



Safety Data Sheet

REMA Tip Top

Product #: 5252884

SDS #: RTT-IND-040

Rev. # 4

Rev. Date: 3/18/2014

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tip Top Hardener Compound B

Chemical Family: Isocyanate Solution

Product Use: Vulcanizing / Cross-linking compound

Restrictions on Use: Use as directed by manufacturer

Manufacturer: Rema Tip Top - North America
119 Rockland Ave.
Northvale, NJ 07647
Phone: 201 256-8200

24-Hour Emergency Phone Number: North America: 800-424-9300 (CHEMTREC)
International: 703-527-3887 (CHEMTREC) Collect Calls Accepted

2. HAZARD IDENTIFICATION

GHS Classifications

Health Hazards

Acute Toxicity, Inhalation, Category 1
Skin Irritation, Category 2
Eye Irritation, Category 2A
Respiratory Sensitization, Category 1A
Skin Sensitization, Category 1A
Specific Target Organ Systemic Toxicity, Single Exposure, Category 3, Respiratory Tract [Inhalation]

GHS-Labeling

Pictograms:



Signal Word: Danger!

Hazard Statements

H315: Causes skin irritation
H317: May cause an allergic skin reaction



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H319: Causes serious eye irritation

H330: Fatal if inhaled

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335: May cause respiratory irritation

Precautionary Statements

Prevention:

P233: Keep container tightly closed.

P260: Do not breathe dust/vapours.

P261: Avoid breathing dust/vapours.

P264: Wash skin and exposed areas thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

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

P285: In case of inadequate ventilation, wear respiratory protection.

Response:

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P341: IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

P308 + P313: IF exposed or concerned: Get medical advice/attention.

P314: Get medical advice/attention if you feel unwell.

P321: Specific treatment found in supplemental First Aid Section of this SDS (Section 4).

P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.

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

P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P362: Take off contaminated clothing and wash before reuse.

Storage:

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up

Disposal:

P501: Dispose of contents/container in accordance with local, regional, and federal regulations

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization

Isocyanate Solution



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Component*	CAS #	% By Wt.
Isocyanic Acid, Polymethylenepolyphenylene Ester (Diphenylmethane di-isocyanate)	9016-87-9	85 – 100

*The above listed components are OSHA hazardous materials which contribute to this products' GHS Hazard Categorization as prescribed in OSHA's Hazard Communication 29 CFR 1910.1200.

4. FIRST AID MEASURES

Inhalation

Symptoms & Effects: Nose, throat and respiratory tract irritation, nausea, headache, dizziness, drowsiness, shortness of breath, confusion

Measures: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, begin artificial respiration. If breathing is difficult, administer oxygen. If symptoms persist, seek medical attention.

Skin Contact

Symptoms & Effects: Skin irritation, local redness, skin drying, skin cracking, allergic skin reactions

Measures: Wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes while washing. If skin irritation develops, seek medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact

Symptoms & Effects: Eye irritation, tearing, eye redness

Measures: Immediately rinse eyes with water for at least 15 minutes. Remove contact lenses after the initial few minutes and if easy to do so and resume rinsing. Rinse beneath eyelids by holding eyelids apart with clean fingers while rinsing. If eye irritation persists, seek medical attention.

Ingestion

Symptoms & Effects: Mouth, throat and digestive tract irritation, lung damage

Measures: Seek immediate medical attention. Do NOT induce vomiting as this substance is an aspiration hazard and may damage the lungs. If the victim is drowsy or unconscious, do not give anything by mouth. Place individual on their left side and place their head down. Do not leave victim unattended.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, Carbon dioxide, Water spray

Unsuitable Extinguishing Media: Direct water stream (See Precautions)

Hazardous Combustion Products: Aldehydes, Hydrocarbons, Carbon monoxide, Carbon dioxide



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Protective Equipment for Fire-Fighters: Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Precautions for Fire-Fighters: Do not use direct water stream as this may spread fire. Use water spray to cool fire exposed containers and structures if this can be done with minimal risk. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, if applied gently, may be used as a blanket for fire extinguishment. Contain fire water run-off if possible, as it may cause environmental damage.

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment: Recommended to wear chemical splash goggles & resistant gloves, such as polyvinyl alcohol-based gloves, and discard of gloves that show tears, pinholes, or signs of wear. Wear proper garments to prevent skin exposure, such as long-sleeves and pants.

Personal Precautions: Persons not wearing proper PPE should be excluded from the area of contamination until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources and pay attention to the spreading of gases, especially at ground level.

Environmental Precautions: Do not allow discharge into drains, surface waters, or sanitary sewer system. Prevent spreading over a wide area by constructing a dike. Local authorities should be advised if significant spillages cannot be contained or if material discharges into drains or ground water.

Methods & Materials for Clean-Up: Contained spilled material with inert, non-combustible absorbent materials (e.g. sand, earth, diatomaceous earth, polyethylene or polypropylene fibers, vermiculite, etc.). Remove residual material with soap and hot water. Use spark-proof tools and explosion-proof equipment for clean-up. Transfer to a suitable container for disposal according to proper federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling: Containers of this material may be hazardous when emptied. All hazard precautions given in this SDS must be observed since emptied containers retain product residues (vapor, liquid, or solid). Wear proper PPE when handling this product including protective gloves, chemical splash goggles, and impervious clothing. Avoid prolonged or repeated skin contact. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. Emergency showers and eye wash stations should be readily accessible. Do not eat, drink or smoke when handling this product.

Storage: Keep container tightly closed and store locked up in a well-ventilated area.

Incompatible Materials: Alkalis, Strong acids, Strong oxidizing agents



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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits :

Exposure limits have not been established for this product.

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposures below permissible exposure limits. Provide readily accessible eye wash stations and safety showers.

Occupational Exposure Controls: Ensure adequate ventilation, especially in confined areas. Consider all potential hazards of this material, applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting PPE. Ensure that eyewash stations and safety showers are proximal to the work location. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Protective and Hygiene measures: Do not inhale vapors. Wash hands before breaks and immediately after handling product. When using, do not eat, drink, or smoke. In case of clothes contamination, remove and wash contaminated clothing before re-use.

Eye Protection: Recommended to wear tight fitting, chemical splash goggles with side shields when there is potential for the exposure of the eyes to the liquid, vapor or mist. Have a suitable eye wash station or bottle nearby in case of splashing into the eyes.

Hand Protection: Recommended to wear suitable resistant gloves and discard of gloves that show tears, pinholes, or signs of wear. Suitable gloves will be based on product use and the period of use, and may include neoprene, butyl-rubber, nitrile rubber, etc.

Skin Protection: Recommended to wear impervious clothing, such as a fuller rubber suit and long-sleeved clothing, pants and proper foot covering in order to prevent direct skin contact with the product. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory Protection: A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown Liquid

Odor: Irritating

Odor Threshold: 200 ppm

pH: No data available



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Melting/Freezing point: No data available

Boiling point/range: 392°F (200°C)

Flash point (Tag closed cup): 428°F (220°C)

Evaporation rate: No data available

Flammability: Lower Limit: No data available **Upper Limit:** No data available

Vapor pressure: No data available

Relative vapor density: No data available

Density: 1.24 g/cm³ (10.3 lbs/gal) @ 68°F (20°C)

Solubility in water: Immiscible; May react with water.

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: 464°F (240°C)

Ignition temperature: No data available

Decomposition temperature: No data available

Viscosity (dynamic): No data available

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Product will not undergo hazardous polymerization.

Conditions to Avoid: Heat, Flames, Sparks, Ignition sources

Incompatible Materials: Alkalis, Strong acids, Strong oxidizing agents

Hazardous decomposition products: Aldehydes, Hydrocarbons, Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

Primary Routes of Exposure: Inhalation, Skin contact, Eye contact, Ingestion

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Nose, throat and respiratory tract irritation, skin irritation, local redness, skin drying, skin cracking, allergic skin reactions, eye irritation, tearing, eye redness, mouth, throat and digestive tract irritation.

Delayed and Immediate Effects & Chronic Effects from Exposure: This substance is suspected of causing allergic skin reactions or rashes with repeated skin contact. This substance is suspected of causing asthma symptoms or breathing difficulty with repeated inhalation.



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Measures of Toxicity:

Acute toxicities are calculated based on component toxicities
Mixture: Acute Oral Toxicity: No sufficient data available
Acute Dermal Toxicity: No sufficient data available
Acute Inhalation Toxicity: LC₅₀ Rat: 0.49 mg/l

Isocyanic Acid,

Polymethylenepolyphenylene Ester CAS # 9016-87-9

Acute Inhalation Toxicity LC₅₀ Rat: 0.49 mg/l

Carcinogen Claims:

OSHA: None

International Agency for Research on Cancer (IARC): None

ACGIH: None

National Toxicology Program (NTP) Report on Carcinogens: None

12. ECOLOGICAL INFORMATION

Eco-toxicity: This substance is not expected to be harmful to aquatic organisms, however it is strongly advised that this substance does not enter the environment.

Persistence & Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State or Local regulations.

Contaminated packaging should be emptied as far as possible before disposal.

14. TRANSPORT INFORMATION

DOT SHIPPING CLASSIFICATION:

UN NUMBER: UN3382

PROPER SHIPPING NAME: Toxic by inhalation liquid, n.o.s. (Diphenylmethane Diisocyanate)

TRANSPORTATION HAZARD CLASS: 6.1

PACKING GROUP: I

HAZARD LABEL: 6.1

IMDG (Marine) SHIPPING CLASSIFICATION:

IMDG CODE: 6.1

UN NUMBER: UN3382



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MARINE POLLUTANT: No

EmS: F-A; S-A

IMDG PACKING GROUP: I

HAZARD LABEL: 6.1

Description of the goods

TOXIC BY INHALATION LIQUID, N.O.S. (Diphenylmethane Diisocyanate)

IATA (Air) SHIPPING CLASSIFICATION:

ICAO/IATA-DGR: 6.1

UN NUMBER: UN3382

HAZARD LABEL: 6.1

Description of the goods

Toxic by inhalation liquid, n.o.s. (Diphenylmethane Diisocyanate)

15. REGULATORY INFORMATION

All components of this product conform to the following national inventory requirements. US TSCA, EU EINECS and Canada DSL

SARA Title III

Section 302 – Extremely Hazardous Chemicals

The following ingredients are subject to the supplier notification requirements of Section 302 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37

None Listed

Section 313 – Toxic Chemicals

The following ingredients are subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37

Component	CAS #	Weight %	CERCLA RQ
Polymeric diphenylmethane diisocyanate	9016-87-9	85 – 100	--

OTHER FEDERAL REGULATIONS

Components of this product are subject to RCRA Hazardous Waste requirements.

Clean Air Act (CAA) Hazardous Air Pollutants requirements and OSHA Process Safety Management (PSM) high hazard requirements.

CANADIAN REGULATIONS

WHMIS Classification: D1A, D2A, D2B (Based on components)



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STATE REGULATIONS

California Proposition 65

This product does not contain chemicals known to the state of California to cause cancer, birth defects and/or reproductive harm.

The components of this product may be included on the various state hazardous materials lists noted below.

California Hazardous Substances List
Delaware Air Quality Management List
Idaho Air Pollutants List
Illinois Toxic Air Contaminants List
Maine Hazardous Air Pollutants List
Massachusetts Hazardous Substances List
Michigan Critical Materials List
Minnesota Hazardous Substances List
New Jersey RTK Hazardous Substances List
New Jersey TCPA Extremely Hazardous Substances List
New York List of Hazardous Substances
North Carolina Toxic Air Contaminants List
Pennsylvania Hazardous Substances List
Washington Permissible Exposure Air Contaminants List
West Virginia Air Toxic Pollutants List
Wisconsin Hazardous Air Contaminants List

Note: Entries under Section 15 are not intended to be all inclusive of Federal and State laws and regulations. Please consult the appropriate agencies for further clarification of any requirements.



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16. OTHER INFORMATION

This SDS conforms to the OSHA Hazard Communication Standard 1910.1200 published in the Federal Register March 26, 2012

MEDICAL EMERGENCIES:

Call CHEMTREC 24 hours a
Day for emergency information
800-424-9300

FOR ANY OTHER INFORMATION:

REMA TIP TOP - NORTH AMERICA
119 Rockland Ave.
NORTHVALE, NJ 07647
201-256-8200

NOTICE: REMA TIP TOP NORTH AMERICA believes that the information contained on this safety data sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all-inclusive, nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of, applicable laws, regulations, rules or insurance requirements.

NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

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