



Safety Data Sheet

REMA TIP TOP

Product #s: 119000190, 119000195

SDS #: RTT-IND-056

Rev. # 3

Rev. Date: 06/09/2021

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CF-R2

Chemical Family: Chlorinated Solvent Solution

Product Use: Cleaning solvent

Restrictions on Use: Use as directed by manufacturer

Distributed By: 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

Skin Irritation, Category 2
Eye Irritation, Category 2A
Skin Sensitization, Category 1
Germ Cell Mutagenicity, Category 2
Carcinogenicity, Category 1B
Reproductive Toxicity, Category 2
Specific Target Organ Systemic Toxicity, Single Exposure, Category 2, Central Nervous System, Liver, Kidney
Specific Target Organ Systemic Toxicity, Repeated Exposure, Category 1, Central Nervous System, Lungs, Liver

Environmental Hazards

Acute Aquatic Toxicity, Category 3
Chronic Aquatic Toxicity, Category 3



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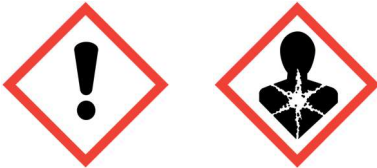
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GHS-Labeling

Pictograms:



Signal Word: Danger!

Hazard Statements

H315: Causes skin irritation
H317: May cause an allergic skin reaction
H319: Causes serious eye irritation
H336: May Cause drowsiness or dizziness
H341: Suspected of causing genetic defects
H350: May cause cancer
H361: Suspected of damaging fertility or the unborn child
H373: May cause damage to organs through prolonged or repeated exposure
H412: Harmful 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.
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.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.

Response:

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P321: Specific treatment found in supplemental first aid instruction.
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313: If eye irritation persists: Get medical advice/attention.
P362: Take off contaminated clothing and wash before reuse.



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Storage:

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.
Trichloroethylene, TCE	79-01-6	90-100

4. FIRST AID MEASURES

Inhalation

Symptoms & Effects: Stomach or intestinal irritation, nausea, irritation of the nose and airways, central nervous system depression, dizziness, drowsiness, weakness, fatigue, headache, unconsciousness, lack of coordination, confusion, irregular heartbeat

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, redness, burning, drying, defatting, dermatitis, and other skin damage

Measures: Immediately wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes while washing. If skin irritation or rash occurs, seek medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact

Symptoms & Effects: Eye irritation, stinging, tearing, redness, and swelling of the eyes

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, irritation of the throat, central nervous system depression, dizziness, drowsiness, weakness, fatigue, headache, unconsciousness, lack of coordination, and confusion. Swallowing large amounts may cause for material to enter the lungs during swallowing or vomiting, leading to lung inflammation and other lung damages.

Measures: Seek immediate medical attention. Do NOT induce vomiting. If the victim is drowsy or unconscious, do not give anything by mouth. If victim is conscious, give at least 3-4 glasses of water. Place individual on their left side and place their head down. Do not leave victim unattended.



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5. FIRE FIGHTING MEASURES

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

Unsuitable Extinguishing Media: None Identified

Hazardous Combustion Products: Hydrogen chloride, Phosgene traces, 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: This product poses a slight fire hazard. Full-face, self-contained breathing apparatus should be worn at all times. Cool storage containers with water, if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment: Recommended to wear NIOSH approved supplied air 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. Construct a dike to contain spill. Contain spilled material with inert, non-combustible absorbent materials such as sand, earth, diatomaceous earth, or vermiculite. After all visible traces have been removed, thoroughly wet vacuum the area. 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.



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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. 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 bases, Oxidizing agents, Magnesium, Barium, Lithium, Titanium

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits :

Exposure limits have not been established for this product.

Trichloroethylene, TCE	CAS # 79-01-6	
OSHA	Permissible Exposure Limit (PEL)	100 ppm
ACGIH	Time Weighted Average (TWA)/(STEL)	10 ppm/25 ppm
NIOSH	Recommended Exposure Limit (REL)	10 ppm

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.



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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: Tan Liquid

Odor: Sweet; Ether-like

Odor Threshold: 28 ppm

pH: No data available

Melting/Freezing point: No data available

Boiling Point/ Range: 188°F (86.7°C)

Flash point (Tag closed cup): > 200°F (> 93.3°C)

Evaporation rate: 0.28 Ethyl Ether

Flammability: Lower Limit: 8.0% (V) **Upper Limit:** 44.8% (V)

Vapor pressure: 58 mm Hg @ 68°F (20°C)

Relative vapor density: > 3 (Air = 1)

Density: 1.45 g/cm³ (12.1 lbs/gal) @ 77°F (25°C)

Solubility in water: 0.1 g/100 g water @ 77°F (25°C)

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

Auto-ignition temperature: 788°F (420°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.



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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, Incompatible materials (see below)

Incompatible Materials: Strong bases, Oxidizing agents, Magnesium, Barium, Lithium, Titanium

Hazardous decomposition products: Hydrogen chloride, Phosgene traces, 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, irritation of the nose and airways, central nervous system depression, dizziness, drowsiness, weakness, fatigue, headache, unconsciousness, lack of coordination, confusion, skin irritation, redness, burning, drying, defatting, dermatitis, other skin damage, eye irritation, stinging, tearing, redness, swelling of the eyes, irregular heartbeat. Swallowing large amounts may cause for material to enter the lungs during swallowing or vomiting, leading to lung inflammation and other lung damages.

Delayed and Immediate Effects & Chronic Effects from Exposure: With repeated exposure, the substance may have effects on the central nervous system, respiratory system, heart, lungs and liver. This substance is suspected of having mutagenic effects based on laboratory animal testing alone. This substance is suspected of causing reproductive harm, damaging fertility or harming the unborn child. This substance is a potential carcinogen to humans as outlined by OSHA, IARC, ACGIH and the NTP (see below).

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: > 2,000 mg/kg

Acute Inhalation Toxicity: No sufficient data available

Trichloroethylene, TCE	CAS # 79-01-6
Acute Oral Toxicity	LD ₅₀ Rat: 5,560 mg/kg
Acute Dermal Toxicity	LD ₅₀ Rabbit: > 2,000 mg/kg
Acute Inhalation Toxicity	LC ₅₀ Mouse: 8,450 ppmV

Carcinogen Claims:

OSHA: **Yes; 1B**, International Agency for Research on Cancer (IARC): **Yes; 1 [Carcinogenic to Humans]**

ACGIH: **Yes; A2 [Suspected Carcinogen]**, National Toxicology Program (NTP) Report on Carcinogens:

Yes; II [Reasonably Anticipated]



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12. ECOLOGICAL INFORMATION

Eco-toxicity: This substance is harmful 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.

Trichloroethylene, TCE **CAS # 79-01-6**
Toxicity to Fish LC_{50} – 41 mg/l (Fathead Minnow; 96 h)
Toxicity to Daphnia EC_{50} – 18 mg/l (Water flea; 48 h)
Toxicity to Algae IC_{50} - 175 mg/l (Green Algae; 96 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.

This product contains a component identified as hazardous under 40 CFR 261.24. This product may be regulated, have exposure limits or other information identified as the following: F001, F002-Hazardous Wastes. Dispose of in accordance with 40 CFR 262

Component	CAS #	Weight %	Waste Number	Regulatory Level
Trichloroethylene, TCE	79-01-6	90 – 100	1,000	0.5 mg/l

14. TRANSPORT INFORMATION

DOT SHIPPING CLASSIFICATION:

UN NUMBER: UN1710

PROPER SHIPPING NAME: Trichloroethylene

TRANSPORTATION HAZARD CLASS: 6.1

PACKING GROUP: III

HAZARD LABEL: 6.1



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IMDG (Marine) SHIPPING CLASSIFICATION:

IMDG CODE: 6.1

UN NUMBER: UN1710

MARINE POLLUTANT: No

EmS: F-A; S-A

IMDG PACKING GROUP: III

HAZARD LABEL: 6.1

Description of the goods

TRICHLOROETHYLENE

IATA (Air) SHIPPING CLASSIFICATION:

ICAO/IATA-DGR: 6.1

UN NUMBER: UN1710

HAZARD LABEL: 6.1

Description of the goods

Trichloroethylene

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 *Not 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
Trichloroethylene	79-01-6	90 –100	100

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



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STATE REGULATIONS

California Proposition 65

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

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
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.



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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 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.