



To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrant or guarantee the information. We provide vendor SDSs in accordance with the requirements of the OSHA Hazard Communication Standard in order to assist our customers in their compliance efforts. We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Compliance Services

Zep Inc.



Safety Data Sheet

REMA Tire Repair Materials

Product #: 71-F

SDS #: RTT-TRM-034

Rev. # 4

Rev. Date: 1/29/2014

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Pre-Buff Cleaner (Liquid, Flammable)

Chemical Family: Alkane & Ketone Hydrocarbon Solution

Product Use: Rubber / Tire Repair Cleaner

Restrictions on Use: Use as directed by manufacturer

Manufacturer: Rema Tip Top - North America
119 Rockland Ave.
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. HAZARDS IDENTIFICATION

GHS Classification

Health Hazards

Skin Irritation, Category 2

Eye Irritation, Category 2A

Reproductive Toxicity, Category 2

Specific Target Organ Systemic Toxicity, Single Exposure, Category 3, Central Nervous System [Inhalation, Ingestion]

Specific Target Organ Systemic Toxicity, Repeated Exposure, Category 3, Liver, Kidney [Inhalation, Ingestion]

Aspiration Hazard, Category 1

Physical Hazards

Flammable Liquid, Category 2

Environmental Hazards

Chronic Aquatic Toxicity, Category 2

GHS Labeling

Pictograms:



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Signal Word: Danger!

Hazard Statements

H225: Highly flammable liquid and vapour

H304: May be fatal if swallowed and enters airways

H315: Causes skin irritation

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness

H361: Suspected of damaging fertility or the unborn child

H373: May cause damage to organs prolonged or repeated exposure

H411: Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention:

P201: Obtain special instructions before use.

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

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.

P260: Do not breathe vapours.

P261: Avoid breathing vapours.

P264: Wash hands and exposed skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

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.



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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).

P331: Do NOT induce vomiting.

P332 + P313: If skin irritation 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.

P391: Collect spillage.

Storage:

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

P405: Store locked up.

Disposal:

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

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization

Alkane & Ketone Hydrocarbon Solution

| Component* | CAS # | Weight % |
|------------|----------|----------|
| n-Heptane | 142-82-5 | 75 – 90 |
| Acetone | 67-64-1 | 10 – 20 |

*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: 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.



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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.

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.



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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.

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.

n-Heptane CAS # 142-82-5

| | | |
|-------|----------------------------------|------------------------------------|
| OSHA | Permissible Exposure Limit (PEL) | 500 ppm (2,000 mg/m ³) |
| ACGIH | Time Weighted Average (TWA) | 400 ppm |
| NIOSH | Recommended Exposure Limit (REL) | 85 ppm (350 mg/m ³) |

Acetone CAS # 67-64-1

| | | |
|-------|----------------------------------|--------------------------------------|
| OSHA | Permissible Exposure Limit (PEL) | 1,000 ppm (2,400 mg/m ³) |
| ACGIH | Time Weighted Average (TWA) | 500 ppm (1,200 mg/m ³) |
| NIOSH | Recommended Exposure Limit (REL) | 250 ppm (590 mg/m ³) |

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.



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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.

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: Clear Liquid

Odor: Mild

Odor Threshold: No data available

pH: No data available

Melting/Freezing Point: -133°F (-92°C)

Boiling point/range: > 170°F (> 75°C)

Flash point (Tag closed cup): -4°F (-20°C)

Evaporation rate: > 1 n-Butyl Acetate

Flammability: Lower Limit: 1.1% (V) **Upper Limit:** 13.2% (V)

Vapor pressure: Not applicable

Relative vapor density: > 2 (Air = 1)

Density: 0.67 g/cm³ (5.6 lb/gal)

Solubility in water: Partially Soluble

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

Auto-ignition temperature: 399°F (204°C)

Ignition temperature: No data available

Decomposition temperature: No data available

Viscosity (dynamic): No data available



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10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical Stability: Stable under normal conditions.

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

Conditions to Avoid: Excessive heat, Repeated direct sunlight exposure

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

Hazardous decomposition products: Carbon monoxide, Carbon dioxide

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. This substance is an aspiration hazard.

Delayed and Immediate Effects & Chronic Effects from Exposure: This material may harm fertility or harm the unborn child due to preliminary tests performed on laboratory animals. Reproductive effects on humans are currently unknown. This material may lead to central nervous system depression and effects such as dizziness and drowsiness. This substance may harm the liver and kidneys with repeated, long-term exposure.

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: > 5,000 mg/kg

Acute Inhalation Toxicity: LC₅₀ Rat: > 20 mg/l

n-Heptane

CAS # 142-82-5

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

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

Acute Inhalation Toxicity LC₅₀ Rat: 103,000 mg/m³

Acetone

CAS # 67-64-1

Acute Oral Toxicity LD₅₀ Rat: 5,800 mg/kg

Acute Dermal Toxicity LD₅₀ Rat: > 20,000 mg/kg

Acute Inhalation Toxicity LC₅₀ Rat: > 16,000 ppmV



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Carcinogen Claims:

OSHA: No

International Agency for Research on Cancer (IARC): No; 4 [Probably Not Carcinogenic]

ACGIH: No; A5 [Not Suspected]

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.

n-Heptane

CAS # 142-82-5

Toxicity to Fish LC₅₀ – 4.0 mg/l (Goldfish; 24 h)

LC₅₀ – 375 mg/l (Tilapia; 96 h)

Toxicity to Daphnia EC₅₀ – 1.5 mg/l (Water flea; 48 h)

Acetone

CAS # 67-64-1

Toxicity to Fish LC₅₀ – 5,540 mg/l (Rainbow Trout; 96 h)

LC₅₀ – 8,300 mg/l (Bluegill; 96 h)

LC₅₀ – 8,733 mg/l (Fathead Minnow; 96 h)

Toxicity to Daphnia EC₅₀ – 13,500 mg/l (Water flea; 48 h)

Persistence & Degradability: No data available; Substance is readily biodegradable.

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:

UN NUMBER: UN1993

PROPER SHIPPING NAME: Flammable liquid, n.o.s. (n-Heptane, Acetone)

TRANSPORTATION HAZARD CLASS: 3

PACKING GROUP: II

HAZARD LABEL: 3



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IMDG (Marine) SHIPPING CLASSIFICATION:

IMDG CODE: 3

UN NUMBER: UN1993

MARINE POLLUTANT: Yes

EmS: F-E; S-E

IMDG PACKING GROUP: II

HAZARD LABEL: 3

Description of the goods

FLAMMABLE LIQUID, N.O.S. (n-Heptane, Acetone)

IATA (Air) SHIPPING CLASSIFICATION:

ICAO/IATA-DGR: 3

UN NUMBER: UN1993

HAZARD LABEL: 3

Description of the goods

Flammable liquid, n.o.s. (n-Heptane, Acetone)

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 |
|-----------|---------|----------|-----------|
| Acetone | 67-64-1 | 10 – 20 | 5,000 |

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: B2, D2B (Based on components)



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STATE REGULATIONS

California Proposition 65

This product does not contain materials known to the state of California to cause cancer, birth defects, and other reproductive harm.

The components of this product may be included on the various state hazardous materials lists noted below.

California Hazardous Substances List

Massachusetts Hazardous Substances List

New Jersey RTK Hazardous Substances List

New Jersey TCPA Extremely Hazardous Substances List

Pennsylvania Hazardous Substances List

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
119 Rockland Ave.
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.**

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