



# Safety Data Sheet

## REMA Tire Repair Materials

Product #s: 101001652, 101001653, 101001654

RTT-TRM-221

Rev. # 2

Rev. Date: 1/24/2020

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Remabond Brush ZV

**Chemical Family:** Polymer & Acetate Ester and Aryl Halide solution

**Product Use:** Tire Repair & Retreading Cement

**Restrictions on Use:** Use as directed by manufacturer

**Manufacturer:** Rema Tip Top/North America, Inc  
1500 Industrial Blvd.  
Madison, GA 30650  
Phone: 706-752-4000

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

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

#### Physical Hazards

Flammable Liquid, Category 2

#### Health Hazards

Skin Irritation, Category 2

Eye Irritation, Category 2A

Skin Sensitization, Category 1B

Specific Target Organ Systemic Toxicity, Single Exposure, Category 3, Respiratory irritant and narcotic effect

#### Environmental Hazards

Chronic Aquatic Toxicity, Category 1

#### GHS Labeling

##### Pictograms:



**Signal Word: Danger!**



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### Hazard Statements

H225: Highly flammable liquid and vapor  
H315: Causes skin irritation  
H319: Causes serious eye irritation  
H332: Harmful if inhaled  
H317: May cause an allergic skin reaction  
H336: May cause drowsiness or dizziness

### Precautionary Statements

#### Prevention:

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
P233: Keep container tightly closed.  
P235: Keep cool.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting/equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P261: Avoid breathing vapors.  
P264: Wash hands and exposed skin 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.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/eye protection/face protection.  
P281: Use personal protective equipment as required.

#### Response:

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.  
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340: 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.  
P321: Specific treatment found in supplemental First Aid Section of this SDS (Section 4).  
P332 + P313: If skin irritation occurs: Get medical advice/attention.  
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.  
P337 + P313: If eye irritation persists: Get medical advice/attention.  
P362: Take off contaminated clothing and wash before reuse.  
P370 + P378: In case of fire: Use dry chemical, foam, carbon dioxide or water spray for extinction.

#### Storage:

P403 + P233 + P235: Store in a well-ventilated place. Keep container tightly closed. Keep cool.  
P405: Store locked up.



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### Disposal:

P501: Dispose of contents/container in accordance with local/regional/national regulations.

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

#### Chemical characterization

Component*	CAS #	Weight %
Natural rubber	9006-04-6	10 - 20
Proprietary solvents, Acetate ester and Aryl halide	Confidential	70 - 90
Carbon Black, amorphous	1333-86-4	1 - 5
4-(1-dimethylethyl)-Phenol	60303-68-6	< 1

### 4. FIRST AID MEASURES

#### Inhalation

**Symptoms & Effects:** Nausea, headache, dizziness, drowsiness, irritation of the nose, throat and lungs

**Measures:** Immediately move outdoors or to fresh air. If not breathing or if breathing is difficult, provide artificial respiration or oxygen. If irritation occurs, seek medical attention.

#### Skin Contact

**Symptoms & Effects:** Slight skin irritation, redness

**Measures:** Wash contaminated areas with plenty of water after use. Wash contaminated clothing before reuse. If skin irritation persists, seek medical attention.

#### Eye Contact

**Symptoms & Effects:** Eye irritation, stinging sensation, tearing, redness

**Measures:** Immediately flush eyes gently with plenty of water for at least 15 minutes. While washing, remove contact lenses if present and easy to do so and continue rinsing. Rinse beneath eyelids by holding eyelids apart with clean fingers while washing. If eye irritation persists, seek medical attention.

#### Ingestion

**Symptoms & Effects:** Stomach or intestinal irritation, nausea, vomiting, dizziness, drowsiness

**Measures:** Seek immediate medical attention. If awake and alert, rinse mouth and drink plenty of water to help dilute the material. Do NOT induce vomiting as this substance is an aspiration hazard. Do not give liquids to a drowsy or unconscious person. If vomiting occurs, keep heads below hips to prevent aspiration.



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### 5. FIRE FIGHTING MEASURES

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

**Unsuitable Extinguishing Media:** None identified

**Hazardous Combustion Products:** 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:** Water may be ineffective for extinguishment, unless used under favorable conditions. Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Use water spray to cool fire exposed containers and structures if this can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

### 6. ACCIDENTAL RELEASE MEASURES

**Protective Equipment:** Recommended to wear chemical splash goggles & gloves and discard of gloves that show tears, pinholes, or signs of wear. Wear proper garments to reduce 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.

**Environmental Precautions:** Do not allow discharge into drains, surface waters, or sanitary sewer system. 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:** Absorb material with inert materials. Shovel or gather material and place in appropriate container for disposal. Wash spill area thoroughly with plenty of water.

### 7. HANDLING AND STORAGE

**Handling:** Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear proper PPE when handling this product including protective gloves, chemical splash goggles, and impervious clothing. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material.



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**Storage:** Store in a cool, well-ventilated area, away from heat and ignition sources as well as from incompatible materials (see below). Keep container tightly closed and store locked up. Keep away from food, drink, and animal foodstuffs.

**Incompatible Materials:** Strong oxidizing agents, Strong reducing agents, Inorganic acids, Halogens

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Exposure Limits :

Exposure Limits have not been established for this product.

#### Acetate ester      Confidential

OSHA	Permissible Exposure Limit (PEL)	200 ppm/610 mg/m <sup>3</sup>
ACGIH	Time Weighted Average (TWA)/(STEL)	200 ppm/250 ppm
NIOSH	Recommended Exposure Limit (REL)	200 ppm (610 mg/m <sup>3</sup> )

#### Carbon Black, amorphous      CAS # 1333-86-4

OSHA	Permissible Exposure Limit (PEL)	3.5 mg/m <sup>3</sup>
ACGIH	Time Weighted Average (TWA)	3.5 mg/m <sup>3</sup>
NIOSH	Recommended Exposure Limit (REL)	3.5 mg/m <sup>3</sup>

**Engineering Controls:** Use product in a well-ventilated area.

**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:** Wash hands before breaks and 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 splash goggles when there is potential for the exposure of the eyes to the product. Have a suitable eye wash station or bottle nearby in case of splashing into the eyes.

**Hand Protection:** Recommended to wear gloves when using this product, and to discard of gloves that show tears, pinholes, or signs of wear.

**Skin Protection:** Recommended to wear long-sleeved clothing, pants and proper foot covering in order to minimize 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.



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**Respiratory Protection:** Although unlikely, a NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be appropriate under certain circumstances 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 or other circumstances where an air-purifying respirator may not provide adequate protection.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Black Liquid

**Odor:** Mild

**Odor Threshold:** No data available

**pH:** No data available

**Melting/Freezing Point:** -89.5°F (-67.5°C)

**Boiling point/range:** 138°F (59°C)

**Flash point (Tag closed cup):** 41.7°F (5.4°C)

**Evaporation rate:** 2.5 n-Butyl Acetate=1

**Flammability: Lower Limit:** 1.46% (V) **Upper Limit:** 17.5% (V)

**Vapor pressure:** 80.6 mmHg @20°C

**Relative vapor density:** 4.66 (Air = 1)

**Density:** 0.96 g/cm<sup>3</sup> (8.06 lb/gal)

**Solubility in water:** Insoluble

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

**Auto-ignition temperature:** 774°F (412°C)

**Ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity (dynamic):** No data available

### **10. STABILITY AND REACTIVITY**

**Reactivity:** May react with oxidizing agents

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Will not react under normal conditions.

**Conditions to Avoid:** Excessive heat, direct sunlight exposure

**Incompatible Materials:** Strong oxidizing agents, Strong reducing agents, Inorganic acids, Halogens

**Hazardous decomposition products:** Carbon monoxide, Carbon dioxide



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### 11. TOXICOLOGICAL INFORMATION

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

**Symptoms Related to Physical, Chemical and Toxicological Characteristics:** Nausea, irritation of the nose, throat and airways, dizziness, drowsiness, and headache. Causes skin and eye irritation.

**Delayed and Immediate Effects & Chronic Effects from Exposure:** This material may lead to central nervous system depression and effects such as dizziness and drowsiness.

**Measures of Toxicity:**

Acute toxicities are calculated based on component toxicities.

Mixture: Acute Oral Toxicity: LD<sub>50</sub> Rat: > 4,500 mg/kg

Acute Dermal Toxicity: No sufficient data available

Acute Inhalation Toxicity: No sufficient data available

**Proprietary solvent**

Acute Oral Toxicity

Acute Dermal Toxicity

Acute Inhalation Toxicity

**Confidential**

LD<sub>50</sub> Rat: > 4,000 mg/kg

LD<sub>50</sub> Rabbit: > 2,000 mg/kg

LC<sub>50</sub> Rat: >16,000 mg/m<sup>3</sup>

**Carbon Black, amorphous**

Acute Oral Toxicity

**CAS # 1333-86-4**

LD<sub>50</sub> Rat: > 8,000 mg/kg

**Carcinogen Claims:**

OSHA: **No**, International Agency for Research on Cancer (IARC): **Inadequate evidence**

ACGIH: **No**, National Toxicology Program (NTP) Report on Carcinogens: **No**

### 12. ECOLOGICAL INFORMATION

**Eco-toxicity:** This substance is expected to be toxic to aquatic organisms with long lasting effects. 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.

**Acetate ester**

Toxicity to Fish LC<sub>50</sub> 295-348 mg/l 48h fathead minnow  
Toxicity to Daphnia EC<sub>50</sub> 1026.7 mg/l 48 h  
Toxicity to algae LC<sub>50</sub> 120 mg/l 72h

**Confidential**

**Aryl halide**

Toxicity to Fish LC<sub>50</sub> 3.68 mg/l 48h daphnia  
Toxicity to algae LC<sub>50</sub> 120 mg/l 72h

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**Carbon Black, amorphous** CAS # 1333-86-4  
Toxicity to Fish LC<sub>50</sub> > 1,000 mg/l (Zebra Fish; 96 h)  
Toxicity to Daphnia EC<sub>50</sub> > 5,600 mg/l (Water flea; 24 h)  
Toxicity to Algae EC<sub>50</sub> > 10,000 mg/l (Green Algae; 72 h)

**Persistence & Degradability:** May be toxic to the aquatic environment with long lasting effects.

**Bio-accumulative Potential:** May bioaccumulate.

**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: UN1133

PROPER SHIPPING NAME: Adhesives, containing a flammable liquid (chlorobenzotrifluorides)

TRANSPORTATION HAZARD CLASS: 3

PACKING GROUP: II

HAZARD LABEL: 3

#### **IMDG (Marine) SHIPPING CLASSIFICATION:**

IMDG CODE: 3

UN NUMBER: UN1133

MARINE POLLUTANT: Yes

EmS: F-E, S-D

IMDG PACKING GROUP: II

HAZARD LABEL: 3

#### **Description of the goods**

ADHESIVES, CONTAINING A FLAMMABLE LIQUID (chlorobenzotrifluorides)

#### **IATA (Air) SHIPPING CLASSIFICATION:**

ICAO/IATA-DGR: 3

UN NUMBER: UN1133

HAZARD LABEL: 3

#### **Description of the goods**

Adhesives, containing a flammable liquid (chlorobenzotrifluorides))





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### 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 *None Listed*

#### 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

 This product contains chlorobenzotrifluoride-(PCBTF), which is known to the State of California to cause cancer. For more information go to, [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

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



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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.

### 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, INC  
240 Pegasus Ave., 2<sup>nd</sup> 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.**