



Safety Data Sheet

REMA TIP TOP

Product #s: HS-FSB, HS-FTG (All sizes),
HS-FCS (All sizes)

SDS #: RTT-IND-053

Rev. # 3

Rev. Date: 1/24/2017

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tip Top Wear Protection Rubber, unvulcanized

Chemical Family: Uncured Rubber Polymer

Product Use: Wear Protection & Rubber Repair

Restrictions on Use: Use as directed by manufacturer

Distributed By: Rema Tip Top - North America
240 Pegasus Avenue, 2nd floor
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

Skin Irritation, Category 3

Respiratory Sensitization, Category 1B

Skin Sensitization, Category 1B

Carcinogenicity, Category 2

Reproductive Toxicity, Category 1A

Specific Target Organ Systemic Toxicity, Repeated Exposure, Category 2, Central Nervous System, Liver,
Kidneys [Inhalation, Skin absorption, Ingestion]

Environmental Hazards

Acute Aquatic Toxicity, Category 1

GHS-Labeling

Pictograms:





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Signal Word: Danger!

Hazard Statements

H316: Causes light skin irritation

H317: May cause an allergic skin reaction

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

H351: Suspected of causing cancer

H360: May damage fertility or the unborn child

H373: May cause damage to organs through prolonged or repeated exposure

H400: Very toxic to aquatic life

Precautionary Statements

Prevention:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe dust.

P261: Avoid breathing dust.

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

P273: Avoid release to the environment.

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

P281: Use personal protective equipment as required.

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

Response:

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

P304 + P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 instruction of this SDS (Section 4).

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

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

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

Storage:

P405: Store locked up

Disposal:

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



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3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization

Uncured Rubber Polymer

Component*	CAS #	% By Wt.
Zinc Oxide	1314-13-2	< 6
Lead Monoxide	1317-36-8	< 2
1,3-Benzenediol, Resorcinol	108-46-3	< 2
Tetramethylthiuram Disulphide, Thiram	137-26-8	< 2
Di(Benzothiazol-2-yl) Disulphide	120-78-5	< 2
N-1,3-Dimethylbutyl-N'-Phenyl-P-Phenylenediamine	793-24-8	< 2
Methyl-2-Mercaptobenzimidazole	53988-10-6	< 2

*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: Irritation of the nose and airways, headache, and respiratory sensitization.

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 develop, seek medical attention.

Skin Contact

Symptoms & Effects: Skin irritation, redness, drying, and possible allergic skin reactions.

Measures: Wash skin with plenty of water after uses. If skin irritation or rash occurs, seek medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact

Symptoms & Effects: Possible slight eye irritation

Measures: 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. If symptoms develop, seek medical attention.

Ingestion

Symptoms & Effects: Irritation of the nose and airways, headache, and respiratory sensitization.

Measures: Seek immediate medical attention. Place individual on their left side and place their head down. Do not leave victim unattended.



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5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, Dry chemical, Alcohol-resistant foam, Water spray

Unsuitable Extinguishing Media: Full water jet

Hazardous Combustion Products: Nitrogen oxides (Nox), Sulfur oxides, Carbon monoxide, Carbon dioxide

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

Precautions for Fire-Fighters: This product poses a slight fire hazard. Full-face, self-contained breathing apparatus should be worn at all times. Cool storage containers with water, if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment: Recommended to wear NIOSH approved respiratory apparatus, goggles & resistant 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: Local authorities should be advised if significant waste cannot be contained.

Methods & Materials for Clean-Up: Only personnel equipped with proper respiratory, eye, and skin protection should be permitted in the area. After all visible traces have been removed, thoroughly wet vacuum the area. Transfer to a suitable container for disposal according to proper federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapors or dust of this product. Skin and eye PPE should be worn at all times when handling this product. When adequate ventilation is not provided, respiratory PPE should also be used. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking.

Storage: Store in a cool, dry, ventilated area, away from heat and ignition sources as well as from incompatible materials (see below).

Incompatible Materials: Nitrous acid, Nitrosating agents



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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits :

Exposure limits have not been established for this product.

Zinc Oxide

CAS # 1314-13-2

OSHA	Permissible Exposure Limit (PEL)	5 mg/m ³
ACGIH	Time Weighted Average (TWA)	2 mg/m ³
NIOSH	Recommended Exposure Limit (REL)	5 mg/m ³

Lead Monoxide

CAS # 1317-36-8

ACGIH	Time Weighted Average (TWA)	0.05 mg/m ³
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1,3-Benzenediol, Resorcinol

CAS # 108-46-3

ACGIH	Time Weighted Average (TWA)	10 ppm (45 mg/m ³)
NIOSH	Recommended Exposure Limit (REL)	10 ppm (45 mg/m ³)

Tetramethylthiuram

Disulphide, Thiram

CAS # 137-26-8

OSHA	Permissible Exposure Limit (PEL)	5 mg/m ³
ACGIH	Time Weighted Average (TWA)	1 mg/m ³
NIOSH	Recommended Exposure Limit (REL)	5 mg/m ³

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 dust or 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 when there is potential for the exposure of the eyes to the dust. Have a suitable eye wash station or bottle nearby in case of splashing into the eyes.



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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 as well as 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: Black / Orange Solid

Odor: Mild

Odor Threshold: No data available

pH: No data available

Melting/Freezing point: No data available

Boiling Point/ Range: No data available

Flash point (Tag closed cup): No data available

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: 1.0 – 1.4 g/cm³

Solubility in water: Insoluble

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

Auto-ignition temperature: No data available

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.



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Possibility of Hazardous Reactions: Product will not undergo hazardous polymerization or other hazardous reactions if storage and use directions are followed.

Conditions to Avoid: Elevated temperatures, Overheating, Incompatible materials (see below)

Incompatible Materials: Nitrous acid, Nitrosating agents

Hazardous decomposition products: Nitrogen oxides (NO_x), Sulfur oxides, Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

Primary Routes of Exposure: Inhalation, Skin contact

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Irritation of the nose and airways, headache, respiratory sensitization, skin irritation, redness, drying, possible allergic skin reactions, and possible eye irritation.

Delayed and Immediate Effects & Chronic Effects from Exposure: With repeated exposure, the substance may have effects on the central nervous system, kidneys and liver. This substance is suspected of harming fertility or the unborn child based on laboratory animal testing alone. This substance is a potential carcinogen to humans as outlined by OSHA, IARC, ACGIH and the NTP (see below).

Measures of Toxicity:

Acute toxicities are calculated based on component toxicities

Mixture: Acute Oral Toxicity: LD₅₀ Rat: > 5,000 mg/kg

Acute Dermal Toxicity: LD₅₀ Rabbit: > 2,000 mg/kg

Acute Inhalation Toxicity: LC₅₀ Rat: > 20,000 ppmV

Zinc Oxide

Acute Oral Toxicity

Acute Inhalation Toxicity

CAS # 1314-13-2

LD₅₀ Mouse: 7,950 mg/kg

LC₅₀ Mouse: 2,500 mg/m³

1,3-Benzenediol, Resorcinol

Acute Oral Toxicity

Acute Dermal Toxicity

CAS # 108-46-3

LD₅₀ Rat: 301 mg/kg

LD₅₀ Rabbit: 3,360 mg/kg

Tetramethylthiuram Disulphide,

Thiram

Acute Oral Toxicity

Acute Dermal Toxicity

Acute Inhalation Toxicity

CAS # 137-26-8

LD₅₀ Rat: 560 mg/kg

LD₅₀ Rabbit: > 5,000 mg/kg

LC₅₀ Rat: 4,420 ppmV



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Di(Benzothiazol-2-yl) Disulphide CAS # 120-78-5
Acute Oral Toxicity LD₅₀ Rat: >12,000 mg/kg
Acute Dermal Toxicity LD₅₀ Rabbit: > 7,940 mg/kg

N-1,3-Dimethylbutyl-N'-Phenyl-P-Phenylenediamine CAS # 793-24-8
Acute Oral Toxicity LD₅₀ Rat: 3,580 mg/kg
Acute Dermal Toxicity LD₅₀ Rabbit: > 7,940 mg/kg

Carcinogen Claims:

OSHA: **Yes; 2**, International Agency for Research on Cancer (IARC): **Yes; 2A [Probably Carcinogenic]**
ACGIH: **Yes; A3 [Animal Carcinogen]**, National Toxicology Program (NTP) Report on Carcinogens: **Yes; II [Reasonably Anticipated]**

12. ECOLOGICAL INFORMATION

Eco-toxicity: This substance is very toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment. Local authorities should be advised if significant spillages cannot be contained or if material discharges into drains or ground water.

Zinc Oxide CAS # 1314-13-2
Toxicity to Fish LC₅₀ – 1.1 mg/l (Rainbow Trout; 96 h)
Toxicity to Daphnia EC₅₀ – 0.098 mg/l (Water Flea; 48 h)

Lead Monoxide CAS # 1317-36-8
Toxicity to Fish LC₅₀ – 0.28 mg/l (Fathead Minnow; 96 h)
Toxicity to Daphnia EC₅₀ – 0.13 mg/l (Water Flea; 48 h)

1,3-Benzenediol, Resorcinol CAS # 108-46-3
Toxicity to Daphnia EC₅₀ – 0.25 mg/l (Water Flea; 48 h)
Toxicity to Algae IC₅₀ – 1.1 mg/l (Freshwater Algae; 96 h)

Tetramethylthiuram Disulphide, Thiram CAS # 137-26-8
Toxicity to Fish LC₅₀ – 0.16 mg/l (Atlantic Salmon; 96 h)
Toxicity to Daphnia EC₅₀ – 0.21 mg/l (Water Flea; 48 h)

N-1,3-Dimethylbutyl-N'-Phenyl-P-Phenylenediamine CAS # 793-24-8
Toxicity to Fish LC₅₀ – 0.14 mg/l (Rainbow Trout; 96 h)
LC₅₀ – 0.40 mg/l (Bluegill; 96 h)
LC₅₀ – 0.45 mg/l (Fathead Minnow; 96 h)
Toxicity to Daphnia EC₅₀ – 0.82 mg/l (Water Flea; 48 h)
Toxicity to Algae IC₅₀ – 0.6 mg/l (Freshwater Algae; 96 h)



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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:

This product is not regulated as a hazardous material for transport.

IMDG (Marine) SHIPPING CLASSIFICATION:

This product is not regulated as a dangerous good for transport.

IATA (Air) SHIPPING CLASSIFICATION:

This product is not regulated as a dangerous good for transport.

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
Thiram	137-26-8	< 2	10



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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: Same as OSHA GHS Classification

STATE REGULATIONS

California Proposition 65

WARNING: This product contains chemicals known to the state of California to cause cancer.

California Hazardous Substances List/Permissible Exposure List
California Toxic air contaminants
Connecticut Permissible Exposure Limits
Delaware List of Chemicals and RQs
Hawaii Permissible Exposure Limits
Idaho Toxic Air Pollutants
Illinois Toxic Air Contaminants List
Louisiana Toxic Air Pollutants
Maine Hazardous Air Pollutants
Maryland Toxic Air Pollutants for Existing Sources
Massachusetts Hazardous Substances List
Michigan Permissible Exposure Limits
Minnesota Hazardous Substances
Minnesota Permissible Exposure Limits
Nebraska Hazardous Air Pollutants
New Jersey RTK Hazardous Substances List/TCPA Extremely Hazardous Substances List
New York List of Hazardous Substances
Ohio Toxic Air Contaminants
Oklahoma Toxic Air Contaminants
North Carolina TAP Emissions Rates Requiring a Permit
Pennsylvania Hazardous Substances List
Rhode Island Toxic Air Contaminants
Tennessee Permissible Exposure Limits
Vermont Hazardous Air Contaminants/Permissible Exposure Limits
Washington Permissible Exposure Limits for Airborne Contaminants.
West Virginia Toxic Air Pollutant List
Wisconsin hazardous Air Contaminants

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
240 Pegasus Avenue, 2nd floor
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.