Safety Data Sheet: MEND-CON RTU PART B

Supercedes Date 07/15/2015 **Issuing Date** 09/06/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name MEND-CON RTU PART B
Recommended use Bonding agent
Information on Manufacturer
CHEMSEARCH DIV. OF NCH CORP.

BOX 152170
IRVING, TX 75015

Product Code 5802B
Chemical nature Epoxies
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Gray **Physical state** Paste **Odor** Amine-like

GHS Classification

Physical Hazards
None

Health Hazard

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitization	Category 1
Reproductive Toxicity	Category 1B

Other hazards
None

Labeling
Signal Word
DANGER

Hazard statements
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H302 - Harmful if swallowed
H360 - May damage fertility or the unborn child

Precautionary Statements
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace
P260 - Do not breathe mist, dust or vapor.
P270 - Do not eat, drink or smoke when using this product.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P333 + P313 - If skin irritation or rash occurs, get medical attention
P363 - Wash contaminated clothing before reuse.
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 physician.
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 - If experiencing respiratory symptoms, call a physician.
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P501 - Dispose of contents and container in accordance with applicable local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %
4-Nonylphenol, branched	84852-15-3	10-30

2,2'- Ethylenedioxydiethyl bis(2-ethylhexanoate)	94-28-0	10-30
1-(2-Aminoethyl) piperazine	140-31-8	10-30
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	7-13
Triethylene tetramine	112-24-3	3-7
Slica, amorphous, fumed, crystalline-free	112945-52-5	3-7
Phenol, 2-nonyl-, branched	91672-41-2	3-7
Monoethylene glycol	107-21-1	3-7
Benzyl alcohol	100-51-6	3-7
Aminoethylethanolamine	111-41-1	1-5
Bis(dimethylaminomethyl)phenol	71074-89-0	0.1-1.0

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

General advice Do not get in eyes, on skin or on clothing. Do not breathe mist, vapor or dust.

Eye Contact Immediately rinse the eyes with water. Remove any contact lenses and continue flushing for at least 15 minutes. Hold the eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Get immediate medical attention.

Skin Contact Immediately remove contaminated clothing and shoes. Flush affected areas with large amounts of water for 20 to 30 minutes. Get immediate medical attention. Discard clothing and shoes.

Inhalation Remove from the area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion Give 3 to 4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

Notes to physician May cause sensitization of susceptible persons. Control of circulatory system, shock therapy if needed. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point No data available **Method** No data available

Flammability Limits in Air %: No information available. **Upper:** No data available **Lower:** No data available

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO2). Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.

NFPA	**Health** 3	**Flammability** 0	**Instability** 0
HMIS -	**Health** 3	**Flammability** 0	**Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Do not get in eyes, on skin or on clothing. Do not breathe vapor, mist, or dust.

Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not freeze.

Storage Temperature **Minimum** 40 °F / 4 °C **Maximum** 90 °F / 32 °C

Storage Conditions **Indoor** x **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Monoethylene glycol	Ceiling: 100 mg/m^3	No data available	No data available
Slica, amorphous, fumed, crystalline-free	No data available	No data available	TWA: 6 mg/m^3

Aminoethylethanolamine	No data available	No data available	TWA: 0.1 mg/m^3

Engineering Measures Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin Protection Wear suitable protective clothing, Impervious gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Paste	**Viscosity**	Viscous
Color	Gray	**Odor**	Amine-like
Odor Threshold	Not applicable	**Appearance**	Opaque
pH	No data available	**Specific Gravity**	1.2
Evaporation Rate	No data available	**Percent Volatile (Volume)**	>4
VOC Content (%)	4	**VOC Content (g/L)**	47
Vapor Pressure	No data available	**Vapor Density**	No information available
Solubility	Insoluble in water	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	No data available	**Flammability (solid, gas)**	No data available
Flash Point	No data available	**Method**	No data available
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	No information available	**Upper:** No data available **Lower:** No data available	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Incompatible Products	Oxidizing agents.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Metal oxides.
Possibility of Hazardous Reactions	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 No information available

Dermal LD50 No information available

Inhalation LC50

Gas No information available

Mist No information available

Vapor No information available

Principle Route of Exposure Skin contact, Eye contact, Ingestion.

Primary Routes of Entry Eye contact, Ingestion.

Acute Effects:

Eyes Corrosive to the eyes and may cause severe damage including blindness.

Skin Causes skin burns. May cause allergic skin reaction.

Inhalation Low hazard for usual industrial or commercial handling.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Toxicity May cause sensitization by skin contact. Suspect reproductive hazard - contains material which may injure unborn child.

Target Organ Effects Central nervous system, Respiratory system, Skin, Eyes, Immune system.

Aggravated Medical Conditions Respiratory system, Neurological disorders.

Component Information

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
4-Nonylphenol, branched 84852-15-3	= 580 mg/kg (Rat)	= 2031 mg/kg (Rabbit)	No data available	No data available	No data available
2,2'- Ethylenedioxydiethyl bis(2-ethylhexanoate) 94-28-0	= 31 g/kg (Rat)	= 14100 µL/kg (Rabbit)	No data available	No data available	No data available
1-(2-Aminoethyl) piperazine 140-31-8	= 2140 mg/kg (Rat)	= 880 µL/kg (Rabbit)	No data available	No data available	No data available

2,4,6-Tri(dimethylaminomethyl) phenol 90-72-2	= 1000 mg/kg (Rat)	= 1280 mg/kg (Rat)	> 0.5 mg/L (Rat)	No data available	No data available
Triethylene tetramine 112-24-3	= 2500 mg/kg (Rat)	= 550 mg/kg (Rabbit)	No data available	No data available	No data available
Slica, amorphous, fumed, crystalline-free 112945-52-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h	No data available	No data available
Phenol, 2-nonyl-, branched 91672-41-2	= 580 mg/kg (Rat)	= 2031 mg/kg (Rabbit)	No data available	No data available	No data available
Monoethylene glycol 107-21-1	4000 - 10200 mg/kg (Rat)	= 10600 mg/kg (Rat)	No data available	No data available	No data available
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h	No data available	No data available
Aminoethylethanolamine 111-41-1	= 2000 mg/kg (Rat)	= 3560 µL/kg (Rabbit)	No data available	No data available	No data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
4-Nonylphenol, branched 84852-15-3	No data available	Skin sensitization	No data available	No data available	No data available
1-(2-Aminoethyl) piperazine 140-31-8	No data available	Skin Sensitizataion	No data available	No data available	No data available
Triethylene tetramine 112-24-3	No data available	Skin sensitization	No data available	No data available	Immune system
Slica, amorphous, fumed, crystalline-free 112945-52-5	No data available	No data available	No data available	No data available	Eyes; Respiratory system
Monoethylene glycol 107-21-1	No data available	No data available	No data available	X	Skin; Central nervous system; Eyes; Respiratory system
Benzyl alcohol 100-51-6	No data available	Skin sensitization	No data available	No data available	No data available
Aminoethylethanolamine 111-41-1	No data available	No data available	No data available	No data available	Eyes; Respiratory system

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Other
Slica, amorphous, fumed, crystalline-free 112945-52-5	not applicable	Group 3	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficien
4-Nonylphenol, branched	EC50 0.36 - 0.48 mg/L Pseudokirchneriella subcapitata 96 h EC50 0.16 - 0.72 mg/L Pseudokirchneriella subcapitata 72 h EC50 = 1.3 mg/L Desmodesmus subspicatus 72 h EC50 = 0.41 mg/L Pseudokirchneriella subcapitata 96 h	LC50 = 0.135 mg/L Pimephales promelas 96 h LC50 = 0.1351 mg/L Lepomis macrochirus 96 h	No information available	0.14: 48 h Daphnia magna mg/L EC50 0.17 - 0.21: 48 h Daphnia magna mg/L EC50 Static 0.0874 - 0.124: 48 h Daphnia magna mg/L EC50 semi-static	N/A
1-(2-Aminoethyl) piperazine	EC50 = 495 mg/L Pseudokirchneriella subcapitata 72 h	LC50 1950 - 2460 mg/L Pimephales promelas 96 h LC50 > 1000 mg/L Poecilia reticulata 96 h LC50 >= 100 mg/L Oncorhynchus mykiss 96 h	EC50 > 10000 mg/L 17 h	32: 48 h Daphnia magna mg/L EC50	-1.48
Triethylene tetramine	EC50 = 2.5 mg/L Desmodesmus subspicatus 72 h EC50 = 20 mg/L Pseudokirchneriella subcapitata 72 h EC50 = 3.7 mg/L Pseudokirchneriella	LC50 = 570 mg/L Poecilia reticulata 96 h LC50 = 495 mg/L Pimephales promelas 96 h	No information available	31.1: 48 h Daphnia magna mg/L EC50	-1.4

	subcapitata 96 h				
Slica, amorphous, fumed, crystalline-free	EC50 = 440 mg/L Pseudokirchneriella subcapitata 72 h	LC50 = 5000 mg/L Brachydanio rerio 96 h	No information available	7600: 48 h Ceriodaphnia dubia mg/L EC50	N/A
Phenol, 2-nonyl-, branched	EC50 = 0.41 mg/L Pseudokirchneriella subcapitata 96 h EC50 = 1.3 mg/L Desmodesmus subspicatus 72 h	LC50 = 0.135 mg/L Pimephales promelas 96 h	No information available	0.14: 48 h Daphnia magna mg/L EC50 0.17 - 0.21: 48 h Daphnia magna mg/L EC50 Static 0.0874 - 0.124: 48 h Daphnia magna mg/L EC50 semi-static	N/A
Monoethylene glycol	EC50 6500 - 13000 mg/L Pseudokirchneriella subcapitata 96 h	LC50 = 41000 mg/L Oncorhynchus mykiss 96 h LC50 14 - 18 mL/L Oncorhynchus mykiss 96 h LC50 = 27540 mg/L Lepomis macrochirus 96 h LC50 = 40761 mg/L Oncorhynchus mykiss 96 h LC50 40000 - 60000 mg/L Pimephales promelas 96 h LC50 = 16000 mg/L Poecilia reticulata 96 h	EC50 = 10000 mg/L 16 h EC50 = 620 mg/L 30 min EC50 = 620.0 mg/L 30 min	46300: 48 h Daphnia magna mg/L EC50	-1.93
Benzyl alcohol	No information available.	LC50 = 460 mg/L Pimephales promelas 96 h LC50 = 10 mg/L Lepomis macrochirus 96 h	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	23: 48 h water flea mg/L EC50	1.1
Aminoethylethanolamine	EC50 = 210 mg/L Desmodesmus subspicatus 72 h	LC50 = 728 mg/L Pimephales promelas 96 h	EC50 = 135 mg/L 17 h	22: 48 h Daphnia magna mg/L EC50	-1.46

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name AMINES, SOLID, CORROSIVE, N.O.S.
Hazard Class 8
UN-No UN3259
Packing Group III
Description UN3259, AMINES, SOLID, CORROSIVE, N.O.S.,(4-NONYLPHENOL, BRANCHED, 2-PIPERAZIN-1-YLETHYLAMINE), 8, PG III **EXCEPTIONS MAY EXIST UNDER 49CFR 173.154.

TDG
Proper shipping name AMINES, SOLID, CORROSIVE, N.O.S.
Hazard Class 8
UN-No UN3259
Description Consumer Commodity, ORM-D

ICAO
UN-No UN3259
Proper Shipping Name AMINES, SOLID, CORROSIVE, N.O.S.
Hazard Class 8
Packing Group III
Shipping Description UN3259, AMINES, SOLID, CORROSIVE, N.O.S.,(4-NONYLPHENOL, BRANCHED, 2-PIPERAZIN-1-YLETHYLAMINE), 8, PG III

IATA
UN-No UN3259
Proper Shipping Name AMINES, SOLID, CORROSIVE, N.O.S.
Hazard Class 8
Packing Group III
Shipping Description UN3259, AMINES, SOLID, CORROSIVE, N.O.S.,(4-NONYLPHENOL, BRANCHED, 2-PIPERAZIN-1-YLETHYLAMINE), 8, PG III

IMDG/IMO

Proper Shipping Name	AMINES, SOLID, CORROSIVE, N.O.S.
Hazard Class	8
UN-No	UN3259
Packing Group	III
Marine Pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
Description	UN3259, AMINES, SOLID, CORROSIVE, N.O.S.,(4-NONYLPHENOL, BRANCHED, 2-PIPERAZIN-1-YLETHYLAMINE), 8, PG III

15. REGULATORY INFORMATION

Inventories

TSCA	Complies
DSL	Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	CAS No.	Weight %	SARA 313 - Threshold Values
Phenol, 2-nonyl-, branched	91672-41-2	3-7	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Monoethylene glycol	5000 lb	Not applicable

16. OTHER INFORMATION

Prepared By	Adrienne McKee
Supercedes Date	07/15/2015
Issuing Date	09/06/2017
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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