



SAFETY DATA SHEET

Product: MARC 149 FLASH-OFF

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 149 FLASH-OFF**

SDS DATE: 08/19/2020

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

RECOMMENDED USE: Choke and carburetor cleaner.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

Classification: Aerosols Category 1, Aspiration Hazard - Category 1, Eye Irritation - Category 2A, Gases Under Pressure Liquefied Gas, Reproductive Toxicity - Category 2, Skin Irritation - Category 2, Specific Target Organ Toxicity - Repeated Exposure - Category 2, Specific Target Organ Toxicity -Single Exposure (Narcotic Effects) - Category 3.



Signal Word: Danger. **Hazardous Statements - Physical:** Extremely flammable aerosol. Contains gas under pressure; may explode if heated. **Hazardous Statements - Health:** Suspected of damaging fertility or the unborn child. May be fatal if swallowed and enters airways. Causes serious eye irritation. Causes skin irritation. May cause damage to organs through prolonged or repeated exposure. H336 - May cause drowsiness or dizziness. **Precautionary Statements - General:** If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. **Precautionary Statements - Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash hands thoroughly after handling. Wear protective gloves, protective clothing, eye protection, and face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, vapors, or spray. Use only outdoors or in a well-ventilated area. **Precautionary Statements - Response:** IF exposed or concerned: Get medical attention. Get medical attention if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. 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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. **Precautionary Statements - Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Store locked up. **Precautionary Statements - Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations. **Hazards Not Otherwise Classified (HNOC):** None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS NO.</u>	<u>INGREDIENT</u>	<u>% BY WT.</u>
0000067-64-1	Acetone	37 - 60
0000124-38-9	Carbon Dioxide	3 - 6
0000108-88-3	Toluene	30 - 49
0001330-20-7	Xylene	Trace
0000071-43-2	Benzene	Trace

Specific percentages may be claimed as a trade secret.

SECTION 4: FIRST AID MEASURES

Inhalation: Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER or doctor. **Eye Contact:** Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention. **Skin Contact:** Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention. **Ingestion:** Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, foam, carbon dioxide. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of



SAFETY DATA SHEET

Product: MARC 149 FLASH-OFF

Form R04132

foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only. Do not direct a solid stream of water or foam into hot, burning pools this may result in frothing and increase fire intensity. **Unsuitable Extinguishing Media:** No data available. **Specific Hazards in Case of Fire:** Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Product is highly flammable and forms explosive mixtures with air, oxygen, and all oxidizing agents. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. High temperatures can cause sealed containers to rupture due to a build up of internal pressures. Cool with water. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Container could potentially burst or be punctured upon mechanical impact, releasing flammable vapors. **Fire-Fighting Procedures:** Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. **Special Protective Actions:** Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Absorb liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated. **Recommended Equipment:** Wear appropriate protective equipment (see Section 8). **Personal Precautions:** Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. **Environmental Precautions:** Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

SECTION 7: HANDLING AND STORAGE

General: Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored. **Ventilation Requirements:** Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. **Storage Room Requirements:** Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Store at temperatures below 120°F.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield. **Skin Protection:** Use solvent-resistant protective gloves for prolonged or repeated contact. **Respiratory Protection:** Avoid breathing vapors. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use an approved air-line respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits. **Appropriate Engineering Controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables Z 1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
ACETONE	1000	2400			1			250	590			
BENZENE	1(a)/25 ceiling		50(a)/10 min.		1	1		0.1c		1c		1
CO2	5000	9000			1			5000	9000	30000	54000	
TOLUENE	200 (a)/300 ceiling	0.2	500ppm/10 minutes (a)		1, 2			100	375	150	560	
XYLENE	100	435			1			100	435	150	655	

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
ACETONE	250		500	
BENZENE	0.5	1.6	2.5	8
TOLUENE	20	0.2		
XYLENE	100	434	150	651



SAFETY DATA SHEET

Product: MARC 149 FLASH-OFF

Form R04132

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

DENSITY:	7.03 lbs/gal.
DENSITY VOC:	2.98 lbs/gal.
%VOC:	42.41%
APPEARANCE-	
COLOR:	N/A
PHYSICAL STATE:	Liquid
ODOR THRESHOLD:	N/A
ODOR:	N/A
pH:	N/A
SOLUBILITY IN WATER:	Nil
SPECIFIC GRAVITY: (H2O = 1)	0.84
MELTING/FREEZING POINT:	N/A
HIGH BOILING POINT:	292°F
LOW BOILING POINT:	0°F
FLASH POINT(METHOD USED:TCC)	N/A
FLAMMABILITY:	Flashpoint below 73°F
LOWER EXPLOSION LEVEL:	N/A
UPPER EXPLOSION LEVEL:	N/A
EVAPORATION RATE:	Slower than ether.
VAPOR PRESSURE (mmHg):	N/A
VAPOR DENSITY:	Slower than ether.
PARTITION COEFFICIENT, n-OCTANOL/WATER:	N/A
AUTO-IGNITION TEMPERATURE:	N/A
DECOMPOSITION TEMPERATURE:	N/A
VISCOSITY:	N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable. **CONDITIONS TO AVOID:** Keep away from heat, sparks, extreme temperature, flame, other sources of ignition and incompatible materials. Dropping containers may cause bursting.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizers, reducers, acids and alkalis.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: In fire, will decompose to carbon dioxide, carbon monoxide.

HAZARDOUS POLYMERIZATION/REACTIONS: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation: Repeated contact of concentrate on skin may cause irritation, defatting or drying. Causes skin irritation

Classification of the substance or mixture: No data available.

Serious Eye Damage/Irritation: May cause eye irritation with discomfort, tearing, or blurring of vision. May cause tissue destruction and permanent eye damage if not treated immediately. Causes serious eye irritation.

Carcinogenicity: No data available.

Germ Cell Mutagenicity: No data available.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Respiratory/Skin Sensitization: No data available.

Specific Target Organ Toxicity - Single Exposure: May cause drowsiness or dizziness.

Specific Target Organ Toxicity - Repeated Exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Acute Toxicity—

0001330-20-7 XYLENE:

LC50 (rat): 6350 ppm (4-hour exposure) (unspecified isomers and ethylbenzene) (1); LC50 (rat): 6700 ppm (4-hour exposure) (65% m-xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene) (2) ethylbenzene) (1)

LC50 (rat): 6700 ppm (4-hour exposure) (65% m-xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene)(2)

LD50 (oral, rat): 5400 mg/kg (52% m-, 19% o-, 24% p-) (1)LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)

LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)



SAFETY DATA SHEET

Product: MARC 149 FLASH-OFF

Form R04132

0000108-88-3 TOLUENE:

LC50 (rat): 8800 ppm (4-hour exposure) (2)
LC50 (rat): 6000 ppm (6-hour exposure) (3)
LD50 (oral, rat): 2600 to 7500 mg/kg (3,5,11,17)
LD50 (oral, neonatal rat): less than 870 mg/kg (3)
LD50 (dermal, rabbit): 12,225 mg/kg (reported as 14.1 ml/kg) (1)

0000067-64-1 ACETONE

LC50 (male rat): 30000 ppm (4-hour exposure); cited as 71000 mg/m³ (4-hour exposure) (29)
LC50 (male mouse): 18600 ppm (4-hour exposure); cited as 44000 mg/m³ (4-hour exposure) (29)
LD50 (oral, female rat): 5800 mg/kg (24)
LD50 (oral, mature rat): 6700 mg/kg (cited as 8.5 mL/kg) (31)
LD50 (oral, newborn rat): 1750 mg/kg (cited as 2.2 mL/kg) (31)
LD50 (oral, mouse): 3000 mg/kg (32,unconfirmed)
LD50 (dermal, rabbit): Greater than 16000 mg/kg cited as 20 mL/kg) (30)

0000071-43-2 BENZENE

LC50 (rat): 13,700 ppm (4-hour exposure) (26); 9,980 ppm (7 hour exposure) (13,200 ppm - equivalent 4 hour exposure) (18)
LD50 (oral, rat): 930 mg/kg (19); 5,600 mg/kg (2); 11.4 ml/kg (10,032 mg/kg) (21)
LD50 (oral, mouse): 4,700 mg/kg (11; unconfirmed)
LD50 (skin, rabbit and guinea pig): Greater than 9,400 mg/kg (20)

Potential Health Effects - Miscellaneous

0000067-64-1 ACETONE

The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

0000108-88-3 TOLUENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heartbeats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

0001330-20-7 XYLENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heartbeats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

Chronic Exposure

0000108-88-3 TOLUENE

TERATOGENIC EFFECTS:Toluene has been Classified as POSSIBLE for humans.

0001330-20-7 XYLENE

High exposure to Xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus. Xylene in high concentrations has caused embryotoxic effects in laboratory animals.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY: No data available.

PERSISTENCE AND DEGRADABILITY: ACETONE CAS#67-64-1 - 91% readily biodegradable. Method: OECD Test Guideline 301B.

BIOACCUMULATIVE POTENTIAL: ACETONE CAS#67-64-1 - Does not bioaccumulate.

OTHER ADVERSE EFFECTS: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL INSTRUCTIONS: Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.



SAFETY DATA SHEET

Product: MARC 149 FLASH-OFF

Form R04132

SECTION 14: TRANSPORT INFORMATION

CONTAINER SIZES(S): Aerosol Can
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

CAS	CHEMICAL NAME	% BY WEIGHT	REGULATION LIST
0000067-64-1	ACETONE	37 - 60	CERCLA,SARA312,TSCA,RCRA,ACGIH,OSHA
0000124-38-9	CO2	3 - 6	SARA312,TSCA,ACGIH,OSHA
0000071-43-2	BENZENE	Trace	SARA313, CERCLA,HAPS,SARA312,VOC,TSCA,RCRA,ACGIH,CA_Prop65 - California Proposition 65,OSHA
0000108-88-3	TOLUENE	30 - 49	SARA313, CERCLA,HAPS,SARA312,VOC,TSCA,RCRA,ACGIH,CA_Prop65 - California Proposition 65,OSHA
0001330-20-7	XYLENE	Trace	SARA313, CERCLA,HAPS,SARA312,VOC,TSCA,RCRA,ACGIH,OSHA

SECTION 16: OTHER INFORMATION

Glossary: * There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS. ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWATime Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.
(*) - Chronic effects.

HMIS/NFPA Ratings: Health = 2, Flammability = 3, Reactivity = 0, Protection = B
(0 represents minimal hazards or risks, and 4 represents significant hazards or risks)

REVISION DATE: 08/19/2020

DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever 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 hazards that exist. The above information pertains to this product as currently formulated and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.