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

1.1 Product identification:

Product name:	PE 663
UFI:	00S3-TNE6-N50H-MVPX

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

Usage:	Filled epoxy.
Uses advised against:	Not suitable for "Do-it-yourself".

1.3 Details of the supplier of the safety data sheet

Responsible distributor:	ASSYST bvba / A.S.O.W. bvba Hellegatstraat 13a 2590 Berlaar Belgium Tel: +32 495 50 61 14 / +32 496 83 70 27 Website: www.assyst.org / www.artsuppliesonweb.com Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency telephone number:

For Belgium:	Call the **Poison Control Center (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.
NHS 24 Direct	For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

Classification according to Directive (EC) No 1272/2008 and its amendments.

The product is classified according to the applicable legislation.

Classification in accordance with Regulation (EC) No 1272/2008 as amended.

Health hazards

Warning, Skin Irrit. 2, Causes skin irritation.
Warning, Eye Irrit. 2, Causes serious eye irritation.
Warning, Skin Sens. 1, May cause allergic skin reaction.
Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]:

Hazard pictograms:

Signal word Warning.

Hazardous ingredients which must be stated on the label

- ✓ reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

Hazard statements:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash the tools thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P391 Collect spillage.
Special provisions:
None.
Special provisions according to Annex XVII of REACH and subsequent amendments:
None.
2.3 Other hazards:
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Ecological information:
The substance/mixture does not contain any components believed to have endocrine disrupting properties, according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 on level 0.1% or higher.
Toxicological information:
The substance/mixture does not contain any components believed to have endocrine disrupting properties, according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 on level 0.1% or higher.

SECTION 3: Composition and information on ingredients

3.2 Mixtures:
Description:
Hazardous components within the meaning of the CLP regulation and related classification:

Chemical Name	**CAS No.** **EC No.** **Index No.** **Registration number**	**Layout (Regulation (EC) No 1272/008)**	**Concentration (%)**
reaction product: bisphenol-A- (epichlorohydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6 - 500-033-5 01-2119456619-26	Eye Irrit. 2 H319 Skin Irrit. 2 H315 Skin Sens. 1,1A, 1B H317 Aquatic Chronic 2 H411	>= 20% - < 40%
Dipropylene glycol, dibenzoate	27138-31-4 248-258-5 - 01-2119529241-49	Aquatic Chronic 3 H412	>= 1% - < 5%
benzyl alcohol	100-51-6 202-859-9 603-057-00-5 01-2119492630-38	Acute Tox. 4 H302 Acute Tox. 4 H332 Eye Irrit. 2 H319	>= 0.25% - < 0.5%
2-butoxyethanol; ethylene glycol monobutyl ether	111-76-2 203-905-0 603-014-00-0 01-2119475108-36	Acute Tox. 4 H332 Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Acute Toxicity Estimate: ATE - Oral 1200 mg/kg bw	< 0.1%

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediately and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
Protect uninjured eye.

In case of ingestion:

Do not under any circumstances induce vomiting.
OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2 Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3 Advice for firefighters:

Use suitable breathing apparatus.
Collect contaminated fire extinguishing water separately.
This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures for the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2 Environmental precautions:

Do not allow to enter into soil/subsoil.
Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand.

6.3 Methods and material for containment and cleaning up
Wash with plenty of water.
6.4 Reference to other sections:
See also section 8 and 13.

SECTION 7: Handling and storage:
7.1 Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
7.2 Conditions for safe storage, including any incompatibilities
Store in original containers, dry, tightly closed, in a cool and well-ventilated area.
Avoid contact with skin, eyes and clothing.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions on storage areas:
Sufficiently ventilated rooms.
7.3 Specific end use:
None in particular.

SECTION 8: Exposure controls/personal protection
8.1 Control parameters:
benzyl alcohol - CAS: 100-51-6
TLV TWA - 5-10 ppm
TLV STEL - 5-10 ppm
2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2
EU - TWA(8h): 98 mg/m3, 20 ppm - STEL: 246 mg/m3, 50 ppm - Notes: Skin
ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - Eye and URT irr
DNEL exposure limits
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects
Worker Professional: 8.33 mg/kg - Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Professional: 8.33 mg/kg - Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Worker Professional: 12.25 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Dipropylene glycol, dibenzoate - CAS: 27138-31-4
Worker Industry: 8.8 mg/m3 - Consumer: 8.69 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 35.08 mg/m3 - Consumer: 8.7 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 10 07 - Consumer: 0.22 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: bw/day

Worker Industry: 170 07 - Consumer: 80 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects - Notes: bw/day
benzyl alcohol - CAS: 100-51-6
Consumer: 5.4 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term (repeated)
Consumer: 4 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Consumer: 20 mg/kg - Exposure: Human Dermal - Frequency: Short Term (acute)
Consumer: 27 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term (acute)
Consumer: 20 mg/kg - Exposure: Human Oral - Frequency: Short Term (acute)
PNEC exposure limits
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
Target: Fresh Water - Value: 3 mg/l
Target: Marine water - Value: 0.3 mg/l
Target: Freshwater sediments - Value: 0.5 mg/l
Target: Marine water sediments - Value: 0.5 mg/l
Dipropylene glycol, dibenzoate - CAS: 27138-31-4
Target: Fresh Water - Value: 3.7 µh/L
Target: Marine water - Value: 0.37 µh/L
Target: Freshwater sediments - Value: 1.49 mg/kg
Target: Marine water sediments - Value: 0.149 mg/kg
Target: 08 - Value: 1 mg/kg
benzyl alcohol - CAS: 100-51-6
Target: Fresh Water - Value: 1 mg/l
Target: Freshwater sediments - Value: 5.27 mg/kg
Target: Marine water - Value: 0.1 mg/l
Target: Marine water sediments - Value: 0.527 mg/kg
Target: 08 - Value: 0.45 mg/kg
8.2 Exposure controls:
Eye protection:
Wear safety goggles (ref. Standard EN 166).
Protection for the skin:
Safety shoes.
Wear long-sleeved working clothes and safety shoes for professional use of category I (REF. Dir. 89/686 / EEC and EN 344).
Protection for hands:
Protect your hands with work gloves (ref. Directive 89/686 / EEG and its amendments and EN 374/2003).
Respiratory protection:
Use suitable protective breathing equipment. (Ref. Dir. 89/686 / EEC as amended - UNI PROTECTED / 1998 - UNI EN 529/2006).
Thermal hazards:
None.
Controlling environmental exposure:
Prevent from entering sewers, basements or any place where its accumulation can be dangerous..
Appropriate technical measures:
None.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	4
Colour:	Grey
Odour:	low
Melting point/freezing point:	Not Relevant

Boiling point or initial boiling point and boiling range:	Not Relevant
Flammability:	Not Relevant
Lower and upper explosion limit:	Not Relevant
Flash point:	> 150 °C
Auto-ignition temperature:	Not Relevant
Decomposition temperature:	Not Relevant
pH:	7
Kinematic viscosity:	Not Relevant
Solubility in water:	insoluble
Solubility in oil:	Not Relevant
Partition coefficient n-octanol/water (log value):	Not Relevant
Vapour pressure:	Not Relevant
Density and/or relative density:	Not Relevant
Relative vapour density:	Not Relevant
Particle characteristics:	
Particle size:	Not Relevant

9.2 Other information
No other relevant information.

SECTION 10: Stability and reactivity

10.1 Reactivity:
There are no particular risks of reaction with other substances under normal conditions of use.
10.2 Chemical Stability:
The product is stable under normal use and storage conditions.
10.3 Potentially hazardous reactions:
None.
10.4 Conditions to avoid
Stable under normal conditions.
10.5 Chemically Interacting Materials:
None in particular.
10.6 Hazardous decomposition products:
None.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:
Toxicological information of the product:
N/A
Toxicological information of the main substances contained in the product:
reaction product: bisphenol-A- (epichlorohydrin); epoxy resin (average molecular weight <= 700) - CAS: 25068-38-6
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 30.000 mg/kg
i) STOT-repeated exposure:
Test: NOAEC - Route: Oral - Species: Rat = 50 mg/kg
Test: NOAEC - Route: Skin - Species: Rat = 100 mg/kg
Dipropylene glycol, dibenzoate - CAS: 27138-31-4
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 3.914 mg/kg
Test: LD50 - Route: Skin - Species: Rat > 2.000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat > 200 mg/l - Duration: 4h
benzyl alcohol - CAS: 100-51-6
a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1.620 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit = 2.000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat > 4.178 mg/l - Duration: 4h - Source:
Method : OCSE 403
2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2
a) acute toxicity:
ATE - Oral 1200 mg/kg bw

If not otherwise specified, the information required by Regulation (EU) 2015/830 below should be considered as N/A:
(a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
(d) respiratory or skin sensitisation;
(e) mutagenicity in germ cells;
(f) carcinogenicity;
(g) reproductive toxicity;
(h) STOT single exposure;
(i) STOT on repeated exposure;
(j) hazard of aspiration.
11.2 Information on other hazards
Hormone-disrupting properties
Product:
Rating:
The substance/mixture does not contain any components believed to have endocrine disrupting properties, according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 on level 0.1% or higher.
Further information
Product:
Comments:
No data available

SECTION 12: Ecological information

12.1 Toxicity:
Adopt good working practices, so that the product is not released into the environment.
benzyl alcohol - CAS: 100-51-6
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 770 mg/l - Duration h: 1
Endpoint: LC50 - Species: Fish = 460 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48 - Notes: Metodo : OCSE 202
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia = 51 mg/l - Notes: Metodo : OCSE 211
e) Plant toxicity:
Endpoint: EC50 - Species: Algae = 770 mg/l - Duration h: 72 - Notes: Metodo : OCSE 201
12.2 Persistence and Degradability:
PE 663
Biodegradability:
No data available.
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
Biodegradability:
not biodegradable

Dipropylene glycol, dibenzoate - CAS: 27138-31-4
Biodegradability:
Easily biodegradable.
benzyl alcohol - CAS: 100-51-6
Biodegradability:
Biodegradable
12.3 Bioaccumulation:
PE 663
Bioaccumulation:
Information not available
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
Bioaccumulation:
Information not available
Dipropylene glycol, dibenzoate - CAS: 27138-31-4
Bioaccumulation:
Not bioaccumulative
benzyl alcohol - CAS: 100-51-6
Bioaccumulation:
Shortly bioaccumulative.
12.4 Mobility in Soil:
PE 663
Mobility in soil:
No data available
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
Mobility in soil:
No data available
Dipropylene glycol, dibenzoate - CAS: 27138-31-4
Mobility in soil:
No data available
benzyl alcohol - CAS: 100-51-6
Mobility in soil:
No data available
12.5 Results of PBT and vPvB assessment
vPvB-substances: None - PBT Substances None
12.6 Hormone-disrupting properties
Product:
Rating:
The substance/mixture does not contain any components believed to have endocrine disrupting properties, according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 on level 0.1% or higher.
12.7 Other Adverse Effects:
None.

SECTION 13: Instructions for disposal

13.1 Waste treatment methods:
Recover if possible.
In so doing, comply with the local and national regulations currently in force.

SECTION 14: Information relating to carriage

14.1 UN number

Not classified as hazardous within the meaning of transport regulations.

14.2 Proper load name according to UN Model Regulations

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for the user

Comments:

The carriage of dangerous goods, including loading and unloading, must be carried out in accordance with regulations by personnel who have received the necessary training;

The shipping classification(s) given herein are for information only, and based solely on the properties of the unpackaged material as described in this MSDS. Transport classifications may vary in terms of mode of transport, package size and variations in regional resp. national regulations.

14.7 Sea transport in bulk according to IMO instruments

Not applicable for product as delivered.

SECTION 15: Legally required information

15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1
Product belongs to category: E2
15.2 Chemical safety assessment:
No chemical safety assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of the H statements

H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
H302 Harmful if swallowed.
H332 Harmful if inhaled.

Full text of other abbreviations

Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

This Safety Data Sheet has been fully updated in accordance with Regulation 2020/878.
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) No 1272/2008	**Classification procedure**
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document has been drawn up by a competent person who has undergone appropriate training.
Main bibliographical sources:
ECDIN - Data and Information Network on Environmental Chemicals - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition – Van Nostrand Reinold.

The information contained herein is based on our state of knowledge at the above-specified date.
It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.

GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goodsby Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.