

Safety Data Sheet acc. to OSHA HCS

Printing date 04/21/2022

Revision 6

Reviewed on 04/21/2022

Trade name: TW-056301 (PART B)

(Contd. of page 3)

Protective Action Criteria for Chemicals

PAC-1:

4246-51-9	3,3'-(Oxybis(2,1-ethane-diylloxy)) bis-1-popanamine	13 mg/m ³
28064-14-4	Epoxy phenol novolac resin	30 mg/m ³
108-95-2	phenol	15 ppm
112-24-3	3,6-diazaoctanethylenediamin	3 ppm

PAC-2:

4246-51-9	3,3'-(Oxybis(2,1-ethane-diylloxy)) bis-1-popanamine	140 mg/m ³
28064-14-4	Epoxy phenol novolac resin	330 mg/m ³
108-95-2	phenol	23 ppm
112-24-3	3,6-diazaoctanethylenediamin	14 ppm

PAC-3:

4246-51-9	3,3'-(Oxybis(2,1-ethane-diylloxy)) bis-1-popanamine	850 mg/m ³
28064-14-4	Epoxy phenol novolac resin	2,000 mg/m ³
108-95-2	phenol	200 ppm
112-24-3	3,6-diazaoctanethylenediamin	83 ppm

7 Handling and storage

- Handling:
- Precautions for safe handling
 - Thorough dedusting
 - Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
 - Requirements to be met by storerooms and receptacles: Store at temperatures not exceeding 10°C. Keep cool.
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: Keep receptacle tightly sealed.
 - Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- Components with limit values that require monitoring at the workplace:
 - The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
 - At this time, the other constituents have no known exposure limits.

108-95-2 phenol

PEL	Long-term value: 19 mg/m ³ , 5 ppm Skin
REL	Long-term value: 19 mg/m ³ , 5 ppm Ceiling limit value: 60* mg/m ³ , 15.6* ppm *15-min; Skin

(Contd. on page 5)

US

Safety Data Sheet acc. to OSHA HCS

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Trade name: TW-056301 (PART B)

(Contd. of page 8)

Transport/Additional information:

DOT

- Quantity limitations
 - On passenger aircraft/rail: 15 kg
 - On cargo aircraft only: 50 kg

IMDG

- Limited quantities (LQ) 1 kg
- Excepted quantities (EQ) Code: E2
 - Maximum net quantity per inner packaging: 30 g
 - Maximum net quantity per outer packaging: 500 g

UN "Model Regulation":

UN 1760 CORROSIVE LIQUID, N.O.S. (POLYGLYCOLDIAMINE), 8, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
 - No further relevant information available.

Sara

Section 355 (extremely hazardous substances):

108-95-2 phenol

Section 313 (Specific toxic chemical listings):

108-95-2 phenol

TSCA (Toxic Substances Control Act):

All components are listed and have the value ACTIVE.

Hazardous Air Pollutants

108-95-2 phenol

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

108-95-2 phenol

D, I

TLV (Threshold Limit Value)

108-95-2 phenol

A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 10)

US

Safety Data Sheet

acc. to OSHA HCS

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(Contd. of page 5)

· Odor threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	294 °C (561.2 °F)
· Flash point:	116 °C (240.8 °F)
· Flammability (solid, gaseous):	Not determined.
· Ignition temperature:	260 °C (500 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	2.1 Vol %
Upper:	10.5 Vol %
· Vapor pressure at 20 °C (68 °F):	4 hPa (3 mm Hg)
· Density at 20 °C (68 °F):	>1.06744 g/cm ³ (>8.90779 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	3.0 %
VOC content:	3.00 %
· Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2022

Revision 6

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Trade name: TW-056301 (PART B)

(Contd. of page 6)

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

4246-51-9 3,3'-(Oxybis(2,1-ethane-diyloxy)) bis-1-popanamine

Oral	LD50	4,290 mg/kg (rat)
Dermal	LD50	2,500 mg/kg (rabbit)

- Primary irritant effect:

· on the skin: Caustic effect on skin and mucous membranes.

· on the eye: Strong caustic effect.

· Sensitization: Sensitization possible through skin contact.

- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- Carcinogenic categories

· IARC (International Agency for Research on Cancer)

108-95-2 phenol

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Ecotoxic effects:
- Remark: Toxic for fish
- Additional ecological information:
- General notes:
- Water hazard class 2 (Self-assessment): hazardous for water
- Do not allow product to reach ground water, water course or sewage system.
- Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- Danger to drinking water if even small quantities leak into the ground.
- Also poisonous for fish and plankton in water bodies.
- Toxic for aquatic organisms
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

(Contd. on page 8)

Safety Data Sheet acc. to OSHA HCS

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Trade name: *TW-056301 (PART B)*

(Contd. of page 1)

Hazard-determining components of labeling:

3,3'-(Oxybis(2,1-ethane-diylloxy)) bis-1-popanamine
phenol
Epoxy phenol novolac resin
3,6-diazoctanethylenediamin

Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P310 Immediately call a poison center/doctor.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see on this label).
P314 Get medical advice/attention if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)



HMIS-ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

(Contd. on page 3)

US

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Printing date 04/21/2022

Revision 6

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Trade name: *TW-056301 (PART B)*

(Contd. of page 10)

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Skin Corrosion 1B: Skin corrosion/irritation - Category 1B
Eye Damage 1: Serious eye damage/eye irritation - Category 1
Sensitization - Skin 1: Skin sensitisation - Category 1
Germ Cell Mutagenicity 2: Germ cell mutagenicity - Category 2
Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2

* Data compared to the previous version altered.

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