Safety Data Sheet

REMA TIP TOP

Product #s: 5254088, 5254095, 5254105, 5254143

SDS #: RTT-IND-036 **Rev. # 5** **Rev. Date: 1/13/2017**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tip Top Cement BC 3004

Chemical Family: Ester & Aromatic Hydrocarbon Solution

Product Use: Adhesive

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. HAZARD IDENTIFICATION

GHS Classifications

Health Hazards
Skin Irritation, Category 2
Eye Irritation, Category 2A
Specific Target Organ Systemic Toxicity, Single Exposure, Category 3, Central Nervous System [Inhalation]
Aspiration Hazard, Category 1

Physical Hazards
Flammable Liquid, Category 2

Environmental Hazards
Chronic Aquatic Toxicity, Category 1

GHS-Labeling
Pictograms:

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
H410: Very toxic to aquatic life with long lasting effects

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.
P260: Do not breathe vapours.
P264: Wash skin and exposed areas thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P301 + P310 + P331: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353: IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water/shower.
P332 + P313: If skin irritation occurs: Get medical advice/attention.
P304 + P340 + P314: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.
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, and federal regulations

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization
Ester & Aromatic Hydrocarbon Solution

Component*	CAS #	% By Wt.
Cyclohexane	110-82-7	25 - 40
Ethyl Acetate	141-78-6	25 - 40
Zinc Oxide	1314-13-2	1 - 5

*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: Stomach or intestinal irritation, nausea, vomiting, diarrhea, nose and throat irritation, dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness
Measures: Immediately 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. Seek immediate medical attention.

Skin Contact
Symptoms & Effects: Skin irritation, burning sensation, dry skin, skin cracking, other skin damage
Measures: Immediately wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes while washing. Wash contaminated clothing before reuse. If skin irritation persists, seek medical attention.

Eye Contact
Symptoms & Effects: Eye irritation, stinging, tearing, redness, eye swelling
Measures: Immediately 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. Rinse beneath eyelids by holding eyelids apart with clean fingers while rinsing. Seek immediate medical attention.

Ingestion
Symptoms & Effects: Stomach or intestinal irritation, nausea, vomiting, diarrhea, nose and throat irritation, dizziness, drowsiness, weakness, fatigue, nausea, headache, and unconsciousness. Since this material is an aspiration hazard, swallowing may result in lung inflammation and other lung injuries.
Measures: Seek immediate medical attention. Do NOT induce vomiting. If the victim is drowsy or unconscious, do not give anything by mouth. Do not give milk. Place individual on their left side and place their head down. Do not leave victim unattended.

5. FIRE FIGHTING MEASURES

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

Unsuitable Extinguishing Media: Water stream/jet

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 stream may be ineffective for extinguishment unless used under favorable conditions. This product is volatile and readily gives off flammable vapors which may travel along the ground or be moved by ventilation. Do not allow run-off from firefighting to enter drains or water courses. Use water spray to cool fully closed containers. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment: Recommended to wear NIOSH approved respiratory 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. Eliminate all ignition sources and pay 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 constructing a dike or using 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: Immediately evacuate the spilled area and provide maximum ventilation. Only personnel equipped with proper respiratory, eye, and skin protection should be permitted in the area. Contain spilled material with inert, non-combustible absorbent materials such as sand, earth, diatomaceous earth, or vermiculite. Transfer to a suitable container for disposal according to proper federal, state, and local regulations. Notify the proper response units and agencies for any uncontained releases or spills.

7. HANDLING AND STORAGE

Handling: Containers of this material may be hazardous when emptied. Since emptied containers still contain product residues (vapor, liquid, or solid), all hazard precautions given in this SDS must be observed. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Avoid breathing vapors or mists of this product. Avoid eye and skin contact with this material. 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. Do not eat, drink or smoke when using this product.

Storage: Store in a cool, dry, 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, Halogenated compounds, Chlorates, Nitrates, Peroxides, Acids

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits :

Exposure limits have not been established for this product.

Cyclohexane	**CAS # 110-82-7**	
OSHA	Permissible Exposure Limit (PEL)	300 ppm (1,050 mg/m^3)
ACGIH	Time Weighted Average (TWA)	100 ppm
NIOSH	Recommended Exposure Limit (REL)	300 ppm (1,050 mg/m^3)
Ethyl Acetate	**CAS # 141-78-6**	
OSHA	Permissible Exposure Limit (PEL)	400 ppm (1,400 mg/m^3)
ACGIH	Time Weighted Average (TWA)	400 ppm (1,400 mg/m^3)
NIOSH	Recommended Exposure Limit (REL)	400 ppm (1,400 mg/m^3)
Zinc Oxide	**CAS # 1314-13-2**	
OSHA	Permissible Exposure Limit (PEL)	5 mg/m^3
ACGIH	Time Weighted Average (TWA/STEL)	2 mg/m^3/10 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 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 liquid, vapor or mist. 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: 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: Blue liquid
Odor: Fruit-like
Odor Threshold: No data available
pH: No data available
Melting/Freezing point: < -22°F (< -30°C)
Boiling Point/ Range: 170°F (77°C)
Flash point (Tag closed cup): -0.4°F (-18°C)

Evaporation rate: > 2.0 n-Butyl Acetate
Flammability: Lower Limit: 1.2% (V) **Upper Limit:** 11.5% (V)
Vapor pressure: 104 mbar @ 68°F (20°C)
Relative vapor density: 3.0 (Air = 1)
Density: 0.90 g/cm^3 (7.5 lbs/gal) @ 68°F (20°C)
Solubility in water: Immiscible
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: > 473°F (> 245°C)
Ignition temperature: No data available
Decomposition temperature: No data available
Viscosity (dynamic): 2,000 mPa*s

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical Stability: Stable under normal conditions.

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, Ignition sources, Incompatible materials (see below)

Incompatible Materials: Strong oxidizing agents, Halogenated compounds, Chlorates, Nitrates, Peroxides, Acids

Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

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

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Stomach or intestinal irritation, nausea, vomiting, diarrhea, nose and throat irritation, dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness, skin irritation, burning sensation, dry skin, skin cracking, other skin damage, eye irritation, stinging, tearing, redness, and eye swelling. Since this material is an aspiration hazard, swallowing may result in lung inflammation and other lung injuries.
Delayed and Immediate Effects & Chronic Effects from Exposure: This substance may lead to central nervous system depression and effects such as drowsiness or dizziness. With repeated exposure, the substance may have toxic effects on the blood.

Measures of Toxicity:
Acute toxicities are calculated based on component toxicities
Mixture: Acute Oral Toxicity: LD_{50} Rat: > 5,000 mg/kg
Acute Dermal Toxicity: LD_{50} Rabbit: > 2,000 mg/kg
Acute Inhalation Toxicity: LC_{50} Rat: > 20,000 ppmV

Cyclohexane	**CAS # 110-82-7**
Acute Oral Toxicity	LD_{50} Rat: > 5,000 mg/kg
Acute Dermal Toxicity	LD_{50} Rabbit: > 2,000 mg/kg
Acute Inhalation Toxicity	LC_{50} Rat: > 32,880 mg/m^3

Ethyl Acetate	**CAS # 141-78-6**
Acute Oral Toxicity	LD_{50} Rat: 5,620 mg/kg
Acute Dermal Toxicity	LD_{50} Rabbit: > 180,000 mg/kg
Acute Inhalation Toxicity	LC_{50} Rat: 16,000 mg/l (6 h)

Zinc Oxide	**CAS # 1314-13-2**
Acute Oral Toxicity	LD_{50} Mouse: 7,950 mg/kg
Acute Inhalation Toxicity	LC_{50} Mouse: 2,500 mg/m^3

Carcinogen Claims:
OSHA: **None** International Agency for Research on Cancer (IARC): **None**
ACGIH: **None** National Toxicology Program (NTP) Report on Carcinogens: **None**

12. ECOLOGICAL INFORMATION

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

Cyclohexane	**CAS # 110-82-7**
Toxicity to Fish	LC_{50} – 4.53 mg/l (Fathead Minnow; 96 h)
Toxicity to Daphnia	EC_{50} – 0.9 mg/l (Water Flea; 48 h)
Toxicity to Algae	EC_{50} – 3.4 mg/l (Algae; 72 h)

Ethyl Acetate	**CAS # 141-78-6**
Toxicity to Fish	LC_{50} – 220 mg/l (Fathead Minnow; 96 h)
Toxicity to Fish	LC_{50} – 350 mg/l (Rainbow Trout; 96 h)
Toxicity to Daphnia	LC_{50} – 154 mg/l (Water Flea; 48 h)
Toxicity to Algae	EC_{50} – 4,300 mg/l (Algae; 24 h)

Zinc Oxide	**CAS # 1314-13-2**
Toxicity to Fish	LC_{50} – 1.1 mg/l (Rainbow Trout; 96 h)

Toxicity to Daphnia EC_{50} – 0.098 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 (Cyclohexane, Ethyl Acetate)
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 (CYCLOHEXANE, ETHYL ACETATE)

IATA (Air) SHIPPING CLASSIFICATION:
ICAO/IATA-DGR: 3
UN NUMBER: UN1133
HAZARD LABEL: 3
Description of the goods
Adhesives, containing a flammable liquid (Cyclohexane, Ethyl Acetate)

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
Cyclohexane	110-82-7	25 – 40	1,000
Ethyl Acetate	141-78-6	25 – 40	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: Same as OSHA GHS Classification

STATE REGULATIONS

California Proposition 65
This product does not contain chemicals known to the state of California to cause cancer, birth defects or reproductive harm.

The components of this product may be subject to the various state laws noted below.

California Hazardous Substances List/Permissible Exposure List
California Permissible Exposure Limits
Connecticut Permissible Exposure Limits
Delaware List of Chemicals and RQs
Hawaii Permissible Exposure Limits
Idaho Toxic Air Pollutants
Maryland Toxic Air Pollutants for Existing Sources

Massachusetts Hazardous Substances List
Michigan Permissible Exposure Limits
Minnesota Hazardous Substances
Minnesota Permissible Exposure Limits
New Jersey RTK Hazardous Substances List/TCPA Extremely Hazardous Substances List
New York List of Hazardous Substances
Ohio 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

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.