

MATERIAL SAFETY DATA SHEET

CASTING/COATING, CLEAR (COMPONENT B – HARDENER)

Section 1. Chemical Product and Company Identification

Common Name: (Component B – Hardener)
Synonym: Not available
Trade Name: PoxyArt
Material Uses: Casting / Coating

Validation Date: 16.02.2017

Section 2. Composition, Information on Ingredients

Substance/Preparation: Preparation

Ingredient Name	CAS Number	%	EC Number	EU/SABS 0265 Classification
Polyoxyalkyleneamine Mixture	39423-51-3	>40	-	Xn C; R20/21/22/34/36/37/38/43 R52/53
Nonylphenol	84852-15-3	>40	284-325-5	Xn; R22/34/50/53 R62/63
Accelerator (Piperazine Mixture)	110-85-0	<10	203-808-3	R21/22/34/42/43 R52/53
See Section 16 for the full text of the R Phrases declared above				

* Occupational Exposure Limit(s), if available, are listed in section 8

Section 3. Hazardous Identification

The preparation is classified as not dangerous according to Directive 1999/45/EC and its amendments.

Classification: Xn; R20/21/22/34
Xi; R36/37/38
R43

Human health hazards: Irritating to eyes and skin.
May cause sensitisation by skin contact.

See Section 11 for more detailed information on health effects and symptoms.

Section 4. First Aid Measures

Eye Contact: In cases of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms appear.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Notes to Physician: No specific treatment, treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms.

Section 5. Fire Fighting Measures

Flammability of the Product:	May be combustible at high temperatures
Auto-ignition Temperature:	The lowest known value is 336.9°C (638.4°F) (Triethylenetetramine).
Flash Points:	The lowest known value is Closed cup: 98.9°C (210°F). Open cup: 97.9°C (208°F). (Cleveland). (Diethylenetriamine).
Flammable Limits:	Not available
Products of Combustion:	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...).
Fire Hazards in Presence of Various Substances:	Slightly flammable to flammable in presence of open flames, sparks and static discharge, of heat.
Explosion Hazards in Presence of Various Substances:	None identified
Fire Fighting Media and Instructions:	In case of fire, use water spray (fog), foam, dry chemical, or CO ₂ .
Special protective Equipment for fire-fighters:	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Special Remarks on Fire Hazards:	When heated to decomposition, it emits toxic fumes. (Diethylenetriamine)
Special Remarks on Explosion Hazards:	No additional remark.

Section 6. Accidental Release Measures

Personal precautions: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).

Environmental Precautions and Clean-up Methods: Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.
If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills like spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

Section 7. Handling and Storage

Handling:	Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use suitable protective equipment (Section 8).
Storage:	Keep container tightly closed. Keep container in a cool, well-ventilated area.
Packaging materials Recommended:	Use original container.

Section 8. Exposure Controls, Personal Protection

Exposure Controls

Occupational exposure

Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Respiratory protection: A respirator is not needed under normal and intended conditions of product use. Wear appropriate respirator when ventilation is inadequate.

Hand protection: Rubber gloves. Neoprene gloves.

Eye protection: Safety glasses. Goggles, face shield, or other full-face protection if potential exists for direct exposure to aerosols or splashes.

Skin protection: Additional body garments should be used based upon the task being performed (e.g. sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces. Appropriate techniques should be used to remove potentially contaminated clothing.

Section 8. Exposure Controls, Personal Protection (Continue/...)

Personal protective Equipment



(Pictograms):

Occupational exposure limits: n/a

Section 9. Physical and Chemical Properties

Physical State and

Appearance: Free Flowing Liquid

Colour: Clear-Transparent

Odour: Amine

Taste: Not available

Molecular Weight: Not applicable

Molecular Formula: Not applicable

pH: Basic

Boiling/Condensation Point: The lowest known value is 207.05°C (404.7°F) (Diethylenetriamine).

Melting/Freezing Point: May start to solidify at 12°C (53.6°F) based on data for: Triethylenetetramine.

Critical Temperature: The lowest known value is 459.9°C (859.8°F) (Triethylenetetramine).

Specific Gravity: 0.95 – 0.97g/cm³

Vapour Pressure: The highest known value is 0.03 kPa (0.2 mmHg) (at 20°C) (Diethylenetriamine).

Vapour Density: The highest known value is 5.04 (Air = 1) (Triethylenetetramine).

Volatility: Not available

Odour Threshold: Not available

Evaporation Rate: 0.005 (Diethylenetriamine) compared to Butyl acetate.

VOC: Not available

Viscosity: 2400 – 2500 mPa.s

LogK_{ow}: The product is partly soluble in water and octanol.

Ionicity (in Water): Not available

Dispersion Properties: Is partly dispersed in cold water, hot water.

Solubility: Partly soluble in cold water, hot water, methanol, diethyl ether, n-octanol.

Physical Chemical Comments: No additional remark.

Section 10. Stability and Reactivity

Stability and Reactivity: The product is stable

Conditions of Instability: None identified.

Incompatibility with Various Substances: Reactive with acids.
Slightly reactive to reactive with OXIDIZING AGENTS.

Hazardous Decomposition Products: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...)

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

Potential Acute Health Effects

Inhalation: Harmful by inhalation.
Ingestion: Ingestion causes gastrointestinal irritation and diarrhea. Harmful if swallowed
Skin contact: Irritating to skin. May cause sensitisation by skin contact.
Eye contact: Irritating to eyes / causes burns.

Potential Chronic Health Effects

<u>Ingredient Name</u>	<u>Carcinogenic Effects</u>	<u>Mutagenic Effects</u>	<u>Developmental toxicity</u>	<u>Impairs fertility</u>
			Toxic to reproductive Health Categ. 3	

Over-exposure signs/symptoms

Target Organs: Contains material, which causes damage to the following organs: lungs, kidneys, liver, gastrointestinal tract, cardiovascular system, skin, eye, lens or cornea.

Other adverse effects: None identified.

Section 12. Ecological Information

Ecotoxicity Data

Ingredient Name	Species	Period	Result
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BOD and COD: Not available.

Biodegradable/OECD: Not available.

Mobility: Not available.

Products of Degradation: These products are carbon oxides (CO, CO₂) and water, nitrogen oxides (NO, NO₂...).

Toxicity of the Products

of Biodegradation: The products of degradation are less toxic than the product itself. Toxic to aquatic organisms.

Special Remarks on the

Products of Biodegradation: Not available

Section 13. Disposal Considerations

Waste Disposal: Incinerate in a licensed high temperature hazardous waste incinerator. Dispose of according to all federal, state and local applicable regulations.

Waste Stream: Not applicable.

Waste Classification: Not applicable.

European Waste Catalogue

(EWC): Not applicable.

Consult your local or regional authorities.

Section 14. Transport Information

Regulatory Information	UN Number 1760	Proper shipping name	Class	Packing Group	Label	Additional information
ADR/RID/SABS 0228 Class	8	Corrosive n.o.s.	8	3	8	
IMDG Class	8					
IATA-DGR Class	8					

Section 15. Regulatory Information

EU / SABS 0265 Classification

Hazard symbol(s):



Risk phrases:

Irritant / Harmful

R20/21/22 – Harmful by inhalation, in contact with skin and if swallowed.

R34 – Causes burns.

R43 – May cause sensitisation by skin contact.

R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R62 – Possible risk of impaired fertility.

R63 – Possible risk of harm to the unborn child.

Safety phrases:

S25 – Avoid contact with eyes.

S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.

Contains:

Nonylphenol, Alkyl ether amines, Piperazine

Product Use:

Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amended and the intended use.

- Industrial applications.

Section 16. Other information

Full text of R phrases referred to in Section 2 and 3:

R34 – Causes burns.

R20/21/22 – Harmful by inhalation, in contact with skin and if swallowed.

R22 – Harmful if swallowed.

R21/22 – Harmful in contact with skin and if swallowed.

R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R43 – May cause sensitisation by skin contact.

R63 – Possible risk of harm to the unborn child.

R62 – Possible risk of impaired fertility.

R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S25/26/36/37/39

Full text of classifications referred to in Sections 2 and 3:

C- Corrosive

Xn- Harmful

Xi- Irritant

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