

1. IDENTIFICATION OF SUBSTANCE

PRODUCT FORM	Mixture
PRODUCT NAME	Rugged Coatings Polyurea 403
PRODUCT USE	Part B of 2 component polyurethane system
SUPPLIER IDENTIFICATION	Rugged Coatings 3217 Messer Airport Hwy Birmingham, AL 35222
EMERGENCY TELEPHONE	(800) 424-9300, Chemtrec

2. HAZARD(S) IDENTIFICATION

GHS RATINGS:

Skin Irritation, Category 2

Eye Irritation, Category 2

Aquatic Toxicity, Category 3

GHS HAZARDS

H319: CAUSES SERIOUS EYE IRRITATION.

H315 + H320: CAUSES SKIN AND EYE IRRITATION.

H402: HARMFUL TO AQUATIC LIFE.

GHS PRECAUTIONS

PREVENTION:

P273: Avoid release to the environment.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P270: Do not eat, drink or smoke when using this product.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy

to do. Continue rinsing.

P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.

P337+P313: If eye irritation persists: Get medical advice/attention.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P264: Wash skin and face thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

STORAGE:

P405: Store locked up.

DISPOSAL:

P501: Dispose of contents/container in accordance with existing federal, state and local environmental control laws.

LABEL ELEMENTS

PICTOGRAM



SIGNAL WORD

WARNING

3. COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURES

Alpha-(2-aminomethyl) omega- (2-aminomethylethoxy)-
poly(oxy(methyl-1,2 -ethanediyl)) 40 - 60%
(CAS) 9046-10-0

Diethylmethylbenzenediamine 10 - 25%
(CAS) 68479-98-1

Poly[oxy(9methyl-1,2-ethanediyl)],alpha,alpha',alpha"-1,2,3-
propanetriyltris[omega-(2-aminomethylethoxy)] 5 - 15%
(CAS) 64852-22-8

4,4-Methylenebis (N-Sec-Butylaniline) 5 - 15%
(CAS) 5285-60-9

4. FIRST-AID MEASURES

INHALATION

Remove victim to fresh air and provide oxygen if breathing is difficult. Seek medical attention if cough or other symptoms develop.

SKIN CONTACT

Remove contaminated clothing and immediately wash affected skin area with plenty of soap and water. Seek medical attention. Either discard or wash contaminated clothing and shoes before reuse.

EYE CONTACT

Immediately flush with plenty of water for two minutes. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Have eyes examined and tested by medical personnel.

INGESTION

Make sure victim is conscious and alert. If so, give 2-3 glasses of water to dilute. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Do not leave victim unattended as spontaneous vomiting may occur. Lay victim on side with head lower than waist to prevent aspiration of swallowed product. If victim is conscious and vomiting occurs, give water to further dilute the chemical.



SIGNS AND SYMPTOMS OF OVEREXPOSURE

INHALATION:	Repeated and/or prolonged exposure to low concentrations of vapors may cause a "Sore Throat"
ACUTE EFFECTS:	Sensitization, irritation and dermatitis."
CHRONIC EFFECTS	This product contains no listed carcinogens according to IARC, ACGIH, NTP, and/or OSHA in concentrations of 0.1 percent or greater (unless identified under section 15 of this MSDS). Repeated or prolonged contact causes sensitization, asthma, and eczema. Prolonged contact may result in chemical burns and permanent damage.

5. FIRE-FIGHTING MEASURES

FLAMMABLE CLASS::

Not Applicable.

GENERAL HAZARD

Evacuate personnel upwind of a fire to avoid inhalation of irritating and/or harmful fumes and smoke.

EXTINGUISHING MEDIA

Dry Chemical, Foam, or Carbon Dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop spill or leak and to disperse vapors..

FIRE FIGHTING PROCEDURES

As in any fire, wear self-contained breathing apparatus pressure-demand, (AS/NZS 1715 and AS/NZS 1716 approved or equivalent) and full protective gear. Toxic vapors may evolve. Fight fires from a safe distance or protected areas. Use of large volumes of water may produce run-off that could be toxic to wildlife and/or pose a hazardous waste disposal issue. Water may not be effective for large fires.

FIRE FIGHTING EQUIPMENT

Fire fighting personnel are required to use respiratory and eye protection. Full fire protective equipment (Bunker Gear) and self contained breathing apparatus (SCBA) is recommended to be used for all indoor fires and any significant outdoor fires. SCBA may not be required for small outdoor fires that may easily be extinguished with a portable fire extinguisher.

HAZARDOUS DECOMPOSITION PRODUCTS

Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as diatomaceous earth, sawdust, vermiculite, or any appropriate readily available material and sweep or shovel absorbed material into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wash the contaminated area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Wear the appropriate personal protective equipment designated in Section 8, remove the leaking container to a containment area and place into an appropriate container to prevent any further spill..

LARGE SPILL: Construct temporary dikes of dirt or sand to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as diatomaceous earth, sawdust, vermiculite, or any appropriate readily available material and sweep or shovel adsorbed material into closed containers for disposal. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Wear the appropriate personal protective equipment designated in Section 8, close or cap leaking valves and/or block or plug hole in leaking container. Remove the leaking containers to a containment area and place into an appropriate container to prevent any further spill. Contain material as described above and call the local fire, police, or appropriate emergency response provider for immediate emergency assistance..

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of material into sources of water.



7. HANDLING AND STORAGE

GENERAL PROCEDURES

Store product in original containers. Store in a cool, dry, well ventilated area.

HANDLING:

Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Avoid breathing in vapors, mists, and aerosols. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form.

STORAGE

Store and warehouse product in an appropriate area or facility. Segregate like materials together to avoid negative chemical reactions. Protect materials from excessive exposure to heat. Observe proper storage conditions and temperatures.

STORAGE TEMPERATURE: (50°F) Minimum to (75°F) Maximum

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME / CAS NO.	TYPE	PPM LIMITS	MG/M3 LIMITS
Diethylmethylbenzene diamine	Supplier OEL (TWA)	.02 ppm	0.13 mg/m3

EXPOSURE CONTROLS

ENGINEERING CONTROLS: Proper industrial hygiene practices are required for workers and should be achieved through engineering controls including ventilation with a high turn over rate whenever feasible. When such controls are not available or not feasible to achieve full protection, respirators for workers (and others in the area) and other personal protective equipment is mandated. Exhaust air may need to be scrubbed (cleaned) or filtered to reduce environmental contamination and odors.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety goggles or safety glasses with side shields when handling and mixing this material.

SKIN: Wear impervious compatible chemical resistant protective clothing such as neoprene or butyl rubber gloves, aprons, boots or Tyvek coveralls, as appropriate to prevent contact with skin.

RESPIRATORY: For respirator selection and training, seek professional advice. Whenever workplace conditions require a use of a respirator, follow a respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements. Wear an OSHA/NIOSH approved respirator selected on its suitability to provide adequate worker protection for the chemicals used and given working conditions including the level of airborne contamination and presence of sufficient oxygen.

WORK HYGIENIC PRACTICES: Always follow "Good personal hygiene practices" when working with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
ODOR:	Ammonia smell
COLOR:	Amber
pH:	10 to 11
PERCENT VOLATILE:	None
FLASHPOINT AND METHOD:	> (230°F) Pensky-Martens CC
FLAMMABLE LIMITS:	Does not support combustion
AUTOIGNITION TEMPERATURE:	> 230°C
VAPOR PRESSURE:	< 1 mbar
VAPOR DENSITY:	Not Available
BOILING POINT:	> 250°C
SOLUBILITY IN WATER:	Slight
EVAPORATION RATE:	Not Available
SPECIFIC GRAVITY:	1.014 g/cm3 at 25°C (74°F)
VISCOSITY #1:	200 to 400 Centipoise
(VOC):	0 g/l Estimated



10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION:

None

STABILITY

This material (product) is stable under normal ambient conditions of temperature and pressure. Follow recommendations for proper storage and use..

CONDITIONS TO AVOID:

Nitric Acid, Ammonia, Nitrogen oxides, Nitrogen oxide can react with water vapors to form corrosive nitric acid, Carbon monoxide, Carbon dioxide, Aldehydes.

INCOMPATIBLE MATERIALS

Reactive metals (e.g. sodium, calcium, zinc, etc.), Materials reactive with hydroxyl compounds, Organic acids (e.g. acetic acid, citric acid, etc.), Mineral acids, Sodium hypochlorite, Oxidizing agents, Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

11. TOXICOLOGICAL INFORMATION

ALPHA-(2-AMINOMETHYLETHYL) OMEGA- (2-AMINOMETHYLETHOXY)- POLY(OXY(METHYL-1,2 -ETHANEDIYL))

LD50 Oral Rat 480 mg/kg,

LD50 Dermal rabbit >1000 mg/k

LC50 Inhalation Rat N/A

DIETHYLMETHYLBENZENEDIAMINE

LD50 Oral Rat 472 mg/kg,

LD50 Dermal rabbit >2000 mg/k

LC50 Inhalation Rat > 0.61 mg/l

4,4-METHYLENEBIS (N-SEC-BUTYLANILINE)

LD50 Oral Rat 1400 mg/kg,

LD50 Dermal rabbit N/A

LC50 Inhalation Rat > 0.61 mg/l

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

No environmental data has been established or is available for this product.

GENERAL COMMENTS:

Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

See the manufacturers instructions to mix together with the proper components of multi-component materials, and allow to harden. Dispose solids at an appropriate waste disposal facility according to current applicable laws and regulations..

14. TRANSPORT INFORMATION

DOT REGULATED COMPONENTS:

Not Regulated:

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

CANADA

DOMESTIC SUBSTANCE LIST (INVENTORY)

The components in this product are listed or exempt from the Canadian Domestic Substance List (DSL).

16. OTHER INFORMATION

SAFETY DATA SHEET ISSUED BY PRODUCT SAFETY DEPARTMENT

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Rugged Coatings. The data on these sheets relates only to the specific material designated herein. Rugged Coatings. assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.