



Safety Data Sheet

REMA TIP TOP

Product: RG 7000 HARDENER

Rev. #: 2

SDS #: RTT-IND-114

Rev. Date: 3/15/19

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: RG 7000 HARDENER

Chemical Family: Amine, Polyol Solution

Product Use: Hardener

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. HAZARD IDENTIFICATION

GHS Classifications

Health Hazards

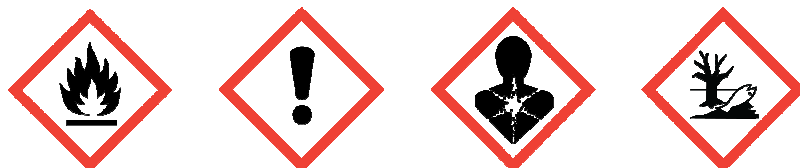
Flammable liquid, Category 3
Acute Toxicity, Oral, Category 4
Acute Toxicity, Dermal, Category 4
Eye Irritation, Category 2A
Skin sensitization, Category 1
Carcinogenicity, Category 2
Specific Target Organ Systemic Toxicity, Repeated Exposure, Category 2, Oral

Environmental Hazards

Acute Aquatic Toxicity, Category 1
Chronic Aquatic Toxicity, Category 1

GHS-Labeling

Pictograms:



Signal Word: Warning

Hazard Statements



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H226: Flammable liquid and vapor
H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation
H332: Harmful if inhaled
H317: May cause an allergic skin reaction
H351: Suspected of causing cancer
H361: Suspected of causing developmental effects in unborn child
H371: May cause damage to organs (Liver, Kidney, Bladder and Central Nervous System)
H410: Very 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 vapors.
P264: Wash skin and exposed areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/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.
P314: Get medical advice/attention if you feel unwell.
P321: Specific treatment found in supplemental First Aid section of this SDS (Section 4).
P332 + P313: If skin irritation occurs: Get medical advice/attention.
P337 + P313: If eye irritation persists: Get medical advice/attention.
P370 + P378: In case of fire: Use alcohol-resistant foam, carbon dioxide, or dry chemical for extinction.
P362: Take off contaminated clothing and wash before reuse.



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Storage:

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

Disposal:

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

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization

Component*	CAS #	Weight %
Diethylmethylbenzenediamine	68479-98-1	70 - 85
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine	106264-79-3	5 - 10
Toluene	108-88-3	5 - 7
Titanium dioxide	13463-67-7	5 - 10

4. FIRST AID MEASURES:

Inhalation

Symptoms & Effects: Stomach or intestinal irritation, severe eye, skin and respiratory tract burns, nose, throat and lung irritation, respiratory tract irritation, headache, nausea, dizziness, confusion, breathing difficulty

Measures: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped or is labored, give artificial respiration. Call a POISON center or doctor/physician if you feel unwell.

Skin Contact

Symptoms & Effects: Skin burns, severe skin irritation, redness, drying

Measures: Immediately remove contaminated clothing and shoes, and any extraneous chemical, if possible to do so without delay. Wash off immediately with plenty of water for at least 15-20 minutes and until no evidence of the chemical remains. Launder all contaminated clothing before reuse. If skin irritation occurs, seek medical advice/attention.

Eye Contact

Symptoms & Effects: Eye burning, severe eye irritation, tearing, redness, blindness (severe exposure)

Measures: Immediately remove contact lenses and flush eyes and beneath the eyelids with plenty of water for at least 20 minutes. While washing, separate the eyelids with fingers and roll eyes in a circular motion. Flush for a longer period of time if there is any indication of residual chemical in the eye. If eye irritation persists, seek medical advice/attention.



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Ingestion

Symptoms & Effects: Stomach or intestinal irritation, severe burns of the mouth and throat, digestive tract irritation, nausea, vomiting

Measures: Do not induce vomiting without medical advice. Rinse out the mouth with plenty of water and drink 1 or 2 glasses of water. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, Carbon dioxide, Alcohol-resistant foam, Dry sand, Limestone powder

Unsuitable Extinguishing Media: Water may be ineffective unless used under favorable conditions.

Hazardous Combustion Products: Ammonia, Nitrogen oxide, 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: Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from firefighting to enter drains or water courses. Incomplete combustion may form carbon monoxide and burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

6. ACCIDENTAL RELEASE MEASURES:

Protective Equipment: Recommended to wear self-contained breathing apparatus, chemical splash 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. Pay close attention to the spreading of gases, especially at ground level.

Environmental Precautions: Do not allow discharge into drains, surface waters, or sanitary sewer system. Prevent spreading over a wide area by containment or oil barriers. 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: Contain spilled material with inert, non-combustible absorbent materials (e.g. sand, earth, diatomaceous earth, vermiculite). Transfer to a suitable container for disposal according to proper federal, state, and local regulations.



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7. HANDLING AND STORAGE

Handling: Do not use sodium nitrite or other nitrosating agents in formulations containing this product, as this may lead to the formation of suspected cancer-causing nitrosamines. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Do not cut, puncture, or weld on or near the container. Avoid breathing vapors and/or aerosols. Avoid contact with skin and eyes. Use only in well-ventilated areas. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Store in steel containers, preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store near acids or oxidizers. Avoid storing containers in direct sunlight as vapors may accumulate in the head space, creating pressure. Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials: Acids, Sodium nitrite, Nitrosating agents, Oxidizers, Strong reducing agents

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Limits

Exposure limits have not been established for this product.

Toluene CAS # 108-88-3

OSHA	Permissible Exposure Limit (PEL)	200 ppm (750 mg/m ³)
ACGIH	Time Weighted Average (TWA)	20 ppm (75 mg/m ³)
NIOSH	Recommended Exposure Limit (REL)	100 ppm (375 mg/m ³)

Titanium Dioxide CAS # 13463-67-7

OSHA	Permissible Exposure Limit (PEL)	15 mg/m ³
ACGIH	Time weighted average (TWA)	10 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 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. Discard of contaminated leather articles.



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Eye Protection: Recommended to wear a full face shield with tight fitting, chemical splash goggles underneath at all times when using this product. Have a suitable eye wash station or bottle nearby in case of splashing into the eyes.

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: Minimally recommended to wear long-sleeved clothing, pants and proper foot covering in order to prevent direct skin contact with the product. Recommended to wear impervious clothing, full rubber suits, rubber or plastic boots and slicker suits. 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: White liquid

Odor: Amine / Fishy

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): > 99°F (> 37°C)

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: No data available

Solubility in water: Slight

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



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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: Avoid exposure to excessive heat and ignition sources as well as incompatible materials. Product will not undergo hazardous polymerization.

Conditions to Avoid: Excessive heat and ignition sources.

Incompatible Materials: Sodium hypochlorite, Acids, Organic acids, Mineral acids, Peroxides, Nitrosamines, Nitrous acids, Nitrosating agents, Oxidizing agents, Reactive metals, Strong reducing agents

Hazardous decomposition products: Nitric acid, Ammonia, Nitrogen oxides (NO_x), Carbon monoxide, Carbon dioxide, Nitrosamine, Hydrocarbons, Chlorine, Aldehydes,

11. TOXICOLOGICAL INFORMATION

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

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Severe skin burns, severe skin irritation, redness, drying of the skin, serious eye damage, tearing of the eyes, blindness (severe exposure), stomach or intestinal irritation, respiratory tract irritation, digestive tract irritation, allergy or asthma symptoms, nose, throat and lung irritation, headache, nausea, dizziness, confusion, breathing difficulty, and vomiting.

Delayed and Immediate Effects & Chronic Effects from Exposure: The substance may have effects on the central nervous system as well as the respiratory system. This substance is suspected of harming the unborn child. This substance is a potential carcinogen to humans (see below).

Measures of Toxicity:

Acute toxicities are calculated based on component toxicities

Mixture: Acute Oral Toxicity: LD₅₀ Rat: 500-1,000 mg/kg

Acute Dermal Toxicity: LD₅₀ Rat: 700-2,000 mg/kg

Acute Inhalation Toxicity: No data available

Toluene

CAS # 108-88-3

Acute Oral Toxicity LD₅₀ Rat: > 5,580 mg/kg

Acute Inhalation Toxicity LC₅₀ Rat: 12,500 mg/m³ (6 h)

Carcinogen Claims: (titanium dioxide)

OSHA: **Yes; 2**, International Agency for Research on Cancer (IARC): **Yes; 2A [Probably Carcinogenic]**

ACGIH: **No; A4 [Not Classifiable]**, National Toxicology Program (NTP) Report on Carcinogens: **No**



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12. ECOLOGICAL INFORMATION

Ecotoxicity: This substance is very toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.

Toluene	CAS # 108-88-3
Toxicity to Fish	LC ₅₀ – 7.63 mg/l (Rainbow Trout; 96 h)
Toxicity to Fish	LC ₅₀ – 8.04 mg/l (Fathead Minnow; 96 h)
Toxicity to Fish	LC ₅₀ – 74 mg/l (Bluegill; 96 h)
Toxicity to Daphnia	EC ₅₀ – 8.0 mg/l (Water Flea; 48 h)

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:

UN NUMBER: UN1133

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

TRANSPORTATION HAZARD CLASS: 3

PACKING GROUP: III

HAZARD LABEL: 3

IMDG (Marine) SHIPPING CLASSIFICATION:

IMDG CODE: 3

UN NUMBER: UN1133

MARINE POLLUTANT: Yes

EmS: F-E, S-D

IMDG PACKING GROUP: III

HAZARD LABEL: 3

Description of the goods

ADHESIVES, CONTAINING A FLAMMABLE LIQUID (Toluene)



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IATA (Air) SHIPPING CLASSIFICATION:

ICAO/IATA-DGR: 3

UN NUMBER: UN1133

HAZARD LABEL: 3

Description of the goods

Adhesives, containing a flammable liquid (Toluene)

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

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
Toluene	108-88-3	5 – 10	1,000

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

Same as OSHA GHS Classification

STATE REGULATIONS

California Proposition 65

This product does contains toluene, a chemical known to the state of California to cause birth defects or reproductive harm.

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

- 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



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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.

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 Avenue, 2nd floor
NORTHVALE, NJ 07647
201-256-8400**

NOTICE: REMA TIP TOP, Inc. 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, EXPRESS OR IMPLIED, OF MERCHANTABILITY,
FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.**