



SAFETY DATA SHEET

Product: MARC 297 SUPER CONCENTRATED GLASS CLEANER
Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 297 SUPER CONCENTRATED GLASS CLEANER**

SDS DATE: 12/28/2018

SUPPLIER: Mid-American Research Chemical Corp. ADDRESS: P. O. Box 927 Columbus, NE 68602-0927
PHONE: 402-564-7104 FAX: 403-563-1290
EMERGENCY PHONE: InfoTrac 1-800-535-5053
E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Glass cleaner.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Flammable liquid category 2. Eye and skin irritation category 2A/2. May be harmful if swallowed.

SIGNAL WORD AND HAZARD AND PRECAUTIONARY STATEMENTS - DANGER: Flammable liquid and vapor. May cause drowsiness or dizziness. Causes serious eye irritation. May cause skin and respiratory irritation. May be harmful if swallowed. Read label before use. If medical advice is needed, have product container or label at hand. Keep away from heat, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Wear protective gloves and eye protection. Avoid breathing vapors and mists. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If irritation persists, seek medical attention. **IF ON SKIN:** Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation or rash occurs, seek medical advice. Wash contaminated clothing before reuse. **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. **IF SWALLOWED:** Call a POISON CENTER or seek medical advice if you feel unwell. In case of fire: Use dry sand, dry chemical, alcohol-resistant foam, carbon dioxide or an extinguishing blanket for extinction. Store locked up in a cool, dry, well-ventilated area. Dispose of contents in accordance with all applicable local, regional and national regulations.



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

<u>CHEMICAL NAME</u>	<u>CAS NO.</u>	<u>% WT.</u>
Isopropyl alcohol	67-63-0	35 - 50%
1-Methoxy-2-Propane	107-98-2	6 -10%

SECTION 4: FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention/advice if irritation develops and persists.

SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

INGESTION: Rinse mouth. Get medical attention if symptoms occur

INHALATION: Move to fresh air. Call a physician if symptoms develop or persist.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

Direct contact with eyes may cause temporary irritation.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.



SAFETY DATA SHEET

Product: MARC 297 SUPER CONCENTRATED GLASS CLEANER

Form R04132

GENERAL INFORMATION: Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Dry chemical powder. Water fog. Foam. Carbon dioxide (CO₂).

UNSUITABLE EXTINGUISHING MEDIA: Do not use water jet as an extinguisher, as this will spread the fire.

SPECIAL FIRE FIGHTING/EQUIPMENT PROCEDURES:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In case of fire and or explosion, do not breathe fumes. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid and vapor. Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

HAZARDOUS DECOMPOSITION PRODUCTS: No hazardous decomposition products are known.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURE: Keep unnecessary personnel away. Keep people away from an upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). **Wear** appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

PROTECTIVE EQUIPMENT: See Section 8.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as Emergency Procedures. Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

ENVIRONMENTAL PRECAUTIONS: Avoid discharge into drains, water courses or onto the ground.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING/STORAGE:

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Take precautionary measures against static discharges. Use non-sparking tools. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Store in original tightly closed container. Store in well-ventilated, cool, dry place out of direct sunlight.

OTHER PRECAUTIONS: **KEEP OUT OF REACH OF CHILDREN!**

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

COMPONENTS	TYPE	VALUE
Isopropyl Alcohol (CAS 67-63-0)	PEL	980 mg/m ³ 400 ppm

US. ACGIH Threshold Limit Values

COMPONENTS	TYPE	VALUE
------------	------	-------



SAFETY DATA SHEET

Product: MARC 297 SUPER CONCENTRATED GLASS CLEANER

Form R04132

Isopropyl Alcohol (CAS 67-63-0) STEL 400 ppm
TWA 200 ppm

**ENGINEERING CONTROLS/
VENTILATION:** Explosion proof general and local exhaust ventilation. Good general ventilation should be used.

RESPIRATORY PROTECTION: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level, exposure limits are exceeded or irritation is experienced, an approved respirator must be worn.

EYE/FACE PROTECTION: Wear safety glasses with side-shields (or goggles).

SKIN PROTECTION/PROTECTIVE GLOVES: Wear protective gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear appropriate thermal protective clothing when necessary.

WORK HYGIENIC PRACTICES: Always observe good personal hygiene such as washing after handling the material and before eating, drinking, and/or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE-

PHYSICAL STATE: Liquid

COLOR: Light blue.

ODOR: Alcohol odor.

ODOR THRESHOLD: Not available.

pH: 7 - 8

MELTING/FREEZING POINT: Not available.

BOILING POINT: 205°F

FLASH POINT: 75°F Tag Closed Cup.

EVAPORATION RATE: < 1 Ethyl ether = 1

FLAMMABILITY (solid, gas): Not available.

FLAMMABILITY LIMITS IN AIR: **UPPER FLAMMABILITY LIMIT:** Not available.
LOWER FLAMMABILITY LIMIT: Not available.

VAPOR PRESSURE (mmHg): 17.7 mm Hg

VAPOR DENSITY (AIR = 1): 0.7; Air =1

SPECIFIC GRAVITY (H₂O = 1): 0.90

WEIGHT PER GALLON: 7.5 pounds

SOLUBILITY IN WATER: 100% Complete.

**PARTITION COEFFICIENT,
n-OCTANOL/WATER:** Not available.

AUTO-IGNITION TEMPERATURE: Not available.

DECOMPOSITION TEMPERATURE: Not available.

VISCOSITY: Not available.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: The product is stable and non-reactive under normal conditions of use, storage and transport.

CHEMICAL STABILITY: Material is stable under normal conditions.

**POSSIBILITY OF HAZARDOUS
REACTIONS:** No dangerous reaction known under conditions of normal use.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing substances.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No hazardous decomposition products are known.

HAZARDOUS POLYMERIZATION: N/A **CONDITIONS TO AVOID (POLYMERIZATION):** NA



SAFETY DATA SHEET

Product: MARC 297 SUPER CONCENTRATED GLASS CLEANER

Form R04132

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE:

EYES: Direct contact with eyes may cause temporary irritation.

SKIN: No adverse effects due to skin contact are expected.

INGESTION: Expected to be a low ingestion hazard.

INHALATION: Prolonged inhalation may be harmful.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

Direct contact with eyes may cause temporary irritation.

INFORMATION ON TOXICOLOGICAL EFFECTS:

ACUTE TOXICITY: Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

COMPONENTS	SPECIES	TEST RESULTS
Isopropyl Alcohol (CAS 67-63-0)		
ACUTE		
Dermal LD50	Rabbit	12800 mg/kg
Oral LD50	Mouse	3600 mg/kg
	Rabbit	5.03 g/kg
	Rat	4.7 g/kg
Other LD50	Mouse	1509 mg/kg
	Rat	1099 mg/kg

Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation: Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization
Respiratory sensitization: Not available.
Skin sensitization: This product is not expected to cause skin sensitization.
Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity- Single exposure: Not classified.
Specific target organ toxicity- Repeated exposure: Not classified.
Aspiration hazard: Prolonged inhalation may be harmful.
Chronic effects: Prolonged inhalation may be harmful.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

COMPONENTS	SPECIES	TEST RESULTS
Isopropyl Alcohol (CAS 67-63-0) Aquatic		



SAFETY DATA SHEET

Product: MARC 297 SUPER CONCENTRATED GLASS CLEANER

Form R04132

Fish LC50 Bluegill (*Lepomis macrochirus*) > 1400 mg/l, 96 Hours

Persistence and Degradability: No data is available on the degradability of this product.

Bioaccumulation: No data available.

Partition coefficient n-octanol/water (log Kow)
Isopropyl Alcohol 0.05

Mobility in Soil: No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state, and local regulations

CONTAMINATED PACKAGING: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is empty.

SECTION 14: TRANSPORT INFORMATION

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

CONTAINER SIZES(S): B, G, Q, P
PROPER SHIPPING NAME: COMPOUND CLEANING LIQUID
HAZARD CLASS: NONE
ID NUMBER: NONE
PACKING GROUP: NONE
LABEL STATEMENT: NONE

SECTION 15: REGULATORY INFORMATION

INTERNATIONAL INVENTORIES

LEGEND

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

U.S. FEDERAL REGULATIONS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA SECTION 12(b) Export Notification (40 CFR 707, Subpt. D):
Not regulated.

CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4):
Not listed.

SARA 304 EMERGENCY RELEASE NOTIFICATION:
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA)

Hazard categories
Immediate Hazard – No
Delayed Hazard – No
Fire Hazard – Yes
Pressure Hazard – No



SAFETY DATA SHEET

Product: MARC 297 SUPER CONCENTRATED GLASS CLEANER

Form R04132

Reactivity Hazard – No

SARA 302 extremely hazardous substance: No

SARA 311/312 Hazardous Chemical: No

SARA 313 (TRI reporting):
Not regulated.

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 1
Flammability = 3
Reactivity = 0
Other = -
Protection = -

REVISION DATE: 12/28/2018

N/A = Not Applicable, N/D = Not Determined, N/E = Not Established

DISCLAIMER: No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product (s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.