



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

---

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Solution HL-T4, Tip Top Heating Solution (HS) T4

**Chemical Family:** Hydrocarbon Solution

**Product Use:** Adhesive

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

**Manufacturer:** Rema Tip Top - North America  
240 Pegasus Ave. 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 2

Eye Irritation, Category 2B

Carcinogenicity, Category 2

Reproductive Toxicity, Category 1A

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

Specific Target Organ Systemic Toxicity, Repeated Exposure, Category 2, Blood, Central Nervous System,

Kidneys, Gastrointestinal Tract [Inhalation, Skin absorption, Ingestion]

Aspiration Hazard, Category 1

#### **Physical Hazards**

Flammable Liquid, Category 2

#### **Environmental Hazards**

Chronic Aquatic Toxicity, Category 2

#### **GHS-Labeling**

#### **Pictograms:**



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017



**Signal Word: Danger!**

## Hazard Statements

H225: Highly flammable liquid and vapour  
H304: May be fatal if swallowed and enters airways  
H315: Causes skin irritation  
H320: Causes eye irritation  
H336: May cause drowsiness or dizziness  
H351: Suspected of causing cancer  
H360: May damage fertility or the unborn child  
H373: May cause damage to organs through prolonged or repeated exposure  
H411: Toxic to aquatic life with long lasting effects

## Precautionary Statements

### Prevention:

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.  
P263: Avoid contact during pregnancy/while nursing.  
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.  
P303 + P361 + P353: IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P332 + P313: If skin irritation occurs: Get medical advice/attention.  
  
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

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

Component*	CAS #	% By Wt.
Naphtha, petroleum, hydrotreated light	64742-49-0	75 - 90
Zinc Oxide	1314-13-2	< 1
Lead Monoxide	1317-36-8	< 0.3

### 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.



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

## 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,



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

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, Peroxides, Acids

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Exposure Limits :

#### Lead Monoxide CAS # 1317-36-8

ACGIH	Time Weighted Average (TWA)	0.05 mg/m <sup>3</sup>
OSHA	Permissible Exposure Limit (PEL)	0.05 mg/m <sup>3</sup>
NIOSH	Recommended Exposure Limit (REL)	0.05 mg/m <sup>3</sup>

#### Naphtha, petroleum CAS # 64742-49-0

ACGIH	Time Weighted Average (TWA)	
n-hexane <3%)		50 ppm
Alkanes C-6	(TWA)/(STEL)	400 ppm/1000



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

---

<b>Zinc Oxide</b>	<b>CAS # 1314-13-2</b>	
OSHA	Permissible Exposure Limit (PEL)	5 mg/m <sup>3R</sup>
ACGIH	TWA/STEL	2/10 mg/m <sup>3</sup>
NIOSH	Recommended Exposure Limit (REL)	5 mg/m <sup>3</sup>

**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.



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Black liquid  
**Odor:** Ester / Hydrocarbon-like  
**Odor Threshold:** No data available  
**pH:** No data available  
**Melting/Freezing point:** No data available  
**Boiling Point/ Range:** 140 – 203°F (60 – 95°C)  
**Flash point (Tag closed cup):** - 13°F (- 25°C)  
**Evaporation rate:** > 2.0 n-Butyl Acetate  
**Flammability: Lower Limit:** 1.1% (V) **Upper Limit:** 8.0% (V)  
**Vapor pressure:** 135 mm Hg @ 68°F (20°C)  
**Relative vapor density:** > 3.0 (Air = 1)  
**Density:** < 1.00 g/cm<sup>3</sup> (8.3 lbs/gal) @ 68°F (20°C)  
**Solubility in water:** Negligible  
**Partition coefficient (n-octanol/water):** No data available  
**Auto-ignition temperature:** 540°F (282°C)  
**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.

**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, 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,



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

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. This substance is an aspiration hazard and thus may be fatal if swallowed and enters the respiratory airways. This substance may harm fertility or causing damage to the unborn child. With repeated exposure, the substance may have toxic effects on the blood, central nervous system, kidneys, and gastrointestinal tract. This substance is a suspected carcinogen as outlined by OSHA, IARC, ACGIH and the NTP.

### Measures of Toxicity:

Acute toxicities are calculated based on component toxicities  
Mixture: Acute Oral Toxicity: LD<sub>50</sub> Rat: > 2,000 mg/kg  
Acute Dermal Toxicity: LD<sub>50</sub> Rabbit: > 2,000 mg/kg  
Acute Inhalation Toxicity: LC<sub>50</sub>:>20 mg/l/4h

### Carcinogen Claims (Lead)

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 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.

### Naphtha, petroleum CAS # 64742-49-0

Toxicity to Fish LC<sub>50</sub> – 1 - 10 mg/l  
Toxicity to Daphnia EC<sub>50</sub> – 1 - 10

### Lead Monoxide CAS # 1317-36-8

Toxicity to Fish LC<sub>50</sub> – 0.298 mg/l (Fathead Minnow; 96 h)  
Toxicity to Daphnia EC<sub>50</sub> – 0.132 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





# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

---

## 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 (Naphtha)

TRANSPORTATION HAZARD CLASS: 3

PACKING GROUP: II

HAZARD LABEL: 3

### IMDG (Marine) SHIPPING CLASSIFICATION:

IMDG CODE: 3

UN NUMBER: UN1133

IMDG PACKING GROUP: II

HAZARD LABEL: 3

### Description of the goods

ADHESIVES, CONTAINING A FLAMMABLE LIQUID (NAPHTHA)

### IATA (Air) SHIPPING CLASSIFICATION:

ICAO/IATA-DGR: 3

UN NUMBER: UN1133

HAZARD LABEL: 3

### Description of the goods

Adhesives, containing a flammable liquid (Naphtha)

## 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*



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

## 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 *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

Same as OSHA GHS Classification

## STATE REGULATIONS

### California Proposition 65

**WARNING:** This product contains lead, a chemical known to the state of California to cause cancer, developmental toxicity and male and female reproductive toxicity..

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

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



# Safety Data Sheet

REMA TIP TOP

Solution HL-T4, HS-T4

SDS #: RTT-IND-009

Rev. # 8

Rev. Date: 12/06/2017

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  
240 Pegasus Ave., 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.**