



Material Safety Data Sheet

REMA TIP TOP

Product #'s: 5254112, 5254150

MSDS #: RTT-IND-034

Rev. # 2

Rev. Date: 1/15/2011

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: Tip Top Metal Primer PR 304

Product Use: Adhesive

Manufacturer: REMA TIP TOP/NO. AMERICA, 119 Rockland Avenue, Northvale, NJ 07647

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

2. PRODUCT INGREDIENTS

<u>CHEMICAL NAME:</u>	<u>CAS NUMBER:</u>	<u>% RANGE:</u>	<u>OSHA PEL:</u>
Xylenes (o-, m-, p- isomers)	1330-20-7	25-35	100 ppm TWA; 435 mg/m ³ TWA
Methyl ethyl ketone	78-93-3	10-20	100 ppm TWA; 410 mg/m ³ TWA
Methylisobutyl ketone	108-10-1	10-20	200 ppm TWA; 590 mg/m ³ TWA

The balance of ingredients not rated as hazardous as defined in 29 CFR 1910.1200.

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

This product is regulated under the Canadian Controlled Products Regulations.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

The product is a blue liquid with a pungent odor. This product is a flammable liquid and vapor. Vapors may cause flash fire. It can cause eye, skin, respiratory and digestive system irritation. Repeated exposure may cause skin dryness or cracking. Harmful by inhalation, in contact with skin and if swallowed. A component is an aspiration hazard. Symptoms of exposure may include central nervous system depression.

EYE: This product may cause irritation to the eyes. Symptoms may include burning, redness, and tearing.

SKIN: This product is irritating to the skin. Prolonged and/or repeated skin contact with this product may cause irritation, defatting of skin and dermatitis. Absorption of liquid through intact skin is possible.

INGESTION: Harmful if swallowed. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. May produce central nervous system depression. If aspirated (liquid enters the lung), the product may be rapidly absorbed through the lungs.

INHALATION: This product may be harmful by inhalation. This product may cause respiratory system irritation causing symptoms that may include: dryness of the throat, tightness of the chest, and shortness of breath. May cause CNS depression characterized by the following: headache, dizziness, staggering gait, confusion, unconsciousness, or coma.



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4. FIRST AID

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

SKIN: For skin contact flush with large amounts of water while removing contaminated clothing. Wash affected area with mild soap and water. If irritation persists, get medical attention. Wash contaminated clothing before reuse. Contaminated leather articles, including shoes, that cannot be decontaminated should be discarded.

INGESTION: Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a physician immediately.

INHALATION: If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

NOTE TO PHYSICIAN: Provide general supportive measures and treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point: -14°C (6.8°F)

Upper Flammable Limit (UFL): Not Available

Auto Ignition: >460°C (>860°F)

Method Used: Not Available

Lower Flammable Limit (LFL): 1.0%

Flammability Classification: Class IB Flammable Liquid

HAZARDOUS COMBUSTION PRODUCTS: Decomposition products may include and are not limited to carbon monoxide, carbon dioxide, and chlorine compounds.

EXTINGUISHING MEDIA: Water fog/fine spray, carbon dioxide, foam, and dry chemical.

FIRE FIGHTING INSTRUCTIONS: This product is a Class IB flammable liquid. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Empty containers may retain product residue including Flammable or Explosive vapors. Do not cut, drill, grind, or weld near full, partially full, or empty product containers.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT PROCEDURES: Stop the flow of material, if this is without risk. Material is heavier than water and has limited water solubility. It will collect on the lowest surface.

CLEAN-UP PROCEDURES: Wear appropriate protective equipment and clothing during clean-up. Eliminate ignition sources including sources of electrical, static or frictional sparks. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into properly labeled closed metal containers for disposal. Use non-sparking tools. Place in non-leaking containers for immediate disposal. Flush area with water to remove trace residue. Do not allow the spilled product to enter public drainage system or open water courses.



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EVACUATION PROCEDURES: Persons not wearing appropriate protective equipment should be excluded from area of spill until clean up has been completed.

SPECIAL PROCEDURES: Follow all Local, State, Federal and Provincial regulations for disposal.

7. HANDLING & STORAGE

HANDLING: Keep liquid and vapor away from heat, sparks and flames. Surfaces that are sufficiently hot may ignite liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can result. Keep containers closed when not in use. Use with adequate ventilation.

Containers, even those that have been emptied, can contain explosive vapors. DO NOT cut, drill, grind, weld or perform similar operations on or near containers. DO NOT pressurize drum containers to empty them.

Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Air-dry contaminated clothing in a well ventilated area before laundering.

STORAGE: Keep packaged in original, labeled containers until use. Store in a cool, dry, well-ventilated area. Store this product in air-tight containers away from sources of heat and light. Ground all equipment to prevent accumulation of static charge. Store away from incompatible materials. Do not remove or deface label. Do not reuse container without recycling or reconditioning in accordance with any Federal, Provincial, State or local laws. Do not use cutting or welding torches, open flames, or electric arcs on empty or full containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Wear safety glasses. Chemical goggles and/ or face shields should be worn, when splashing is a possibility. Contact lenses should not be exposed. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: Use impervious gloves. Use of impervious apron and boots are recommended.

RESPIRATORY PROTECTION: If recommended exposure limits are exceeded, a NIOSH-approved, continuous flow supplied air-respirator, hood or helmet is acceptable. A NIOSH approved self-contained positive pressure breathing apparatus, with full-face piece, is required for spills and/ or emergencies.



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EXPOSURE GUIDELINE(s):

Component Exposure Limits

REMA TIP/TOP USA recommends that its customers minimize employee exposure. REMA therefore suggests that its customers consider adopting the lower of the current OSHA PEL or the ACGIH TLV's for the purpose of evaluating employee exposures. The TLV's recommended by the ACGIH have been updated on a continuing basis.

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA
150 ppm STEL
OSHA: 100 ppm TWA; 435 mg/m³ TWA

Methylisobutyl ketone (108-10-1)

ACGIH: 50 ppm TWA
75 ppm STEL
OSHA: 100 ppm TWA; 410 mg/m³ TWA
NIOSH: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL

Methyl ethyl ketone (78-93-3)

ACGIH: 200 ppm TWA
300 ppm STEL
OSHA: 200 ppm TWA; 590 mg/m³ TWA
NIOSH: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL

Component Exposure Limits - Canada

The following Provincial Exposure Limits apply for this product's components.

Xylenes (o-, m-, p- isomers) (1330-20-7)

Alberta: 100 ppm TWA; 434 mg/m³ TWA
150 ppm STEL; 651 mg/m³ STEL
British Columbia: 100 ppm TWA
150 ppm STEL
Manitoba: 100 ppm TWA; 435 mg/m³ TWA
150 ppm STEL; 655 mg/m³ STEL
New Brunswick: 100 ppm TWA; 434 mg/m³ TWA
150 ppm STEL; 651 mg/m³ STEL
NW Territories: 100 ppm TWA; 434 mg/m³ TWA
150 ppm STEL; 652 mg/m³ STEL
Nova Scotia: 100 ppm TWA
150 ppm STEL
Nunavut: 100 ppm TWA; 434 mg/m³ TWA
150 ppm STEL; 652 mg/m³ STEL
Ontario: 100 ppm TWAEV; 435 mg/m³ TWAEV
150 ppm STEV; 650 mg/m³ STEV
Quebec: 100 ppm TWAEV; 434 mg/m³ TWAEV
150 ppm STEV; 651 mg/m³ STEV
Saskatchewan: 434 mg/m³ TWA; 100 ppm TWA
651 mg/m³ STEL; 150 ppm STEL
Yukon: 100 ppm TWA; 435 mg/m³ TWA
150 ppm STEL; 650 mg/m³ STEL



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Methylisobutyl ketone (108-10-1)

Alberta:	50 ppm TWA; 205 mg/m ³ TWA 75 ppm STEL; 307 mg/m ³ STEL
British Columbia:	50 ppm TWA 75 ppm STEL
Manitoba:	50 ppm TWA; 205 mg/m ³ TWA 75 ppm STEL; 300 mg/m ³ STEL
New Brunswick:	50 ppm TWA; 205 mg/m ³ TWA 75 ppm STEL; 307 mg/m ³ STEL
NW Territories:	50 ppm TWA; 205 mg/m ³ TWA 75 ppm STEL; 300 mg/m ³ STEL
Nova Scotia:	50 ppm TWA 75 ppm STEL
Nunavut:	50 ppm TWA; 205 mg/m ³ TWA 75 ppm STEL; 300 mg/m ³ STEL
Ontario:	50 ppm TWAEV; 205 mg/m ³ TWAEV 75 ppm STEV
Quebec:	50 ppm TWAEV; 205 mg/m ³ TWAEV 75 ppm STEV; 310 mg/m ³ STEV
Saskatchewan:	205 mg/m ³ TWA; 50 ppm TWA 307 mg/m ³ STEL; 75 ppm STEL
Yukon:	100 ppm TWA; 410 mg/m ³ TWA 125 ppm STEL; 510 mg/m ³ STEL

Methyl ethyl ketone (78-93-3)

Alberta:	200 ppm TWA; 590 mg/m ³ TWA 300 ppm STEL; 885 mg/m ³ STEL
British Columbia:	50 ppm TWA 100 ppm STEL
Manitoba:	200 ppm TWA; 590 mg/m ³ TWA 300 ppm STEL; 885 mg/m ³ STEL
New Brunswick:	200 ppm TWA; 590 mg/m ³ TWA 300 ppm STEL; 885 mg/m ³ STEL
NW Territories:	200 ppm TWA; 590 mg/m ³ TWA 300 ppm STEL; 885 mg/m ³ STEL
Nova Scotia:	200 ppm TWA 300 ppm STEL
Nunavut:	200 ppm TWA; 590 mg/m ³ TWA 300 ppm STEL; 885 mg/m ³ STEL
Ontario:	200 ppm TWAEV; 590 mg/m ³ TWAEV 300 ppm STEV; 885 mg/m ³ STEV
Quebec:	50 ppm TWAEV; 150 mg/m ³ TWAEV 100 ppm STEV; 300 mg/m ³ STEV
Saskatchewan:	590 mg/m ³ TWA; 200 ppm TWA 885 mg/m ³ STEL; 300 ppm STEL
Yukon:	200 ppm TWA; 590 mg/m ³ TWA 250 ppm STEL; 740 mg/m ³ STEL



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9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: Blue liquid

ODOR: Ketone

ODOR THRESHOLD: Not Available

BOILING POINT: ~80°C (~176°F)

SOLUBILITY IN WATER: Partially Soluble @ 20°C (68°F)

SPECIFIC GRAVITY: 1.02 g/ml @ 20°C (68°F)

VAPOR PRESSURE: Not Available

% VOLATILE: <70%

10. STABILITY & REACTIVITY

INCOMPATIBILITY WITH OTHER MATERIALS: Materials to avoid are strong acids, bases, and oxidizers.

HAZARDOUS POLYMERIZATION: Will not occur.

DECOMPOSITION PRODUCTS: Decomposition products may include and are not limited to carbon monoxide, carbon dioxide, and chlorine compounds.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

This product is harmful by inhalation, when in contact with the skin, eyes and if it is swallowed. Aspiration hazard. Lung damage may occur if aspirated into the lungs and may be fatal. Symptoms include coughing and difficulty breathing. May cause CNS effects with symptoms that include headache, drowsiness, dizziness and loss of coordination. Inhalation of high vapor concentrations may cause symptoms of headache, dizziness, drowsiness, nausea and vomiting.

CHRONIC TOXICITY

Overexposure may cause damage to the liver and kidneys. Repeated or prolonged exposure may cause skin irritation and dermatitis.

CARCINOGENICITY

This product's component(s) are not classified as carcinogenic by ACGIH, IARC, NIOSH, NTP OR OSHA.

Component Carcinogenicity

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71, 1999; Monograph 47, 1989 (Group 3 (not classifiable))

12. ECOLOGICAL INFORMATION



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No information available for the product. Contains components harmful to aquatic life.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Xylenes (o-, m-, p- isomers) (1330-20-7)

Test & Species

96 Hr LC50 Pimephales promelas	13.4 mg/L [flow-through]
96 Hr LC50 Oncorhynchus mykiss	8.05 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	16.1 mg/L [flow-through]
96 Hr LC50 Pimephales promelas	26.7 mg/L [static]
24 hr EC50 Photobacterium phosphoreum	0.0084 mg/L
48 Hr EC50 water flea	3.82 mg/L
48 Hr LC50 Gammarus lacustris	0.6 mg/L

Conditions

Methylisobutyl ketone (108-10-1)

Test & Species

96 Hr LC50 Pimephales promelas	505 mg/L [flow-through]
96 Hr EC50 Selenastrum capricornutum	400 mg/L
5 min EC50 Photobacterium phosphoreum	79.6 mg/L
24 Hr EC50 water flea	4280.0 mg/L
48 Hr EC50 Daphnia magna	170 mg/L

Conditions

Methyl ethyl ketone (78-93-3)

Test & Species

96 Hr LC50 Pimephales promelas	3220 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	1690 mg/L
5 min EC50 Photobacterium phosphoreum	3426 mg/L
30 min EC50 Photobacterium phosphoreum	3403 mg/L
48 Hr EC50 water flea	520 mg/L
48 Hr EC50 Daphnia magna	5091 mg/L

Conditions

13. DISPOSAL CONSIDERATIONS

DISPOSAL: Waste must be handled in accordance with all federal, state, provincial, and local regulations.

UNUSED & UNCONTAMINATED PRODUCT:



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Component Waste Numbers

Xylenes (o-, m-, p- isomers) (1330-20-7)

RCRA:

waste number U239 (Ignitable waste, Toxic waste)

Methylisobutyl ketone (108-10-1)

RCRA:

waste number U161 (Ignitable waste)

Methyl ethyl ketone (78-93-3)

RCRA:

waste number U159 (Ignitable waste, Toxic waste)
200.0 mg/L regulatory level

If discarded, this product is considered a RCRA ignitable waste, D001.

14. TRANSPORT INFORMATION

US DOT Information

Shipping Name: Adhesives

UN/NA #: UN1133 **Hazard Class:** 3 **Packing Group:** II

Required Label(s): FLAMMABLE Liquid

Additional Info.: PLACARD (WHEN REQUIRED): FLAMMABLE, 3.

EXCEPTIONS: DOT Paragraphs 173.150, 173.173, & 173.242.

ALTERNATE SHIPPING ARRANGEMENTS: Based on package or shipping container size, this product may be shipped as a, "Limited Quantity", or, renamed, "Consumer Commodity" and reclassified as, "ORM-D" Material.

TDG Information

Shipping Name: Adhesives

UN/NA #: UN1133 **Hazard Class:** 3 **Packing Group:** II

Required Label(s): FLAMMABLE Liquid

IMDG Information

Additional Info.: IMO Requirements: EmS No. = F-E, S-D

IATA Information

Additional Info.: 3

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

SARA 313 INFORMATION:

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 313 (40 CFR 372.65).

Xylenes (o-, m-, p- isomers) (1330-20-7)

SARA 313:

1.0 % de minimis concentration

Methylisobutyl ketone (108-10-1)

SARA 313:

1.0 % de minimis concentration



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SARA HAZARD CATEGORY:

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactive: No

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA):

Component Analysis

This material contains one or more of the following chemicals required to be identified under CERCLA (40 CFR 302.4).

Xylenes (o-, m-, p- isomers) (1330-20-7)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

Methylisobutyl ketone (108-10-1)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

Methyl ethyl ketone (78-93-3)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are on the U.S. EPA TSCA Inventory List.

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	DSL	EINECS
Methylisobutyl ketone	108-10-1	Yes	DSL	EINECS
Methyl ethyl ketone	78-93-3	Yes	DSL	EINECS

STATE RIGHT-TO-KNOW:

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes	Yes
Methylisobutyl ketone	108-10-1	Yes	Yes	Yes	Yes	Yes	Yes
Methyl ethyl ketone	78-93-3	Yes	Yes	Yes	Yes	Yes	Yes

Other state regulations may apply. Check individual state requirements.

CANADIAN REGULATIONS

This product is regulated under the Canadian Controlled Products Regulations.

WHMIS INFORMATION:

WHMIS Classification:

B2- Flammable liquid

D2A- Chronic toxic effects

D2B- Irritating to skin and eyes



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Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Methylisobutyl ketone	108-10-1	1 %
Methyl ethyl ketone	78-93-3	1 %

EUROPE:

Component Analysis

Component (CAS#)	EC #
Xylenes (o-, m-, p- isomers) (1330-20-7)	215-535-7
Methylisobutyl ketone (108-10-1)	203-550-1
Methyl ethyl ketone (78-93-3)	201-159-0

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

MEDICAL EMERGENCIES:

Call CHEMTREC 24 hours a
Day for emergency information
800-424-9300

FOR ANY OTHER INFORMATION:

REMA TIP TOP/NO. AMERICA
119 Rockland Ave.
NORTHVALE, NJ 07647
201-768-8100

NOTICE: REMA TIP/TOP USA believes that the information contained on this material 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.