



SAFETY DATA SHEET

Product: MARC 103 SAF-SOLV

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 103 SAF-SOLV**

SDS DATE: 01/25/2021

SUPPLIER: Mid-American Research Chemical Corp.
PHONE: 402-564-7104 FAX: 402-563-1290
EMERGENCY PHONE: InfoTrac 1-800-535-5053
E-MAIL: marc1@marc1.com WEBSITE: www.marc1.com

ADDRESS: P. O. Box 927 • Columbus, NE 68602-0927

RECOMMENDED USE: Solvent-based cleaner

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Dissolved Gas Skin Irritant: Category 2; Eye Irritant: Category 2A; Specific Target Organ Toxicity (Single Exposure): Category 3; Carcinogenicity: Category 1B; Germ Cell Mutagenicity: Category 2; Skin Sensitization: Category 1.



HAZARD STATEMENT(S): DANGER: Contains gas under pressure; May explode if heated. Causes skin and serious eye irritation. May cause drowsiness and dizziness. May cause cancer. Suspected of causing genetic defects.

This product contains the following percentage of chemicals of unknown toxicity: 0%. **PRECAUTIONARY STATEMENTS:** Keep away from heat, sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50°C/120°F. Store in a well-ventilated place. Wash hands thoroughly after handling. Wear protective gloves, eye protection and protective clothing. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash before reuse. Contaminated work clothing must not be allowed out of the workplace. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: Get medical advice or attention. Avoid breathing fumes, mist, vapors, and spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Dispose of contents and container in accordance with local, state, and national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>WT.</u>
Carbon Dioxide	124-38-9	2 - 6%
Trichloroethylene	79-01-6	30 - 60%
Tetrachloroethylene	127-18-4	30 - 60%

Specific percentages are claimed as a trade secret.

SECTION 4: FIRST AID MEASURES

EYES: Remove contact lenses. Flush with water for at least 15 minutes. See a physician if irritation persists. **INGESTION:** Rinse mouth with water. Do not induce vomiting unless directed by medical authority. Seek medical attention. **INHALATION:** If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. **SKIN:** Immediately wash with soap and water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation persists. **ACUTE HEALTH HAZARDS--** Inhalation: dizziness, drowsiness, weakness, and fatigue. Eye: stinging, tearing, redness. Oral: Vomiting, nausea, irritation. Skin: Prolonged or repeated contact may dry skin. **CHRONIC HEALTH HAZARDS:** Possible cancer-causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system. **NOTE TO PHYSICIAN:** Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use appropriate media for surrounding fire. **UNSUITABLE EXTINGUISHING MEDIA:** N/A. **SPECIAL FIRE FIGHTING PROCEDURES:** Wear NIOSH approved Self-Contained Breathing Apparatus with a full-face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires. Use water spray only to cool exposed containers. **UNUSUAL FIRE AND EXPLOSION HAZARDS:** Contents under pressure. Exposure to temperatures above 120°F may cause bursting. **HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, chlorine, hydrogen chloride and phosgene.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Refer to section VIII for proper Personal Protective Equipment. **SPILL:** Use absorbent on spill, sweep to clean. Dispose in accordance with local, state and federal laws. Small releases may be wiped up with wiping material. **WASTE DISPOSAL:** Dispose of contents in accordance with federal, state, and local regulations. Do not dump in sewers. Wrap container and place in trash collection, do not puncture, incinerate, or reuse container. **RCRA STATUS:** Waste solvent likely considered U228 (Trichloroethylene), hazardous, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F. Pressurized container: Do not pierce or burn, even after use. Store locked up. **OTHER PRECAUTIONS:** Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warning and precautions listed for the product. Keep out of the reach of children. **INCOMPATIBILITY:** Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Carbon Dioxide	5000ppm	5000ppm
Trichloroethylene	10 ppm	25 ppm
Tetrachloroethylene	25 ppm	100 ppm

ENGINEERING CONTROLS/VENTILATION: Material is heavier than air. Material may concentrate in low lying areas. Normal, forced ventilation required to meet TLV requirements. Local exhaust ventilation is generally preferred. **RESPIRATORY PROTECTION:** Wear NIOSH/MSHA approved organic vapor respiratory protection if used in confined, poorly ventilated areas. **PERSONAL PROTECTIVE EQUIPMENT:** Safety glasses, gloves, and synthetic apron. **ADDITIONAL MEASURES:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear, colorless spray
ODOR:	Chlorinated solvent odor
ODOR THRESHOLD:	N/D
pH:	N/A
SOLUBILITY IN WATER:	0%
SPECIFIC GRAVITY:	1.52
MELTING POINT:	N/D
FREEZING POINT:	N/D
BOILING POINT:	>188°F (87°C)
FLASH POINT/METHOD USED:	N/D
EVAPORATION RATE:	>3 (Fast)
FLAMMABILITY:	Not considered a flammable aerosol or an extremely flammable aerosol by OSHA (29CFR 1910.1200)
FLAMMABILITY LIMITS:	N/D UPPER: N/D LOWER: N/D
VAPOR PRESSURE (mmHg):	N/D
VAPOR DENSITY (AIR = 1):	N/D
PARTITION COEFFICIENT, n-OCTANOL/WATER:	N/D
VOLATILE ORGANIC COMPOUNDS (VOC):	0%
DIELECTRIC STRENGTH (Volts):	29,000
AUTO-IGNITION TEMPERATURE:	N/D
DECOMPOSITION TEMPERATURE:	>400°C
VISCOSITY:	N/D

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Chemically active metals and acids. **CHEMICAL STABILITY:** Stable. **POSSIBLE HAZARDOUS REACTIONS:** None known. **CONDITIONS TO AVOID:** Temperatures greater than 122°F may cause bursting. **INCOMPATIBLE MATERIALS:** Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings. **HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon, chlorine, hydrogen chloride and phosgene.



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SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Trichloroethylene (79-01-6) LD50 (Oral, Rat) 5,650 mg/kg; Tumorigen, mutagenic reproductive effects in humans. Tetrachloroethylene (127-18-4) LD50 (Oral, Rat) 2629 mg/kg; LD50 (Dermal, Rabbit) > 3228 mg/kg; LD50 (IPR, Mouse) 4700 mg/kg; LC50 (Inhalation, Mouse, 4hr) 5200 ppm; LC50 (Inhalation, Rat, 8hr) 34200 mg/m³

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin.

EYES: Causes irritation, redness, burning, tearing. **SKIN:** Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin. **INGESTION:** Causes gastrointestinal irritation, headaches, nausea, diarrhea, vomiting, abdominal cramps. **INHALATION:** Cause irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system. Prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects and death.

ACUTE HEALTH HAZARDS-- EYES: Stinging, redness, tearing. **SKIN:** Prolonged or repeated contact may dry skin. **INHALATION:** Dizziness, drowsiness, weakness and fatigue. **ORAL:** Vomiting, nausea, irritation.

CHRONIC HEALTH HAZARDS: Possible cancer-causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Excessive exposure will aggravate pre-existing skin disorders, respiratory, liver, kidney, cardiovascular system or pulmonary illnesses.

CARCINOGENICITY-- OSHA: Yes; **ACGIH:** A2-Suspected; **NTP:** 2-Anticipated; **IARC:** 2A-Probable; **OTHER:** CA Prop 65.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Trichloroethylene (79-01-6) LC50 (96hr) Fish: 41 - 67 mg/L. **PERSISTENCE AND DEGRADABILITY:** Component or components of this product are not biodegradable. **BIOACCUMULATIVE POTENTIAL:** This product is not expected to bioaccumulate.

MOBILITY IN SOIL: This product is mobile in soil. **OTHER ADVERSE EFFECTS:** None known.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations. Do not dump in sewers. Wrap container and place in trash collection, do not puncture, incinerate, or reuse container. **RCRA STATUS:** Waste solvent likely considered U228 (Trichloroethylene), hazardous, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers)

CONTAINER SIZES(S): Aerosol

PROPER SHIPPING NAME: CLEANING COMPOUND

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENT: LIMITED QUANTITY

SECTION 15: REGULATORY INFORMATION

TSCA STATUS: All Chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Trichloroethylene (79-01-6) Reportable Quantity = 100 lbs Tetrachloroethylene (127-18-4) Reportable Quantity = 100 lbs.

SARA 311/312 HAZARD CATEGORIES: Acute Health, Chronic Health.

SARA 313 REPORTABLE INGREDIENTS: Trichloroethylene (79-01-6), Tetrachloroethylene (127-18-4).

STATE REGULATIONS: CA Prop 65: This product can expose you to chemicals including Trichloroethylene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. Trichloroethylene (79-01-6) Right-to-Know: NY, RI, PA, FL, MN, MA, MI, NJ, TN.

INTERNATIONAL REGULATIONS: Trichloroethylene, CAS 79-01-6, - EC - yes, Japan - yes, Australia - yes, Korea - yes, Canada DSL - yes, Canada NDSL -no, Philippines - yes. Tetrachloroethylene (127-18-4) WHMIS (Canada) Class D-1B: Material causing immediate and serious toxic effects (TOXIC). Class D-2A: Material causing other toxic effects (VERY TOXIC).

SECTION 16: OTHER INFORMATION

HMS/NFPA Ratings: Health = 2; Flammability = 1; Reactivity = 0; Other = None; Protection = C.

N/A = Not Applicable; N/D = Not Determined.

DISCLAIMER: To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.