



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

## 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: REMA GOO, Part A

Product Use: Conveyor Belt Repair Material

Manufacturer: REMA TIP TOP/NO. AMERICA, 119 Rockland Avenue, Northvale, NJ 07647

24-Hour Emergency Phone Number: North America: 800-424-9300 (CHEMTREC)

International: 703-527-3887 (CHEMTREC) Collect Calls Accepted

## 2. PRODUCT INGREDIENTS

<u>CHEMICAL NAME:</u>	<u>CAS NUMBER:</u>	<u>% RANGE:</u>	<u>OSHA PEL:</u>
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatocyclohexane]	67837-35-8	30-60	Not Established
Methylene bis(4-cyclohexylisocyanate)	5124-30-1	15-40	Not Established
Methylene bisphenol isocyanate (MDI)	101-68-8	5-10	Not Established
Silane, triethoxy(3-isocyanatopropyl)-	24801-88-5	1-5	Not Established

### Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following:  
Diisocyanates, Isocyanates, all.

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication) and the Canadian Controlled Products Regulations.

## 3. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS:

This product is a black, medium viscosity liquid. This product is irritating to the eyes, respiratory system and skin. This product may cause sensitization by inhalation and skin contact. This product may be absorbed through the skin.

**EYE:** This product may cause irritation to the eyes.

**SKIN:** This product may cause irritation to the skin. Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis. Prolonged or repeated skin contact may cause an allergic skin sensitization reaction. This product may be harmful if it is absorbed through the skin.

**INGESTION:** This product may be harmful if it is swallowed.

**INHALATION:** This product may be harmful by inhalation. Inhalation of this product may produce respiratory irritation and may cause allergic respiratory sensitization reactions. Chest pain and/or shortness of breath may occur.



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

## 4. FIRST AID

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention or advice.

**SKIN:** Immediately take off all contaminated clothing. For skin contact, wash immediately with soap and water. If irritation persists, get medical attention. Launder clothing before reuse.

**INGESTION:** Do not induce vomiting. Call a physician immediately.

**INHALATION:** If inhaled, immediately remove the affected person to fresh air. Seek medical attention. Monitor for delayed (2-3 hr) asthmatic-type symptoms and consult physician if this occurs.

**NOTE TO PHYSICIAN:** Provide general supportive measures and treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES:

**Flash Point:** >280°F (>138°C)

**Upper Flammable Limit (UFL):** Not Available

**Auto Ignition:** Not Available

**Method Used:** Cleveland Open Cup

**Lower Flammable Limit (LFL):** Not Available

**Flammability Classification:** Class IIIB

**HAZARDOUS COMBUSTION PRODUCTS:** Decomposition of this product may yield oxides of nitrogen and carbon, traces of HCN, Isocyanate vapors and aerosols.

**EXTINGUISHING MEDIA:** Dry chemical, foam, carbon dioxide. Incompatible with water.

**FIRE FIGHTING INSTRUCTIONS:** This product is a slightly flammable liquid. Contain fire run-off if possible. Firewater run-off, if not contained may cause environmental damage.

**PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:** Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.

## 6. ACCIDENTAL RELEASE MEASURES

**CONTAINMENT PROCEDURES:** Stop the flow of material, if this is without risk. Contain the discharged material.

**CLEAN-UP PROCEDURES:** Absorb spill with inert material. Shovel material into appropriate container for disposal. Prevent contamination of soil, surface water or groundwater.

**EVACUATION PROCEDURES:** Persons not wearing appropriate protective equipment should be excluded from area of spill until clean up has been completed.

**SPECIAL PROCEDURES:** Follow all Local, State, Federal and Provincial regulations for disposal. Notify the proper authorities if entry to the environment occurs.



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

## 7. HANDLING & STORAGE

**HANDLING:** Do not get this material in your eyes, on your skin, or on your clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. DO NOT eat, drink or smoke in product area.

**STORAGE:** Store in a cool, dry, well-ventilated area. For maximum product stability maintain temperature range of 65-85°F (18-29°C).

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**EYE/FACE PROTECTION:** Wear chemical goggles.

**SKIN PROTECTION:** Use impervious gloves.

**RESPIRATORY PROTECTION:** If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

### EXPOSURE GUIDELINE(s):

#### Component Exposure Limits

REMA TIP/TOP USA recommends that its customers minimize employee exposure. REMA therefore suggests that its customers consider adopting the lower of the current OSHA PEL or the ACGIH TLV's for the purpose of evaluating employee exposures. The TLV's recommended by the ACGIH have been updated on a continuing basis.

#### Methylene bis(4-cyclohexylisocyanate) (5124-30-1)

ACGIH: 0.005 ppm TWA  
NIOSH: 0.01 ppm Ceiling; 0.11 mg/m<sup>3</sup> Ceiling

#### Methylene bisphenol isocyanate (MDI) (101-68-8)

ACGIH: 0.005 ppm TWA  
OSHA: 0.02 ppm Ceiling; 0.2 mg/m<sup>3</sup> Ceiling  
NIOSH: 0.005 ppm TWA; 0.05 mg/m<sup>3</sup> TWA  
0.020 ppm Ceiling (10 min); 0.2 mg/m<sup>3</sup> Ceiling (10 min)



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

## Component Exposure Limits - Canada

The following Provincial Exposure Limits apply for this product's components.

### Methylene bis(4-cyclohexylisocyanate) (5124-30-1)

Alberta:	0.005 ppm TWA; 0.054 mg/m <sup>3</sup> TWA
British Columbia:	0.005 ppm TWA 0.01 ppm Ceiling
Manitoba:	0.01 ppm Ceiling; 0.11 mg/m <sup>3</sup> Ceiling
New Brunswick:	0.005 ppm TWA; 0.054 mg/m <sup>3</sup> TWA
NW Territories:	0.01 ppm Ceiling; 0.1 mg/m <sup>3</sup> Ceiling
Nova Scotia:	0.005 ppm TWA
Nunavut:	0.01 ppm Ceiling; 0.1 mg/m <sup>3</sup> Ceiling
Ontario:	0.005 ppm TWAEV
Quebec:	0.005 ppm TWAEV; 0.054 mg/m <sup>3</sup> TWAEV
Saskatchewan:	0.054 mg/m <sup>3</sup> TWA; 0.005 ppm TWA 0.162 mg/m <sup>3</sup> STEL; 0.015 ppm STEL
Yukon:	0.01 ppm Ceiling; 0.11 mg/m <sup>3</sup> Ceiling

### Methylene bisphenol isocyanate (MDI) (101-68-8)

Alberta:	0.005 ppm TWA; 0.051 mg/m <sup>3</sup> TWA
British Columbia:	0.005 ppm TWA 0.01 ppm Ceiling
Manitoba:	0.02 ppm Ceiling; 0.2 mg/m <sup>3</sup> Ceiling
New Brunswick:	0.005 ppm TWA; 0.051 mg/m <sup>3</sup> TWA
NW Territories:	0.02 ppm Ceiling; 0.2 mg/m <sup>3</sup> Ceiling
Nova Scotia:	0.005 ppm TWA
Nunavut:	0.02 ppm Ceiling; 0.2 mg/m <sup>3</sup> Ceiling
Ontario:	0.005 ppm TWAEV (designated substance regulation); 0.2 µmol/m <sup>3</sup> TWAEV (designated substance regulation) 0.02 ppm CEV (designated substances regulation); 0.8 µmol/m <sup>3</sup> CEV (designated substances regulation)
Quebec:	0.005 ppm TWAEV; 0.051 mg/m <sup>3</sup> TWAEV
Saskatchewan:	0.051 mg/m <sup>3</sup> TWA; 0.005 ppm TWA 0.153 mg/m <sup>3</sup> STEL; 0.015 ppm STEL
Yukon:	0.02 ppm Ceiling; 0.2 mg/m <sup>3</sup> Ceiling

## 9. PHYSICAL & CHEMICAL PROPERTIES

**APPEARANCE:** Black, medium viscosity

**ODOR:** Low or no detectable odor, weakly aromatic

**ODOR THRESHOLD:** Not Available

**BOILING POINT:** >400°F (>204°C)

**SOLUBILITY IN WATER:** Not Available

**SPECIFIC GRAVITY:** 1.0-1.2

**VAPOR PRESSURE:** <1.5x10<sup>-5</sup> (0.000021 hPa) @ 77°F (25°C)

**% VOLATILE:** <=10 g/l (Test Method: calculated per EPA method 24)



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

## 10. STABILITY & REACTIVITY

**INCOMPATIBILITY WITH OTHER MATERIALS:** Strong mineral acids, bases, oxidizers, metals, and/or water.

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization may occur with high temperatures associated with fires and/or contact with incompatible materials. Highly exothermic reactions may occur when mixed in large quantities with incompatible materials.

**DECOMPOSITION PRODUCTS:** Decomposition of this product may yield oxides of nitrogen and carbon, traces of HCN, Isocyanate vapors and aerosols.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

This product is irritating to the eyes, respiratory system and skin. This product may cause sensitization by inhalation and skin contact. This product may be absorbed through the skin. Chest pain and/or shortness of breath may occur.

### CHRONIC TOXICITY

Prolonged or repeated liquid contact can result in defatting and drying of the skin, which may result in skin irritation and dermatitis. Respiratory tract sensitization, characterized by asthma-like symptoms such as tightness in the chest, difficulty breathing, and wheezing may result from prolonged or repeated inhalation of dust/processing fumes of this product.

### CARCINOGENICITY

No information available for the product.

### Component Carcinogenicity

#### Methylene bisphenol isocyanate (MDI) (101-68-8)

IARC: Monograph 71, 1999; Supplement 7, 1987; Monograph 19, 1979 (Group 3 (not classifiable))

## 12. ECOLOGICAL INFORMATION

No information available for the product.

### Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL:** Waste must be handled in accordance with all federal, state, provincial, and local regulations.

### UNUSED & UNCONTAMINATED PRODUCT:

#### Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

## 14. TRANSPORT INFORMATION

### US DOT Information

**Shipping Name:** This product is not regulated as a hazardous material for transport.

### TDG Information

**Shipping Name:** This product is not regulated as a dangerous good for transport.

## 15. REGULATORY INFORMATION

### US FEDERAL REGULATIONS

#### SARA 313 INFORMATION:

##### Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 313 (40 CFR 372.65).

##### Methylene bis(4-cyclohexylisocyanate) (5124-30-1)

SARA 313: 1.0 % de minimis concentration (Listed under Chemical Category N120, Diisocyanates)

##### Methylene bisphenol isocyanate (MDI) (101-68-8)

SARA 313: 1.0 % de minimis concentration (Listed under Chemical Category N120, Diisocyanates)

#### SARA HAZARD CATEGORY:

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** Yes

#### COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA):

##### Component Analysis

This material contains one or more of the following chemicals required to be identified under CERCLA (40 CFR 302.4).

##### Methylene bisphenol isocyanate (MDI) (101-68-8)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are exempt from listing (i.e. as polymers) or are listed on the confidential inventory as declared by the supplier.

#### Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatocyclohexane]	67837-35-8	No	No	No
Methylene bis(4-cyclohexylisocyanate)	5124-30-1	Yes	DSL	EINECS
Methylene bisphenol isocyanate (MDI)	101-68-8	Yes	DSL	EINECS



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

Silane, triethoxy(3-isocyanatopropyl)-	24801-88-5	Yes	NDSL	EINECS
--	------------	-----	------	--------

### STATE RIGHT-TO-KNOW:

#### Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Methylene bis(4-cyclohexylisocyanate)	5124-30-1	Yes	Yes	Yes	Yes	Yes	Yes
Methylene bisphenol isocyanate (MDI)	101-68-8	Yes	Yes	Yes	Yes	Yes	Yes

Other state regulations may apply. Check individual state requirements.

### CANADIAN REGULATIONS

This product is regulated under the Canadian Controlled Products Regulations.

### WHMIS INFORMATION:

WHMIS Classification: D2A, D2B

#### Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Methylene bis(4-cyclohexylisocyanate)	5124-30-1	0.1 %
Methylene bisphenol isocyanate (MDI)	101-68-8	0.1 %

### EUROPE:

#### Component Analysis

Component (CAS#)	EC #
Methylene bis(4-cyclohexylisocyanate) (5124-30-1)	225-863-2
Methylene bisphenol isocyanate (MDI) (101-68-8)	202-966-0
Silane, triethoxy(3-isocyanatopropyl)- (24801-88-5)	246-467-6



# Material Safety Data Sheet

REMA TIP TOP

Product #'s: Rema GOO, Part A

MSDS #: RTT-IND-007

Rev. # 1

Rev. Date: 2/12/2008

## 16. OTHER INFORMATION

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

**NFPA Ratings: Health: 2 Fire: 1 Reactivity: 1**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### MEDICAL EMERGENCIES:

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

#### FOR ANY OTHER INFORMATION:

REMA TIP TOP/NO. AMERICA  
119 Rockland Ave.  
NORTHVALE, NJ 07647  
201-768-8100

**NOTICE:** REMA TIP/TOP USA believes that the information contained on this material 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, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.**