SAFETY DATA SHEET

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

1.1 Product identification:

Product name: PE 640 B

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

Usage: Filled epoxy.

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, Acute Tox. 4, Harmful if swallowed.
Hazard, skin Corr. 1B, Causes severe skin burns and eye damage.
Hazard, Eye Dam. 1, Causes serious eye damage.
Warning, Skin Sens. 1, May cause allergic skin reaction.
Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical effects, effects on human health and the environment:

No other hazards

2.2 Label elements:

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

Hazard pictograms:

Signal word Danger.

Hazardous ingredients which must be stated on the label

- ✓ Fatty acids, C18unsatd., Dimers, oligomer. Reaction products with sebum fatty acids
- ✓ Hydrocarbons, polymers with phenol
- ✓ 2,4,6-tris (dimethylaminomethyl) phenol
- ✓ benzyl alcohol
- ✓ 3-aminomethyl-3,5,5-trimethylcyclohexylamine: May cause allergic reaction.

Indications of danger:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
Precautions
Prevention:
P261 Avoid breathing dust / fumes / gas / vapour / spray.
P264 Wash tools thoroughly after use.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/face protection.
Action:
P303 + P361 + P353 IF ON SKIN (or hair): Remove contaminated clothing immediately. Rinse skin with water or shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Call a POISON CENTER or doctor immediately.
Special provisions according to Annex XVII of REACH and subsequent amendments:
None.
2.3 Other hazards:
vPvB-substances: None - PBT Substances None
Other hazards:
No other hazards

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/List** **Registration number** **Index No.**	**Layout (Regulation (EC) No 1272/008)**	**Concentration (%)**
Fatty acids, C18unsatd., Dimers, oligomer. Reaction products with sebum fatty acids	68082-29-1	Skin Irrit. 2 H315 Eye Irrit. 2 H319 Skin Sens. 1 H317	>= 20% -< 40%
Hydrocarbons, polymers with phenol	68512-30-1 270-966-8 01-2119555274-38	Acute Tox. 4 H302	>= 5% -< 10%
2,4,6-tris (dimethylaminomethyl) phenol	90-72-2 202-013-9 01-2119560597-27 603-069-00-0	Acute Tox. 4 H302 Eye Irrit. 2 H319 Skin Irrit. 2 H315	>= 5% -< 10%
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2 220-666-8 01-2119514687-32 612-067-00-9	Acute Tox. 4 H312 Acute Tox. 4 H302 Skin Corr. 1B H314 Skin Sens. 1,1A,1B H317 Aquatic Chronic 3 H412	>= 5% -< 10%
benzyl alcohol	100-51-6 202-859-9 01-2119492630-38 603-057-00-5	Acute Tox. 4 H332 Acute Tox. 4 H302	>= 5% -< 10%

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

In case of skin contact:

Remove contaminated clothing immediately.
SEEK IMMEDIATE MEDICAL ATTENTION.
Remove contaminated clothing immediately and dispose of it safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eye contact:

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

In case of ingestion:

DO NOT induce vomiting.
Do not give anything to eat or drink.

In case of inhalation:

Take the victim into the fresh air and keep him warm and calm.

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

Appearances:

No

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

In case of accident or feeling unwell, seek medical advice immediately (show the instructions for use or the Safety Data Sheet where possible).

Treatment:

No

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

Specific firefighting hazards:

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

5.3 Advice for firefighters:

Special protective equipment for firefighters:

Use suitable respiratory equipment.
Collect contaminated extinguishing water separately. It may not be discharged into the sewage system.
Move undamaged containers out of the immediate danger zone if this can be done safely.

SECTION 6: Accidental release measures for the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions:

Wear personal protective equipment.
Bringing people to safety.
See protective measures under points 7 and 8.

6.2 Environmental precautions:

Environmental precautions:

Do not allow to enter soil/subsoil. Do not allow to enter surface water or the sewage system.
Collect and dispose of contaminated wash water.
In the event of gas escape or entry into waterways, soil or sewage system, inform the responsible authorities.

Suitable material for absorption: absorbent material, organic, sand.
6.3 Methods and material for containment and cleaning up
Cleaning methods:
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 spray.
Do not use empty containers before they have been cleaned.
Make sure that there are no incompatible materials in the containers before carrying out transfer operations.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Soiled clothing should be changed before entering eating areas.
Do not eat or drink during work.
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.
Mismatched 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
DNEL exposure limits
2,4,6-tris (dimethylaminomethyl) phenol - CAS: 90-72-2
Worker Industry: 0.31 mg / m3 - Exposure: Human Inhalation - Frequency: Long-term, systemic effects
Benzyl alcohol - CAS: 100-51-6
Consumer: 5.4 mg / m3 - Exposure: Human Inhalation - Frequency: Prolonged (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
2,4,6-tris (dimethylaminomethyl) phenol - CAS: 90-72-2
Objective: Freshwater - Value: 0.084 mg/l
Purpose: Sea water - Value: 0,0084 mg/l
Benzyl alcohol - CAS: 100-51-6
Objective: Freshwater - Value: 1 mg/l
Objective: Freshwater sediment - Value: 5.27 mg / kg
Purpose: Sea water - Value: 0,1 mg/l
Objective: Marine sediment - 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:
No
Controlling environmental exposure:
Avoid entering sewers, basements or other places where accumulation can be dangerous.
Appropriate technical measures:
No

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	pasta
Colour:	beige
Odour:	low
Odour threshold:	Not implemented
pH:	7
Melting point/freezing point:	Not relevant
Boiling point and boiling range:	Not relevant
Flammability:	> 100 ° C
Lower and upper explosion limit:	Not relevant
Flashpoint:	> 200 ° C
Auto-ignition temperature: not	relevant
Decomposition temperature:	Not relevant
Density:	0.60 g/cm3 (25 °C)
Bulk density:	Not implemented
Solubility in water:	Insoluble
Solubility in other solvents:	Not performed
Partition coefficient: n-octanol/water:	No data available
Ignition temperature:	Not applicable
Auto-ignition temperature:	Not applicable
Thermal decomposition:	Method: No data available
Viscosity	
Viscosity, dynamic:	Not carried out
Viscosity, kinematic:	Not done
Explosive properties:	Not applicable
Oxidising properties:	Not applicable

9.2 Other information

Surface tension:	Not done
Sublimation point:	Not applicable

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:
2,4,6-tris (dimethylaminomethyl) phenol - CAS: 90-72-2
(a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 2.169 mg / kg
3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
(a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 1030 mg / kg
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
Hydrocarbons, polymers with phenol - CAS: 68512-30-1
LD50: 6.27 ml / kg (oral rat)
LD50: 10 ml / kg (dermal rat)
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
Endocrine disrupting properties:
No endocrine disruptors present in concentration> = 0.1%.

SECTION 12: Ecological information
12.1 Toxicity:
Apply good working practices so that the product does not end up in the environment.
2,4,6-tris (dimethylaminomethyl) phenol - CAS: 90-72-2
(a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 175 mg/l - Duration: 96

Endpoint: EC50 - Species: INVACQ = 718 mg/l - Duration u: 96
Endpoint: EC50 = 84 mg/l - Duration h: 72
Endpoint: NOEC = 2 mg/l - Time to market: 2
3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
(a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 110 mg/l - Duration: 96
Endpoint: EC50 - Species: Daphnia = 23 mg/l - Duration h: 48
Benzyl alcohol - CAS: 100-51-6
(a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 770 mg/l - Duration: 1
Endpoint: LC50 - Species: Fish = 460 mg/l - Duration: 96
Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48
Terminal point: EC50 - Species: Daphnia = 66 mg/l
(b) Chronic aquatic toxicity:
Endpoint: NOEC - Species: Daphnia = 51 mg/l
12.2 Persistence and Degradability:
No
PE 640 B
Biodegradability: No data available.
2,4,6-tris (dimethylaminomethyl) phenol - CAS: 90-72-2
Biodegradability: Not readily biodegradable
Benzyl alcohol - CAS: 100-51-6
Biodegradability: Readily biodegradable.
12.3 Bioaccumulation:
PE 640 B
Bioaccumulation: Information not available
2,4,6-tris (dimethylaminomethyl) phenol - CAS: 90-72-2
Bioaccumulation: Information not available
Benzyl alcohol - CAS: 100-51-6
Bioaccumulative: Bioaccumulative in the near future.
12.4 Mobility in Soil:
PE 640 B
Mobility in soil: No data available
2,4,6-tris (dimethylaminomethyl) phenol - CAS: 90-72-2
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 Endocrine disrupting properties:
No endocrine disruptors present in concentration> = 0.1%.
12.7. Other adverse effects
No

SECTION 13: Instructions for disposal
13.1 Waste treatment methods:
Collect, if possible. Send to authorised disposal facilities or for incineration under controlled conditions.
Observe the applicable local and national regulations.

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
Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No.

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 limits)
Regulation (EC) No 1907/2006 (REACH)
Regulation (EC) No 1272/2008 (CLP)
Regulation (EC) 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) No 286/2011 (ATP 2 CLP)
Regulation (EU) No 618/2012 (ATP 3 CLP)
Regulation (EU) No 487/2013 (ATP 4 CLP)
Regulation (EU) No 944/2013 (ATP 5 CLP)
Regulation (EU) No 605/2014 (ATP 6 CLP)
Regulation (EU) No 2015/1221 (ATP 7 CLP)
Regulation (EU) 2016/918 (ATP 8 CLP)
Regulation (EU) 2016/1179 (ATP 9 CLP)
Regulation (EU) 2017/776 (ATP 10 CLP)
Regulation (EU) No 2018/669 (ATP 11 CLP)
Regulation (EU) No 2018/1480 (ATP 13 CLP)
Regulation (EU) No 2019/521 (ATP 12 CLP)
Restrictions on the product or substances in Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent amendments:
No
Please refer to the following legal provisions, if applicable:
Directive 2012/18 / EU (Seveso III)
Regulation (EC) No 648/2004 (detergents).
Dir. 2004/42 / EC (VOC Directive)
Provisions relating to Directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, Part 1
Product belongs to category:
no
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
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
H332 Harmful by inhalation.

Full text of other abbreviations

Acute tox. 4	3.1 / 4 /	Dermal Acute toxicity (dermal), category 4
Acute tox. 4	3.1 / 4 /	Acute toxicity by inhalation (inhalation) category 4
Acute tox. 4	3.1 / 4 / Oral	Acute oral toxicity category 4
Skin corrosion 1B	3.2 / 1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2 / 2	Skin irritation, category 2
Eye contact. 1	3.3 / 1	Serious eye damage, Category 1
Eye Irrit. 2	3.3 / 2	Eye irritation, category 2
Skin Sens.1	3.4.2 / 1	Skin sensitisation, category 1
Skin Sens.1,1A, 1B	3.4.2 / 1-1A-1B	Skin sensitisation, category 1,1A, 1B
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 2015/830.
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

Acute tox. 4,	H302	Calculation method
Skin Corr. 1B,	H314	Calculation method
Eye pt. 1,	H318	Calculation method
Skin Sens. 1,	H317	Calculation method
Aquatic Chronic 3,	H412	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
THE DANGEROUS PROPERTY OF SAX FROM INDUSTRIAL MATERIALS - Eighth edition - Van Nostrand Reinold
The information contained in this document is based on our knowledge at the date specified above. It refers exclusively to the product specified and does not constitute a guarantee of any particular quality.
It is the user's duty to ensure that this information is appropriate and complete in relation to the specific intended use.
This MSDS cancels and replaces all previous releases.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute toxicity estimate
ATEmix:	Acute toxicity estimation (mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	classification, labelling, packaging.
DNEL:	Derived no-effect dose.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally harmonised system for classification and labelling of chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the International Air Transport Association (IATA).
ICAO:	International Civil Aviation Organisation.

ICAO-TI:	Technical Instructions of 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 the test population.
LD50:	lethal dose, for 50 percent of the test population.
PNEC:	Predicted no-effect concentration.
RID:	Regulation on the International Transport of Dangerous Goods by Rail.
STEL:	Short-term exposure limit.
STOT:	Specific target organ toxicity.
TLV:	Threshold Limiting Value.
TWA:	time-weighted average
WGK:	German water hazard class.