

Product: Cushion Gum, Rope Rubber, Calendered Rubber

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

- Product Name: Cushion Gum, Rope Rubber, and Calendered Rubber
- Product Use: Repair and Retreading of Tires

MSDS Preparation Date: 8/01/2011

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

| CHEMICAL NAME: | CAS NUMBER: | % RANGE: | OSHA PEL: |
|---|-------------------------|---------------|--|
| Carbon black Paraffinic Oil | 1333-86-4 64742-04-7 | 27-33 8-10 | 3.5 mg/m3 TWA |
| Zinc oxide | 1314-13-2 | 1-3 | 5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) |
| N-tert-Butyl-2-benzothiazolesulfenamide | 95-31-8 | 0.1-1 | |
| Octylphenol-Formaldehyde Polymer | 26678-93-3 | 1 | |
| Sulfur | 7704-34-9 | 1 | |

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

Product is black rubber strips or slabs. Product can release hazardous combustion products. Product processing may create the formation of dusts, vapors or fumes which can cause irritation of the eyes, skin and respiratory tract. Contact with molten material may cause thermal burns. Contains carbon black, a suspect cancer hazard.

EYE: Eye contact with this material may produce mechanical irritation. Vapors released during thermal processing may irritate eyes. Contact with molten material may produce thermal burns.

SKIN: May cause mechanical irritation. Contact with molten material may produce thermal burns.

INGESTION: Ingestion of this product is unlikely. If ingestion does occur, it can produce gastric irritation.

INHALATION: Inhalation of dusts from this product may cause irritation of the respiratory tract. Fumes released during thermal processing may irritate respiratory system, skin and eyes.



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4. FIRST AID

EYES: In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention. In case of contact with molten product, cool rapidly with water and seek immediate medical attention. Do not attempt to remove molten product.

SKIN: For skin contact, wash immediately with soap and water. If irritation persists, get medical attention. For contact with molten product, do not remove any material or clothing adhering to the skin. Flush the burned area immediately with large amounts of cold water. If it is possible, submerge the area in cold water. Immediately seek medical attention or contact a physician.

INGESTION: Due to the physical nature of this material, ingestion is unlikely to occur. If ingestion of a large amount does occur, seek medical attention.

INHALATION: If vapors or fumes produced during thermal processing of this material are inhaled, remove to fresh air. If respiratory irritation occurs, if breathing becomes difficult, or if other symptoms develop, seek medical attention immediately.

NOTE TO PHYSICIAN: No additional information available.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Flash Point: Not available Flammability Classification: Not available LFL: Not available

Method Used: Not available UFL: Not available Autoignition Temperature: Not available

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, sulfur and zinc and aliphatic and aromatic hydrocarbons. Burning will produce acrid fumes and dense, black smoke.

EXTINGUISHING MEDIA: Dry chemical, foam, water fog.

FIRE FIGHTING INSTRUCTIONS: Slight fire hazard. Product is not easily ignited. If product is ignited, intense fire develops with high heat generation. Burning will produce irritating smoke and toxic fumes and gases.

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. Dike fire area to prevent oil runoff. Carbon dioxide may be ineffective on larger fires due to lack of cooling capacity, which may result in re-ignition.

6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT PROCEDURES: Contain the discharged material.

CLEAN-UP PROCEDURES: Sweep up or gather material and place in appropriate container for disposal. Wash spill area thoroughly. Wear appropriate protective equipment during cleanup.

EVACUATION PROCEDURES: Isolate area. Keep unnecessary personnel away.

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SPECIAL PROCEDURES: None necessary.

7. HANDLING & STORAGE

HANDLING: Do not heat above 400°F (204°C). Avoid inhaling fumes or vapors produced during thermal processing. Avoid eye and excessive skin contact. Wash thoroughly after handling. Use only with adequate ventilation. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Special care must be taken to avoid contact with molten materials.

STORAGE: Store in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust ventilation. Ventilation should effectively remove and prevent buildup of any vapors or fumes generated from the handling or processing of this product.

PERSONAL PROTRECTIVE EQUIPMENT

EYE/FACE PROTECTION: Wear safety glasses; chemical goggles for fumes which may arise from thermal processing.

SKIN PROTECTION: Normal work clothing (long sleeved shirts and long pants) is recommended. Impervious gloves should be worn when handling this product. For molten product, use any type of thermal insulating gloves and other clothing as necessary to protect from thermal burns.

RESPIRATORY PROTECTION: When thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.



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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.

| Carbon Black (1333-86-4) | |
|--------------------------|---|
| ACGIH: | 3.5 mg/m3 TWA |
| OSHA: | 3.5 mg/m3 TWA |
| NIOSH: | 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (as PAH, carbon black in presence of polycyclic aromatic hydrocarbons) |
| Zinc Oxide (1314-13-2) | |
| ACGIH: | 2 mg/m3 TWA (respirable fraction) |
| | 10 mg/m3 STEL (respirable fraction) |
| OSHA: | 5 mg/m3 TWA (fume); 10 mg/m3 TWA (total dust); |
| | 5 mg/m3 TWA (respirable fraction) |
| | 10 mg/m3 STEL (fume) |
| NIOSH: | 5 mg/m3 TWA (dust and fume) |
| | 10 mg/m3 STEL (fume) |
| | 15 mg/m3 Ceiling (dust) |



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Component Exposure Limits

The following Provincial Exposure Limits apply for this product's components. Carbon Black (1333-86-4) 3.5 mg/m3 TWA Alberta: 3.5 mg/m3 TWA British Columbia: 3.5 mg/m3 TWA Manitoba: 3.5 mg/m3 TWA New Brunswick: NW Territories: 3.5 mg/m3 TWA 7 mg/m3 STEL Nova Scotia: 3.5 mg/m3 TWA 3.5 mg/m3 TWA Nunavut: 7 mg/m3 STEL Ontario: 3.5 mg/m3 TWAEV 3.5 mg/m3 TWAEV Ouebec: 3.5 mg/m3 TWA Saskatchewan: 7 mg/m3 STEL 3.5 mg/m3 TWA Yukon: 7 mg/m3 STEL Zinc Oxide (1314-13-2) Alberta: 10 mg/m3 TWA (dust); 5 mg/m3 TWA (fume) 10 mg/m3 STEL (fume) 2 mg/m3 TWA (respirable) British Columbia: 10 mg/m3 STEL (respirable) 5 mg/m3 TWA (fume); 10 mg/m3 TWA (dust, the value is for total dust containing no asbestos and Manitoba: < 1% crystalline silica) 10 mg/m3 STEL (fume) New Brunswick: 5 mg/m3 TWA (fume); 10 mg/m3 TWA (particulate matter containing no asbestos and < 1% crystalline silica, dust) 10 mg/m3 STEL (fume) NW Territories: 5 mg/m3 TWA (fume); 5 mg/m3 TWA (dust, respirable mass); 10 mg/m3 TWA (dust, total mass) 10 mg/m3 STEL (fume) Nova Scotia: 2 mg/m3 TWA (respirable fraction) 10 mg/m3 STEL (respirable fraction) 5 mg/m3 TWA (fume); 5 mg/m3 TWA (dust, respirable mass); 10 mg/m3 TWA (dust, total mass) Nunavut: 10 mg/m3 STEL (fume) 2 mg/m3 TWAEV (respirable) Ontario: 10 mg/m3 STEV (respirable) 5 mg/m3 TWAEV (fume); 10 mg/m3 TWAEV (dust) Quebec: 10 mg/m3 STEV (fume) Saskatchewan: 5 mg/m3 TWA (fume); 10 mg/m3 TWA (dust) 10 mg/m3 STEL (fume); 20 mg/m3 STEL (dust) 5 mg/m3 TWA (fume); 30 mppcf TWA (dust); 10 mg/m3 TWA (dust) Yukon: 10 mg/m3 STEL (fume); 20 mg/m3 STEL (dust)

9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: Black solid pieces or strips

| ODOR: Rubber | ODOR THRESHOLD: Not available |
|---------------------|--------------------------------------|
| | |



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BOILING POINT: Not available

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 1.115-1.145 (water=1)

VAPOR PRESSURE: Not applicable

% VOLATILE BY VOLUME: Not available

10. STABILITY & REACTIVITY

INCOMPATIBILITY WITH OTHER MATERIALS: This product may react with strong oxidizing agents and strong reducing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

DECOMPOSITION PRODUCTS: Oxides of carbon, sulfur and zinc and aliphatic and aromatic hydrocarbons.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Vapors and fumes released during thermal processing may cause eye, skin and respiratory irritation. Hazardous decomposition products may be released from the product. Contact with molten product may produce thermal burns.

CHRONIC TOXICITY

No information available.

CARCINOGENICITY

Product contains Carbon Black, a suspect carcinogen.

Component Carcinogenicity

Carbon Black (1333-86-4)

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

12. ECOLOGICAL INFORMATION

No data available for this product.

Component Analysis - Ecotoxicity - Aquatic Toxicity

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



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13. DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

UNUSED & UNCONTAMINATED PRODUCT: Component Waste Numbers

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

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: Not regulated.

TDG Information

Shipping Name: Not regulated.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS SARA 313 INFORMATION: Component Analysis None of this products components are listed under SARA Section 313 (40 CFR 372.65).

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

None of this products components are listed under CERCLA (40 CFR 302.4).

TOXIC SUBSTANCES CONTROL ACT (TSCA): Components of this product have been checked against the nonconfidential 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



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| Component | CAS # | TSCA | CAN | EEC |
|----------------------------------|------------|------|-----|--------|
| Carbon Black | 1333-86-4 | Yes | DSL | EINECS |
| Aromatic Oil | 64742-04-7 | Yes | DSL | EINECS |
| Zinc Oxide | 1314-13-2 | Yes | DSL | EINECS |
| Octylphenol-Formaldehyde Polymer | 26678-93-3 | Yes | DSL | No |

STATE RIGHT-TO-KNOW:

Component Analysis - State

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

| Component | CAS | СА | MA | MN | NJ | PA | RI |
|--------------|------------|-----|-----|-----|-----|-----|-----|
| Carbon Black | 1333-86-4 | Yes | Yes | Yes | Yes | Yes | Yes |
| Aromatic Oil | 64742-04-7 | No | Yes | No | No | No | No |
| Zinc Oxide | 1314-13-2 | Yes | Yes | Yes | Yes | Yes | Yes |

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.

CANADIAN REGULATIONS

WHMIS INFORMATION:

WHMIS Classification: Class D2A- Toxic Material Class D2B- Material Causing Other Toxic Effects

Component Analysis - WHMIS IDL

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

| Component | CAS # | Minimum Concentration |
|--------------|-----------|---|
| Carbon Black | 1333-86-4 | 1 % (English Item 309, French Item 1271) |
| Zinc Oxide | 1314-13-2 | 1 % (English Item 1717, French Item 1326) |

EUROPE:

| Component Analysis | | | | |
|--------------------|------------|-----------|--|--|
| Component | CAS# | EINECS# | | |
| Carbon Black | 1333-86-4 | 215-609-9 | | |
| Aromatic Oil | 64742-04-7 | 265-103-7 | | |
| Zinc Oxide | 1314-13-2 | 215-222-5 | | |



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16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS: NFPA Ratings: Health: 1 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.

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