

SAFETY DATA SHEET

Product Name: RainguardPro® 100% Epoxy (Part B)
Product Codes: EP-0301, EP-0304

SECTION 1: Identification

MANUFACTURER: Rainguard Brands, LLC
RainguardPro
2736 West McDowell Road
Phoenix, AZ 85009
United States of America

RAINGUARD PHONE: (949) 515-8800

POISON CENTER: (800) 222-1222

EMAIL: support@rainguardpro.com

WEBSITE: rainguardpro.com

REVISION DATE: 01/20/23

SECTION 2: Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam . /1 rrit.	1	Serious eye damage/eye irritation
Skin Sens.	1A	Skin sensitization
Aquatic Acute	3	Hazardous to the aquatic environment - acute

PICTOGRAMS



Signal Word: DANGER

Hazard Statements:

Hazard #	Hazard Statement
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe dust or mist.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do not eat, drink or smoke when using this product.
P264	Wash skin thoroughly after handling

PRECAUTIONARY STATEMENTS (Response):

P310	Immediately call a POISON CENTER/doctor
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Immediately take off all contaminated clothing. Rinse skin with water (or shower)
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P301+P330+P331	IF SWALLOWED: Rinse mouth. DO NOT induce vomitingseveral minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P361 + P364

Take off immediately all contaminated clothing and wash it before reuse.

PRECAUTIONARY STATEMENTS (Storage):

P405

Store locked up.

PRECAUTIONARY STATEMENTS (Disposal):

P501

Dispose of contents/container to hazardous or special waste collection point.

2.3 Hazards not otherwise classified:

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition

HAZARDOUS COMPONENTS

CHEMICAL NAME	CAS #	%	COMMENTS
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	>= 99.7 - <= 100.0%	
Cyclohexanecarbonitrile, 5-amino-1,3,3-trimethyl-	133117-08-5	>= 0.1 - <= 0.1 %	

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

GENERAL ADVICE:

Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). If not breathing, give artificial respiration. First aid personnel should pay attention to their own safety.

EYE EXPOSURE:	In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.
SKIN EXPOSURE:	Wash affected areas thoroughly with soap and water. Remove contaminated clothing. Immediate medical attention required.
INHALATION:	Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.
INGESTION:	Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

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

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote. Pulmonary oedema prophylaxis. Medical monitoring for at least 24 hours.

SECTION 5: Fire Fighting Measures

5.1 Extinguishing Media	Dry chemical, carbon dioxide, alcohol-resistant foam. Use water spray to keep fire-exposed containers cool. Unsuitable Extinguishing Media: High volume water jet.
5.2 Special Hazards Arising from the Substance or Mixture:	Hazards during fire-fighting: No particular hazards known.
5.3 Advice for Firefighters:	Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

5.4 Further Information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures:

Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.

6.2 Environmental Precautions:

This product is not regulated by RCRA. This product is not regulated by CERCLA ("Superfund"). Do not discharge into drains/surface waters/groundwater.

6.3 Methods and Materials for Containment and Cleaning up:

Spills should be contained, solidified, and placed in suitable containers for disposal.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling:

Containers should be opened carefully in well-ventilated areas to avoid static discharge. Protection against fire and explosion: No explosion proofing necessary.

7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Segregate from acids and acid forming substances. Segregate from isocyanates. Segregate from epoxides. Suitable materials for containers: Carbon steel (Iron), Stainless steel 1.4401, Stainless steel 1.4301 (V2), High density polyethylene (HOPE), glass, Low density polyethylene (LOPE), Stove-lacquer RDL 16
Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Keep tanks under inert gas.

Keep away from sources of ignition - No smoking.
Keep container tightly closed and in a cool place.
Storage stability:
Storage duration: 24 Months
From the data on storage duration in this safety data sheet no agreed statement regarding the warrantee of application properties can be deduced.

7.3 Regulatory Requirements:

No data found.

SECTION 8: Exposure Controls and Personal Protection

No occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Chemical resistant protective gloves, Suitable materials, polyvinylchloride (Pylox)

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

chemical-protection suit (I.e. according to EN 14605)

General safety and hygiene measures:

Eye wash fountains and safety showers must be easily accessible. Avoid inhalation of vapours/mists. Wear protective clothing as necessary to prevent contact.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

FORM:	Liquid
ODOR:	Amine-like
ODOR THRESHOLD:	Not determined due to potential health hazard by inhalation.
COLOR:	Colorless to yellow
pH:	11 .6 (8.5 g/1, 20 °C)
MELTING POINT:	247 °C (760 mmHg)

FREEZING POINT:	10 °C (760 mmHg)
FLASH POINT:	112 °C (open cup) Literature data.
FLAMMABILITY:	Product is combustible. (derived from flash point)
LOWER EXPLOSION LIMIT:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
UPPER EXPLOSION LIMIT:	For liquids not relevant for classification and labelling.
AUTOIGNITION:	380 °C
SADT:	Study scientifically not justified.
VAPOR PRESSURE:	0.0157 hPa (20 °C) dynamic (measured)
DENSITY :	0.92 g/cm ³ (20 °C)
RELATIVE DENSITY:	0.924 (20 °C)
PARTITIONING COEFFICIENT NOCTANOL/WATER (log Pow):	0.99 (23 °C) (Directive 92/69/EEC, A.8)
SELF-IGNITION TEMPERATURE:	Not self-igniting
THERMAL DECOMPOSITION:	< 400 °C (DSC (DIN 51007)) No exothermic decomposition within the mentioned temperature range. No decomposition if used as directed. It is not a selfdecompositionable substance.
VISCOSITY, DYNAMIC:	18 mPa.s (20 °C)
VISCOSITY, KINEMATIC:	19 mm ² /s (OECD 114) (20 °C)
SOLUBILITY IN WATER:	approx. 492 g/l (23.8 °C)
MOLAR MASS:	170.30 g/mol
EVAPORATION RATE:	Value can be approximated from Henry's Law Constant or vapor pressure.

SECTION 10: Stability and Reactivity

10.1 REACTIVITY

Corrosion to metals:
No corrosive effect on metal.
Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing. Corrosion to metals:
No corrosive effect on metal.
Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing.
Forms no flammable gasses in the presence of water.

10.2 CHEMICAL STABILITY

The product is stable if stored and handled as prescribed/indicated.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

The product is chemically stable.
Exothermic reaction. Reacts with acids.

10.4 CONDITIONS TO AVOID:

Avoid all sources of ignition: heat, sparks, open flame. See SOS section 7 - Handling and storage.

10.5 INCOMPATIBLE MATERIALS:

Strong alkali and oxidizing compounds

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide, carbon dioxide, nitrogen oxides

10.7 OTHER DECOMPOSITION PRODUCTS:

No data available

10.8 OTHER INFORMATION:

Thermal decomposition:
< 400 °C (DSC (DIN 51007))
No exothermic decomposition within the mentioned temperature range. No decomposition if used as directed. It is not a self-decomposable substance.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

PRIMARY ROUTES OF EXPOSURE:

Routes of entry for solids and liquids are ingestion

and inhalation, but may include eye or skin contact. Routes of entry for gasses include inhalation and eye contact. Skin contact may be a route of entry for liquefied gasses.

ACUTE TOXICITY/EFFECTS

ACUTE TOXICITY:

Assessment of acute toxicity: Of moderate toxicity after single ingestion. Of low toxicity after short term inhalation. Virtually nontoxic after a single skin contact. The European Union (EU) has classified this substance as 'harmful' after dermal exposure.

ORAL:

Type of value: LD50
Species: rat (male)
Value: 1,030 mg/kg (similar to OECD guideline 401)

INHALATION:

Type of value: LC50
Species: rat (male/female)
Value: > 5.01 mg/l (OECD Guideline 403)
Exposure time: 4 h
An aerosol was tested.

DERMAL:

Type of value: LD50
Species: rat
Value: > 2,000 mg/kg (OECD Guideline 402)
The European Union (EU) has classified this substance as 'harmful'.

ASSESSMENT OTHER ACUTE EFFECTS:

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

IRRITATION / CORROSION:

Assessment of irritating effects: Corrosive!
Damages skin and eyes.

SKIN:

Species: rabbit
Result: Corrosive.
Method: Draize test

EYE:

Species: rabbit
Result: Risk of serious damage to eyes.
Method: OECD Guideline 405

SENSITIZATION:

Assessment of sensitization: Sensitization after skin contact possible.

Guinea pig maximization test
Species: guinea pig
Result: sensitizing
Method: OECD Guideline 406

ASPIRATION HAZARD:

No aspiration hazard expected.

CHRONIC TOXICITY/EFFECTS

REPEATED DOSE TOXICITY:

Assessment of repeated dose toxicity: Repeated oral exposure to large quantities may affect certain organs. Damages the kidneys. Causes mortality through prolonged or repeated exposure.

GENETIC TOXICITY:

Assessment of mutagenicity No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in a test with mammals.

CARCINOGENICITY:

Assessment of carcinogenicity: No data available.

REPRODUCTIVE TOXICITY:

Assessment of reproduction toxicity: Repeated oral uptake of the substance did not cause damage to the reproductive organs.

TERATOGENICITY:

Assessment of teratogenicity: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. Mortality observed in rabbits following oral gavage exposure to this corrosive substance.

SYMPTOMS OF EXPOSURE

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Medical conditions aggravated by overexposure

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product. See SOS section 11 - Toxicological information.

SECTION 12: Ecological Information

TOXICITY

AQUATIC TOXICITY

ASSESSMENT OF AQUATIC TOXICITY:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

TOXICITY TO FISH

LC50 (96 h) 11 0 mg/l, *Leuciscus idus* (Directive 84/449/EEC, C.1, semistatic)

Nominal values (confirmed by concentration control analytics)

AQUATIC INVERTEBRATES

EC50 (48 h) 23 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)
Nominal values (confirmed by concentration control analytics)

EC50 (48 h) 388 mg/l, *Chaetogammarus marinus* (semistatic)
The details of the toxic effect relate to the nominal concentration.

AQUATIC PLANTS

EC50 (72 h) > 50 mg/l (growth rate), *Scenedesmus subspicatus* (Directive 88/302/EEC, part C, p. 89)

Nominal concentration.

EC1 O (72 h) 11.2 mg/l (growth rate), *Scenedesmus subspicatus* (Directive 88/302/EEC, part C, p. 89)

Nominal concentration.

CHRONIC TOXICITY TO FISH

Study not necessary due to exposure considerations.

CHRONIC TOXICITY TO AQUATIC INVERTEBRATES

No observed effect concentration (21 d) 3 mg/l, *Daphnia magna* (OECD Guideline 202, part 2, semi static)

Nominal values (confirmed by concentration control analytics)

ASSESSMENT OF TERRESTRIAL TOXICITY

No data available.

Study not necessary due to exposure considerations.

MICROORGANISMS / EFFECT ON ACTIVATED SLUDGE

TOXICITY TO MICROORGANISMS

DIN 38412 Part 8 bacterium/EC10 (18 h): 1,120 mg/l

Nominal concentration.

PERSISTENCE AND DEGRADABILITY

ASSESSMENT BIODEGRADATION AND ELIMINATION (H₂O)

Not readily biodegradable (by OECD criteria).

ELIMINATION INFORMATION

8 % DOC reduction (28 d) (Directive 92/69/EEC, C.4-A) (aerobic, predominantly domestic sewage)

ASSESSMENT OF STABILITY IN WATER

In contact with water the substance will hydrolyse slowly.

INFORMATION ON STABILITY IN WATER (HYDROLYSIS)

$t_{1/2} > 120$ h, < 10 % (5 d) (50 °C, pH value 7), (OECD Guideline 111, pH 7)

BIOACCUMULATIVE POTENTIAL

ASSESSMENT BIOACCUMULATION POTENTIAL

No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

BIOACCUMULATION POTENTIAL

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected. Literature data.

MOBILITY IN SOIL

ASSESSMENT TRANSPORT BETWEEN ENVIRONMENTAL COMPARTMENTS

The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is not expected.

ADDITIONAL INFORMATION

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Other ecotoxicological advice:

Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

SECTION 13: Disposal Considerations

DISPOSAL: Incinerate in a licensed facility. Do not discharge substance/product into sewer system.

EMPTY CONTAINER DISPOSAL: Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

SECTION 14: Transportation Information

Land transport
USDOT

Hazard class:

Packing group: III
ID number: UN 2289
Hazard label: 8
Proper shipping name: ISOPHORONEDIAMINE

**Sea transport
IMDG**

Hazard class: 8
Packing group: III
ID number: UN 2289
Hazard label: 8
Marine pollutant: NO
Proper shipping name: ISOPHORONEDIAMINE

**Air transport
IATA/ICAO**

Hazard class: 8
Packing group: III
ID number: UN 2289
Hazard label: 8
Proper shipping name: ISOPHORONEDIAMINE

SECTION 15: Regulatory Information

FEDERAL REGULATIONS

Registration status: Chemical TSCA, US released / listed

EPCRA 311/312 {Hazard categories): Refer to SOS section 2 for GHS hazard classes applicable for this product.

STATE REGULATIONS

STATE RTK	NJ
CAS NUMBER	2855-13-2
CHEMICAL NAME	3-aminomethyl-3,5,5-trimethylcyclohexylamine
NFPA HAZARD CODES:	
Health:	3
Fire:	1
Reactivity:	0
Special:	
HMIS III RATING	
Health:	3
Flammability:	1
Physical Hazard	0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Aquatic Acute:	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Acute Tox.	4 (Oral)	Acute toxicity
Eye Dam .I/1 rrit.	1	Serious eye damage/eye irritation
Skin Sens.	1A	Skin sensitization
Acute Tox.	5 (Inhalation - mist)	Acute toxicity

SECTION 16: Other Information

DISCLAIMER: The information contained in the document relates to the specific material designated and may not be valid for such material used in combination with any other material or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled.

However no representation, warranty or guarantee, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for their own particular use. Rainguard Brands, LLC and RainguardPro do not accept liability for any loss or damage that may occur from the use or reliance upon this information.