



# Material Safety Data Sheet

**Product No. 960, 960ND**

## 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: REMA Bead Sealer & REMA Bead Sealer, No Drip

Product Use: Rim Sealer

MSDS Preparation Date: 12/4/2008

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

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

## 2. PRODUCT INGREDIENTS

| <u>CHEMICAL NAME:</u> | <u>CAS NUMBER:</u> | <u>% RANGE:</u> | <u>OSHA PEL:</u>          |
|-----------------------|--------------------|-----------------|---------------------------|
| Trichloroethylene     | 79-01-6            | 60 - 80         | 100 ppm TWA               |
| 1,2-Butylene oxide    | 106-88-7           | 0 - 1           | Not Established           |
| Carbon black          | 1333-86-4          | 0 - 15          | 3.5 mg/m <sup>3</sup> TWA |

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). The balance of ingredients not rated as hazardous as defined in 29 CFR 1910.1200. This product is regulated under the Canadian Controlled Products Regulations.

The balance of ingredients not rated as hazardous as defined in 29 CFR 1910.1200.

## 3. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS:

The product is a black, viscous liquid with a chlorinated or ether like odor. This product is harmful by inhalation, when in contact with the skin, eyes and if it is swallowed. Probable cancer hazard. Overexposure may cause damage to the liver and kidneys.

**EYE:** This product may cause irritation to the eyes. Contact may cause stinging, watering, redness, swelling, and eye damage. Vapors may also produce eye irritation. Chronic eye exposure to this product may cause irreversible eye damage.

**SKIN:** This product may cause irritation to the skin. Prolonged and/or repeated skin contact with this product may cause irritation, defatting of skin and dermatitis. Confinement of this material on the skin may result in chemical burns. This product may be harmful if it is absorbed through the skin.

**INGESTION:** Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. May produce central nervous system depression. If aspirated (liquid enters the lung), the product may be rapidly absorbed through the lungs and can result in chemical pneumonitis and pulmonary edema/ hemorrhage.



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**INHALATION:** This product may be harmful by inhalation. Overexposure can cause central nervous system depression with symptoms of headache, dizziness, stupor, loss of consciousness or death. Exposure to high concentrations can cause irregular heartbeat, cardiac arrest and death. Overexposure can result in adverse effects on the liver, nervous system and other internal organs.

## 4. FIRST AID

**EYES:** Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

**SKIN:** For skin contact flush with large amounts of water while removing contaminated clothing. Wash affected area with mild soap and water. If irritation persists, get medical attention. Wash contaminated clothing before reuse.

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

**INHALATION:** If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

**NOTE TO PHYSICIAN:** Chlorinated hydrocarbons may sensitize the heart to epinephrine and other circulating catecholamines so that arrhythmias may occur. Careful consideration of this potential adverse effect should precede administration of epinephrine or other cardiac stimulants and the selection of bronchodilators.

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES:

**Flash Point:** >200 F

**Upper Flammable Limit (UFL):** 44.8% @ 212 °F; 10.5% @ 77 °F

**Auto Ignition:** 788 °F

**Method Used:** TOC, TCC & COC

**Lower Flammable Limit (LFL):** 8% @ 212 °F; 8% @ 77 °F

**Flammability Classification:** Not Available

**HAZARDOUS COMBUSTION PRODUCTS:** Hazardous combustion products may include and are not limited to hydrogen chloride. Hazardous combustion products may include trace amounts of phosgene and chlorine gases.

**EXTINGUISHING MEDIA:** Water fog/ spray, carbon dioxide, and foam.

**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:** Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.



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## 6. ACCIDENTAL RELEASE MEASURES

**CONTAINMENT PROCEDURES:** Stop the flow of material, if this is without risk. Material is heavier than water and has limited water solubility. It will collect on the lowest surface.

**CLEAN-UP PROCEDURES:** Eliminate ignition sources including sources of electrical, static or frictional sparks. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into properly labeled closed metal containers for disposal. Place in non-leaking containers for immediate disposal. Flush area with water to remove trace residue. Do not allow the spilled product to enter public drainage system or open watercourses.

**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 National Response Center (800-424-8802) of uncontained releases to the environment in excess of the Reportable Quantity (RQ). For all transportation accidents, call CHEMTREC at 800-424-9300.

## 7. HANDLING & STORAGE

**HANDLING:** Do not get in contact with skin and eyes. Use this product with adequate ventilation. Avoid prolonged or repeated breathing of vapors. Avoid dust or mist formation. Wash thoroughly after handling. DO NOT eat, drink or smoke in product area.

Do not reuse the empty container. Do not cut or weld on empty drums. Sufficient vapors from residues may be present to cause explosion and serious injury and/or death. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or promptly disposed of.

**STORAGE:** Keep packaged in original, labeled containers until use. Store in a cool, dry, well-ventilated area. Store this product in airtight containers away from sources of heat and light. Ground all equipment to prevent accumulation of static charge. Store away from incompatible materials. Do not remove or deface label. Do not reuse container without recycling or reconditioning in accordance with any Federal, Provincial, State or local laws. Do not use cutting or welding torches, open flames, or electric arcs on empty or full containers.

## 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 safety glasses. Chemical goggles and/ or face shields should be worn, when splashing is a possibility. Contact lenses should not be exposed. If vapor exposure causes eye discomfort, use a full-face respirator.

**SKIN PROTECTION:** Use impervious gloves. Use of impervious apron and boots are recommended.



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**RESPIRATORY PROTECTION:** If recommended exposure limits are exceeded, a NIOSH-approved, continuous flow supplied air-respirator, hood or helmet is acceptable. A NIOSH approved self-contained breathing apparatus or supplied-air respirator, with full-face piece, is required for vapor concentrations above 625 ppm. A NIOSH approved self-contained positive pressure breathing apparatus, with full-face piece, is required for spills and/ or emergencies.

## **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.

### **Trichloroethylene (79-01-6)**

|        |                                |
|--------|--------------------------------|
| ACGIH: | 50 ppm TWA<br>100 ppm STEL     |
| OSHA:  | 100 ppm TWA<br>200 ppm Ceiling |

### **Carbon black (1333-86-4)**

|        |   |
|--------|---|
| ACGIH: | 3.5 mg/m <sup>3</sup> TWA   |
| OSHA:  | 3.5 mg/m <sup>3</sup> TWA   |
| NIOSH: | 3.5 mg/m <sup>3</sup> TWA; 0.1 mg/m <sup>3</sup> TWA (as PAH, carbon black in presence of polycyclic aromatic hydrocarbons) |

## **Component Exposure Limits - Canada**

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

### **Trichloroethylene (79-01-6)**

|                   |  |
|-------------------|--|
| Alberta:          | 50 ppm TWA; 269 mg/m <sup>3</sup> TWA<br>100 ppm STEL; 537 mg/m <sup>3</sup> STEL      |
| British Columbia: | 50 ppm TWA<br>100 ppm STEL   |
| Manitoba:         | 50 ppm TWA; 270 mg/m <sup>3</sup> TWA<br>200 ppm STEL; 1080 mg/m <sup>3</sup> STEL     |
| New Brunswick:    | 50 ppm TWA; 269 mg/m <sup>3</sup> TWA<br>100 ppm STEL; 537 mg/m <sup>3</sup> STEL      |
| NW Territories:   | 100 ppm TWA; 537 mg/m <sup>3</sup> TWA<br>150 ppm STEL; 806 mg/m <sup>3</sup> STEL     |
| Nova Scotia:      | 50 ppm TWA<br>100 ppm STEL   |
| Nunavut:          | 100 ppm TWA; 537 mg/m <sup>3</sup> TWA<br>150 ppm STEL; 806 mg/m <sup>3</sup> STEL     |
| Ontario:          | 50 ppm TWAEV<br>100 ppm STEV   |
| Quebec:           | 50 ppm TWAEV; 269 mg/m <sup>3</sup> TWAEV<br>200 ppm STEV; 1070 mg/m <sup>3</sup> STEV |
| Saskatchewan:     | 269 mg/m <sup>3</sup> TWA; 50 ppm TWA<br>537 mg/m <sup>3</sup> STEL; 100 ppm STEL      |
| Yukon:            | 100 ppm TWA; 535 mg/m <sup>3</sup> TWA<br>150 ppm STEL; 800 mg/m <sup>3</sup> STEL     |



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## **Carbon black (1333-86-4)**

|                   |                             |
|-------------------|-----------------------------|
| Alberta:          | 3.5 mg/m <sup>3</sup> TWA   |
| British Columbia: | 3.5 mg/m <sup>3</sup> TWA   |
| Manitoba:         | 3.5 mg/m <sup>3</sup> TWA   |
| New Brunswick:    | 3.5 mg/m <sup>3</sup> TWA   |
| NW Territories:   | 3.5 mg/m <sup>3</sup> TWA   |
|                   | 7 mg/m <sup>3</sup> STEL    |
| Nova Scotia:      | 3.5 mg/m <sup>3</sup> TWA   |
| Nunavut:          | 3.5 mg/m <sup>3</sup> TWA   |
|                   | 7 mg/m <sup>3</sup> STEL    |
| Ontario:          | 3.5 mg/m <sup>3</sup> TWAEV |
| Quebec:           | 3.5 mg/m <sup>3</sup> TWAEV |
| Saskatchewan:     | 3.5 mg/m <sup>3</sup> TWA   |
|                   | 7 mg/m <sup>3</sup> STEL    |
| Yukon:            | 3.5 mg/m <sup>3</sup> TWA   |
|                   | 7 mg/m <sup>3</sup> STEL    |

## **9. PHYSICAL & CHEMICAL PROPERTIES**

**APPEARANCE:** Black, viscous liquid.

**ODOR:** Irritating                      **ODOR THRESHOLD:** 1.36 (Trichloroethylene)

**BOILING POINT:** ~ 180 °F

**SOLUBILITY IN WATER:** 0.11 g/ 100 ml @ 25°C

**SPECIFIC GRAVITY:** 1.45 @ 77 °F

**VAPOR PRESSURE:** ~70 mmHg @ 25°C

**% VOLATILE:** 89%

## **10. STABILITY & REACTIVITY**

**INCOMPATIBILITY WITH OTHER MATERIALS:** This product may react with strong oxidizing agents. Materials to avoid are strong alkalis, barium, lithium, magnesium and titanium. Contact with aluminum parts in a pressurized fluid system may cause violent reactions. Aluminum equipment should not be used for storage and/ or transfer.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**DECOMPOSITION PRODUCTS:** Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hazardous decomposition products may include and are not limited to hydrogen chloride and trace amounts of chlorine and phosgene.



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## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

This product is irritating to the eyes and respiratory tract and causes drowsiness, dizziness and nausea. Ventricular arrhythmias and very rapid respiration have been observed in individuals exposed to 15,000 ppm. High concentrations or prolonged overexposure can cause unconsciousness and death.

### CHRONIC TOXICITY

Chronic overexposure to the ingredient Trichloroethylene has caused toxic effects in the liver, Lymphatic system (one species), kidney and cardiovascular system of experimental animals. Humans exposed to Trichloroethylene can become intolerant to ethyl alcohol, with small quantities causing inebriation and skin blotches. Reports have been published associating increased incidences of scleroderma (systemic sclerosis) with exposure to Trichloroethylene. The finding of chronic toxic effects in lab animals may indicate toxicity to humans. Overexposure should be avoided; failure to do so could result in illness, injury or even death depending on the level and duration of exposure.

### CARCINOGENICITY

This product contains component(s) that may be listed by ACGIH, IARC, NIOSH, NTP OR OSHA.

#### Component Carcinogenicity

##### Trichloroethylene (79-01-6)

ACGIH: A5 - Not Suspected as a Human Carcinogen  
 NIOSH: potential occupational carcinogen  
 NTP: Reasonably Anticipated To Be A Carcinogen (Possible Select Carcinogen)  
 IARC: Monograph 63, 1995 (Group 2A (probably carcinogenic to humans))

##### Carbon black (1333-86-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen  
 NIOSH: potential occupational carcinogen (in presence of polycyclic aromatic hydrocarbons)  
 IARC: Monograph 65, 1996 (Group 2B (possibly carcinogenic to humans))

##### 1,2-Butylene oxide (106-88-7)

IARC: Monograph 71, 1999; Monograph 47, 1989 (Overall evaluation upgraded from 3 to 2B with supporting evidence from other data relevant to the evaluation of carcinogenicity and its mechanisms) (Group 2B (possibly carcinogenic to humans))

## 12. ECOLOGICAL INFORMATION

No information available for the product.

#### Component Analysis - Ecotoxicity - Aquatic Toxicity

##### Trichloroethylene (79-01-6)

#### Test & Species

96 Hr LC50 fathead minnow

44.1 mg/L

#### Conditions

flow-through



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## 13. DISPOSAL CONSIDERATIONS

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

### UNUSED & UNCONTAMINATED PRODUCT:

#### Component Waste Numbers

#### Trichloroethylene (79-01-6)

RCRA:

waste number U228  
0.5 mg/L regulatory level

Trichloroethylene has a waste number, U228, under RCRA - Hazardous Constituents - Appendix VIII to 40 CFR 261.

## 14. TRANSPORT INFORMATION

### US DOT Information

**Shipping Name:** Trichloroethylene Mixture

**UN/NA #:** UN1710 **Hazard Class:** 6.1 **Packing Group:** III

**Required Label(s):** POISON

**Additional Info.:** Check RQ regulations for the product packaging.

PLACARD (WHEN REQUIRED): POISON, 6.

EXCEPTIONS: DOT Paragraphs 173.153 & 173.203.

ALTERNATE SHIPPING ARRANGEMENTS: Based on package or shipping container size, this product may be shipped as a, "Limited Quantity", or, renamed, "Consumer Commodity" and reclassified as, "ORM-D" Material.

### TDG Information

**Shipping Name:** Trichloroethylene Mixture

**UN/NA #:** UN1710 **Hazard Class:** 6.1 **Packing Group:** III

**Required Label(s):** POISON

**Additional Info.:** Check RQ regulations for the product packaging.

### IMDG Information

**Additional Info.:** EmS No. = 6.1-02

MFAG Table No. = 340

IMDG Code Page: 6273

### IATA Information

**Additional Info.:** 6.1

## 15. REGULATORY INFORMATION

### US FEDERAL REGULATIONS

#### SARA 313 INFORMATION:



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## Component Analysis

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

### Trichloroethylene (79-01-6)

SARA 313: 0.1 % de minimis concentration

### 1,2-Butylene oxide (106-88-7)

SARA 313: 0.1 % de minimis concentration

## SARA HAZARD CATEGORY:

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

## 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).

### Trichloroethylene (79-01-6)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

### 1,2-Butylene oxide (106-88-7)

CERCLA: 100 lb final RQ; 45.4 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 either exempt from listing (i.e. polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

## Component Analysis - Inventory

| Component          | CAS #     | TSCA | CAN | EEC    |
|--------------------|-----------|------|-----|--------|
| Trichloroethylene  | 79-01-6   | Yes  | DSL | EINECS |
| Carbon black       | 1333-86-4 | Yes  | DSL | EINECS |
| 1,2-Butylene oxide | 106-88-7  | Yes  | DSL | 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  |
|--------------------|-----------|-----|-----|-----|-----|-----|-----|
| Trichloroethylene  | 79-01-6   | Yes | Yes | Yes | Yes | Yes | Yes |
| Carbon black       | 1333-86-4 | Yes | Yes | Yes | Yes | Yes | Yes |
| 1,2-Butylene oxide | 106-88-7  | No  | Yes | Yes | Yes | Yes | Yes |

This product is not a consumer product. This product may not be legally authorized for consumer use or sale in a state that has adopted the OTC Model Rule, or in California pursuant to the Consumer Products Regulation of the California Air Resources Board, or in states with similar laws. Please check federal, state, and local air control laws for guidance.

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

**WARNING!** This product contains a chemical known to the state of California to cause cancer.





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## CANADIAN REGULATIONS

### WHMIS INFORMATION:

WHMIS Classification: D1A, D2A, D2B

### Component Analysis - WHMIS IDL

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

| Component         | CAS #   | Minimum Concentration                     |
|-------------------|---------|---|
| Trichloroethylene | 79-01-6 | 1 % (English Item 1612, French Item 1646) |

## EUROPE:

### Component Analysis

| Component (CAS#)              | EC #      |
|-------------------------------|-----------|
| Trichloroethylene (79-01-6)   | 201-167-4 |
| Carbon black (1333-86-4)      | 215-609-9 |
| 1,2-Butylene oxide (106-88-7) | 203-438-2 |

## 16. OTHER INFORMATION

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

**NFPA Ratings: Health: 3 Fire: 1 Reactivity: 0**

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.**