC35 Washing and cleaning products PC8_1 Laundry and dish-washing products PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover) PC9b_2 Plasters and floor equalisers Covers skin contact area up to 857.5 cm². PC9b_3 Modelling clay PC9c Finger paints Covers skin contact area up to 254.4 cm². PC24_1 Liquids PC24_2 Pastes Covers skin contact area up to 468 cm².

Other given operational conditions affecting Non-industrial exposure

Setting Indoor.

Temperature Assumes activities are at ambient temperature (unless stated differently).

Room size Covers use in room size of 20 m³. Unless otherwise stated. PC4 Anti-freeze and de-icing products. PC9a_3 Aerosol spray can PC24_1 Liquids Covers use in a one car garage (34 m³) under typical ventilation.

Ventilation rate Covers use under typical household ventilation.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

Use in Cleaning Agents - Consumer

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

De-icing and Anti-icing Applications - Consumer

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	De-icing and Anti-icing Applications - Consumer
Process scope	De-icing of vehicles and similar equipment by spraying.
Product category	PC4 Anti-freeze and de-icing products.
Main sector	SU21 Consumer uses

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	PC1 Adhesives, sealants. Covers concentrations up to 30 %. PC4_1 Washing car window Covers concentrations up to 1 %. PC4_2 Pouring into radiator Covers concentrations up to 10 %. PC4_3 Lock de-icer Covers concentrations up to 50 %.

Amounts used

De-icing and Anti-icing Applications - Consumer

PC1_1 Glues, hobby use

For each use event, covers use amounts up to 9 g.

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

For each use event, covers use amounts up to 6390 g.

PC1_3 Glue from spray

For each use event, covers use amounts up to 85.05 g.

PC1_4 Sealants

For each use event, covers use amounts up to 75 g.

PC4_1 Washing car window

For each use event, covers use amounts up to 0.5 g.

PC4_2 Pouring into radiator

For each use event, covers use amounts up to 2000 g.

PC4_3 Lock de-icer

For each use event, covers use amounts up to 4 g.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Covers exposure up to 1 application per day

PC1_1 Glues, hobby use

PC1_4 Sealants

PC4 Anti-freeze and de-icing products.

Covers frequency up to 365 days/year, , .

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

Covers frequency up to 1 days/year, , .

PC1_3 Glue from spray

Covers frequency up to 6 days/year, , .

PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

Application duration: 6 hours

PC1_1 Glues, hobby use

PC1_3 Glue from spray

Application duration: 4 hours

PC1_4 Sealants

Application duration: 1 hour

PC4_3 Lock de-icer

Application duration: 15 minutes

PC4_2 Pouring into radiator

Application duration: 10 minutes

PC4_1 Washing car window

Application duration: 12 minute

Human factors not influenced by risk management

Potentially exposed body parts PC1_1 Glues, hobby use PC1_3 Glue from spray PC1_4 Sealants Covers skin contact area up to 35.73 cm². PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue) Covers skin contact area up to 110 cm². PC4_2 Pouring into radiator Covers skin contact area up to 428 cm². PC4_3 Lock de-icer Covers skin contact area up to 214 cm².

Other given operational conditions affecting Non-industrial exposure

Setting Indoor.

Temperature Assumes activities are at ambient temperature (unless stated differently).

Room size Covers use in room size of 20 m³. Unless otherwise stated. PC4 Anti-freeze and de-icing products. Covers use in a one car garage (34 m³) under typical ventilation.

Ventilation rate Covers use under typical household ventilation.

Other given operational conditions affecting Non-industrial exposure

De-icing and Anti-icing Applications - Consumer

No specific risk management measure identified beyond those operational conditions stated.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

Manufacture, Distribution of Substances and Mixtures - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Manufacture, Distribution of Substances and Mixtures - Industrial
Process scope	Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC1 Manufacture of the substance ERC2 Formulation into mixture ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) ERC6a Use of intermediate
<u>Worker</u>	

Manufacture, Distribution of Substances and Mixtures - Industrial

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC6 Calendering operations.</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC14 Tableting, compression, extrusion, pelletisation, granulation</p> <p>PROC15 Use as laboratory reagent.</p>
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	<p>Liquid, vapour pressure > 10 kPa at STP</p> <p>Readily biodegradable.</p>
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Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Manufacture, Distribution of Substances and Mixtures - Industrial

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Use in Laboratories - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use in Laboratories - Industrial
Process scope	Use of the substance within laboratory settings, including material transfers and equipment cleaning.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
<u>Worker</u>	
Process category	PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC10 Roller application or brushing PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP Readily biodegradable.
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Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Use in Laboratories - Industrial

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures No specific risk management measure identified beyond those operational conditions stated.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Uses in Coatings - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Uses in Coatings - Industrial
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
<u>Worker</u>	

Uses in Coatings - Industrial

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC7 Industrial spraying</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC15 Use as laboratory reagent.</p> <p>PROC19 Manual activities involving hand contact</p>
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
	Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Uses in Coatings - Industrial

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Ensure material transfers are under containment or extract ventilation. Sample via a closed loop or other system to avoid exposure.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

PROC7 Industrial spraying

Spraying/fogging by machine application

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario
Use as Binders and Release Agents - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use as Binders and Release Agents - Industrial
Process scope	Covers the use as binders and release agents, including material transfers, mixing, application (including spraying and brushing), mould forming and casting and handling of waste.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC5 Use at industrial site leading to inclusion into/onto article
<u>Worker</u>	

Use as Binders and Release Agents - Industrial

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC6 Calendering operations.</p> <p>PROC7 Industrial spraying</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p>
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
	Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Use as Binders and Release Agents - Industrial

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Ensure material transfers are under containment or extract ventilation. Sample via a closed loop or other system to avoid exposure.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

PROC7 Industrial spraying

Spraying/fogging by machine application

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Rubber production and Processing - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Rubber production and Processing - Industrial
Process scope	Manufacture of tyres and general rubber articles, including processing of raw (uncured) rubber, handling and mixing of rubber additives, vulcanising, cooling and finishing.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC6a Use of intermediate ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article) ERC6c Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article) ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)

Worker

Rubber production and Processing - Industrial

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC6 Calendering operations.</p> <p>PROC7 Industrial spraying</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC14 Tableting, compression, extrusion, pelletisation, granulation</p>
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
	Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Rubber production and Processing - Industrial

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Ensure material transfers are under containment or extract ventilation. Sample via a closed loop or other system to avoid exposure.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

PROC7 Industrial spraying

Spraying/fogging by machine application

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Polymer Manufacturing and Processing - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Polymer Manufacturing and Processing - Industrial
Process scope	Processing of formulated polymers within closed or contained systems, including incidental exposures during material transfers, additives handling (e.g. pigments, stabilisers, fillers, plasticisers etc.), moulding, curing and forming activities, material reworks, storage and associated maintenance.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
<u>Worker</u>	

Polymer Manufacturing and Processing - Industrial

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC6 Calendering operations.</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC14 Tableting, compression, extrusion, pelletisation, granulation</p> <p>PROC15 Use as laboratory reagent.</p>
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
	Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Polymer Manufacturing and Processing - Industrial

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Sample via a closed loop or other system to avoid exposure.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Use in Cleaning Agents - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use in Cleaning Agents - Industrial
Process scope	Covers the use as a component of cleaning products, including transfer from storage, pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
<u>Worker</u>	

Use in Cleaning Agents - Industrial

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC7 Industrial spraying</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC19 Manual activities involving hand contact</p>
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
	Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Use in Cleaning Agents - Industrial

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Sample via a closed loop or other system to avoid exposure. Ensure material transfers are under containment or extract ventilation.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

PROC7 Industrial spraying

Spraying/fogging by machine application

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Blowing Agents - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Blowing Agents - Industrial
Process scope	Use as a blowing agent for rigid and flexible foams, including material transfers, mixing and injection, curing, cutting, storage and packing
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) ERC10a Widespread use of articles with low release (outdoor)
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC12 Use of blow agents in manufacture of foam.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
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Blowing Agents - Industrial

Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Sample via a closed loop or other system to avoid exposure. Handle substance within a closed system.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

Blowing Agents - Industrial

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Mining Chemicals - Industrial

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Mining Chemicals - Industrial
Process scope	Covers the use of the substance in extraction processes at mining operations, including material transfers, winning and separation activities and substance recovery and disposal.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

2. Conditions of use affecting exposure (Industrial - Environment 1)

Mining Chemicals - Industrial

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP
Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Sample via a closed loop or other system to avoid exposure.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use suitable eye protection.
Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Mining Chemicals - Industrial

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Use in Laboratories - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use in Laboratories - Professional
Process scope	Use of small quantities within laboratory settings, including material transfers and equipment cleaning.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
<u>Worker</u>	
Process category	PROC10 Roller application or brushing PROC15 Use as laboratory reagent. PROC19 Manual activities involving hand contact

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Use in Laboratories - Professional

Technical protective measures Ensure material transfers are under containment or extract ventilation. Limit the substance content in the product to 25%.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out operation for more than 4 hours. Avoid carrying out activities involving exposure for more than 1 hour.

Risk management measures

Use suitable eye protection.
Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Use in Coatings - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use in Coatings - Professional
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) ERC8f Widespread use leading to inclusion into/onto article (outdoor)

Worker

Use in Coatings - Professional

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC11 Non industrial spraying</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC15 Use as laboratory reagent.</p> <p>PROC19 Manual activities involving hand contact</p>
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures	Ensure material transfers are under containment or extract ventilation. Limit the substance content in the product to 25%.
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Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures	Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out operation for more than 4 hours. Avoid carrying out activities involving exposure for more than 1 hour.
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Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

PROC11 Non industrial spraying

Spraying/fogging by manual application

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.
	Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Use in Coatings - Professional

Frequency and duration of use

Emission days: 360 days/year

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Use as Binders and Release Agents - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use as Binders and Release Agents - Professional
Process scope	Covers the use as binders and release agents, including material transfers, mixing, application by spraying, brushing and handling of waste.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor) ERC8f Widespread use leading to inclusion into/onto article (outdoor)
<u>Worker</u>	

Use as Binders and Release Agents - Professional

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC11 Non industrial spraying</p>
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Ensure material transfers are under containment or extract ventilation. Limit the substance content in the product to 25%.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out operation for more than 4 hours. Avoid carrying out activities involving exposure for more than 1 hour.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

PROC11 Non industrial spraying

Spraying/fogging by manual application

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Use as Binders and Release Agents - Professional

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

Polymer Manufacturing and Processing - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Polymer Manufacturing and Processing - Professional
Process scope	Processing of formulated polymers, including material transfers, moulding and forming activities, material reworks and associated maintenance.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8c Widespread use leading to inclusion into/onto article (indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) ERC8f Widespread use leading to inclusion into/onto article (outdoor)
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC14 Tableting, compression, extrusion, pelletisation, granulation

Polymer Manufacturing and Processing - Professional

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Ensure material transfers are under containment or extract ventilation. Limit the substance content in the product to 25%.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out activities involving exposure for more than 4 hours.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Polymer Manufacturing and Processing - Professional

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

Use in Cleaning Agents - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Use in Cleaning Agents - Professional
Process scope	Covers the use as a component of cleaning products, including pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand).
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
<u>Worker</u>	

Use in Cleaning Agents - Professional

Process category	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC11 Non industrial spraying</p> <p>PROC15 Use as laboratory reagent.</p> <p>PROC19 Manual activities involving hand contact</p>
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Ensure material transfers are under containment or extract ventilation. Limit the substance content in the product to 25%.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out activities involving exposure for more than 4 hours. Avoid carrying out operation for more than 1 hour.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

PROC11 Non industrial spraying

Spraying/fogging by manual application

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Use in Cleaning Agents - Professional

Frequency and duration of use

Emission days: 360 days/year

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario Agrochemical Uses - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Agrochemical Uses - Professional
Process scope	Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging, including equipment clean-downs and disposal.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC4 Chemical production where opportunity for exposure arises PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring. PROC19 Manual activities involving hand contact

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
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Agrochemical Uses - Professional

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Ensure material transfers are under containment or extract ventilation. , or: Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out operation for more than 4 hours. Avoid carrying out activities involving exposure for more than 1 hour.

Risk management measures

Use suitable eye protection.
Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.
PROC11 Non industrial spraying
Spraying/fogging by manual application
Wear a respirator conforming to EN140 with Type A/P2 filter or better.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.
Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Agrochemical Uses - Professional

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

De-icing and Anti-icing applications - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	De-icing and Anti-icing applications - Professional
Process scope	Ice prevention and de-icing of vehicles, aircraft and other equipment by spraying.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC11 Non industrial spraying PROC19 Manual activities involving hand contact

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

De-icing and Anti-icing applications - Professional

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Ensure material transfers are under containment or extract ventilation. , or: Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out operation for more than 4 hours. Avoid carrying out activities involving exposure for more than 1 hour.

Risk management measures

Use suitable eye protection.
Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.
PROC11 Non industrial spraying
Spraying/fogging by manual application
Wear a respirator conforming to EN140 with Type A/P2 filter or better.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

Explosives manufacture and use - Professional

Identification

Product name	Acetone
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EC number	200-662-2
EU index number	606-001-00-8
Supplier	Univar 536 Grants Crescent Greenogue Industrial Estate Rathcoole Co Dublin +353 1 401 9800 +353 1 401 9142 sds@univar.com

1. Title of exposure scenario

Main title	Explosives manufacture and use - Professional
Process scope	Covers exposures arising from the manufacture and use of slurry explosives (including materials transfer, mixing and charging) and equipment cleaning.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC5 Mixing or blending in batch processes PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid, vapour pressure > 10 kPa at STP
Concentration details	Covers concentrations up to 100 %.

Explosives manufacture and use - Professional

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Ensure material transfers are under containment or extract ventilation. , or: Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Avoid carrying out activities involving exposure for more than 4 hours.

Risk management measures

Use suitable eye protection.

Wear chemically-resistant gloves (tested to EN374) in combination with 'basic' employee training.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state Liquid, vapour pressure > 10 kPa at STP

Concentration details Covers concentrations up to 100 %.

Readily biodegradable.

Amounts used

Annual amount per site: 641 tonnes

Frequency and duration of use

Emission days: 360 days/year

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

3. Exposure estimation (Environment 1)

No exposure assessment presented for the environment.

3. Exposure estimation (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.