

Product: MARC 15 SILICONIZED RELEASE AGENT

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: MARC 15 SILICONIZED RELEASE AGENT

SDS DATE: 01/04/2019

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: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Spray or brush on snow plows, blades, dump trucks, etc., to reduce friction, protects against rust and corrosion.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS:

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

CLASSIFICATION: FLAMMABLE LIQUIDS - Category 3, SKIN IRRITATION - Category 2, SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3, ASPIRATION HAZARD - Category 1

SIGNAL WORD AND PRECAUTIONARY STATEMENTS: DANGER: Flammable Liquid and Vapor. May accumulate electrostatic charge and ignite or explode. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. Causes skin irritation. Suspected of causing cancer. Toxic to aquatic life with long lasting effects.









APPEARANCE: Colorless liquid. PHYSICAL STATE: Liquid. ODOR: Hydrocarbon

PRECAUTIONARY STATEMENTS – PREVENTION: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Avoid breathing mist, vapors or spray. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye protection. Wash hands and any possibly exposed skin thoroughly after handling. Keep in cool area locked up.

PRECAUTIONARY STATEMENTS – RESPONSE: If exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. DO NOT INDUCE VOMITING! In case of fire: Use water spray, fog or regular foam for extinction. Collect spillage.

PRECAUTIONARY STATEMENTS – STORAGE: Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked

PRECAUTIONARY STATEMENTS - DISPOSAL: Dispose of contents/container at an approved waste disposal plant.

POTENTIAL HEALTH EFFECTS: See Section 11 for more information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Specific percentages may be claimed as a trade secret.

| CHEMICAL NAME | CAS NUMBER | WEIGHT % |
|-----------------------|------------|---------------|
| Petroleum Distillate | 8008-20-6 | 85% 98% |
| Naphthalene | 91-20-3 | 0.01% - 0.40% |
| Polydimethyl Siloxane | 8050-81-5 | 2% - 15% |



Product: MARC 15 SILICONIZED RELEASE AGENT

Form R04132

SECTION 4: FIRST AID MEASURES

GENERAL ADVICE: In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety

data sheet if possible).

EYES: Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure

thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists. .

SKIN: Immediately wash exposed skin with soap and water while removing contaminated clothing and shoes. May be absorbed through

the skin in harmful amounts. Get medical attention if irritation persists. Any injection injury from high pressure equipment should

be evaluated immediately by a physician as potentially serious (See NOTES TO PHYSICIAN).

INGESTION: DO NOT INDUCE VOMITING because of danger of aspirating liquid into lungs, causing serious damage and chemical

pneumonitis. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION!

INHALATION: Remove person to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear,

give oxygen and monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected

person warm and at rest. **GET IMMEDIATE MEDICAL ATTENTION!**

MOST IMPROTANT SIGNS AND SYMPTOMS, BOTH SHORT-TERM AND DELAYED WITH OVEREXPOSURE:

ADVERSE EFFECTS: Acute: Headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue.

Delayed: Dry skin and possible irritation with repeated or prolonged exposure.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: INGESTION: This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC)

or water spray can be used.

UNSUITABLE EXTINGUISHING MEDIA: Do not use straight water streams to avoid spreading fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: This product has been determined to be a flammable liquid per the OSHA Hazard Communication Standard and should be handled accordingly. May accumulate electrostatic charge and ignite or explode. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors. Static discharge, or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail.

HAZARDOUS DECOMPOSITION PRODUCTS: Smoke, carbon monoxide, carbon dioxide and other products of incomplete combustion.

EXPLOSION DATA

Sensitivity to Mechanical Impact: No Sensitivity to Static Discharge: Yes

SPECIAL PROTECTIVE EQUIPMENT AND

PRECAUTIONS FOR FIRE FIGHTERS: Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Keep run-off water out of sewers and water sources.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition



Product: MARC 15 SILICONIZED RELEASE AGENT

Form R04132

vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. When recovering free liquids ensure all equipment is grounded and boded. Use only non-sparking tools.

Advise authorities and National Response Center (800-424-8802) if product has entered a water

course or sewer. Notify local health and pollution control agencies, if appropriate.

PROTECTIVE EQUIPMENT: Use personal protective devises as stated in Section 8.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. Avoid subsoil penetration.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as EMERGENCY PROCEDURES.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING: Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking. Use

appropriate grounding and bonding practices. Static accumulating flammable liquid. Avoid repeated and prolonged skin contact. Use personal protection measures as recommended in Section 8. Use only non-sparking tools. Do not cut, drill, grind or weld on empty containers since explosive residues may remain.

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN!! CAREFULLY READ ENTIRE LABEL BEFORE USE! DO NOT

TAKE INTERNALLY!

STORAGE: Store in cool, well ventilated area, in properly closed containers that are appropriately labeled. Store locked

up.

INCOMPATIBLE MATERIALS: Strong oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| NAME | ACGIH TLV |
|----------------------|------------------------------|
| Petroleum Distillate | 200 mg/m3 TWA |
| 8008-20-6 | Skin – potential significant |
| | Contribution to overall |
| | Exposure by the cutaneous |
| | route |

| NAME | ACGIH TLV | OSHA PELS: | OSHA-VACATED PELS | NIOSH IDLH |
|-------------|------------------------------|---------------|-------------------|------------|
| Naphthalene | 10 ppm TWA | TWA: 10 ppm | 10 ppm TWA | 250 ppm |
| 91-20-3 | Skin – potential significant | TWA: 50 mg/m3 | 50 mg/m3 TWA | |
| | Contribution to overall | | 15 ppm STEL | |
| | Exposure by the cutaneous | | 75 mg/m3 STEL | |
| | route | | | |

ENGINEERING CONTROLS/

VENTILATION: Local or general exhaust required in an enclosed area or with inadequate ventilation. Use mechanical

ventilation equipment that is explosion-proof.

RESPIRATORY PROTECTION: Use an approved organic vapor chemical cartridge or supplied air respirators when material

produces vapors that exceed permissible exposure limits or excessive vapors are generated.

EYE PROTECTION: Use goggles or face-shield if the potential for splashing exists.

SKIN PROTECTION/PROTECTIVE GLOVES: Wear neoprene, nitrile or PVA gloves to prevent skin contact. Glove suitability is based

on workplace conditions and usage. Contact the glove manufacturer for specific advice

on glove selection and breakthrough times.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin,

eyes and clothing. Wash thoroughly with soap and water after handling and before eating food.



Product: MARC 15 SILICONIZED RELEASE AGENT

Form R04132

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE-

PHYSICAL STATE: Liquid
COLOR: Clear, Blue.
ODOR: Hydrocarbon odor.
ODOR THRESHOLD: No available data.

PROPERTY VALUES (METHOD)

pH: Not applicable.

MELTING/FREEZING POINT: No available data.

BOILING POINT/RANGE: 182-288°C/360-550°F
FLASH POINT/METHOD USED: 49-88°C/120-190°F
EVAPORATION RATE: No available data.

FLAMMABILITY (solid, gas): Not applicable.

FLAMMABILITY LIMITS:

UPPER FLAMMABILITY LIMIT: 5.0 LOWER FLAMMABILITY LIMIT: 0.7

VAPOR PRESSURE (mmHg): 1-10 mm Hg @ 20°C

VAPOR DENSITY (AIR = 1): 4-5
SPECIFIC GRAVITY (H2O = 1): 0.82
WATER SOLUBILITY: None
SOLUBILITY IN OTHER SOLVENTS: Negligible.

PARTITION COEFFICIENT: No available data. **DECOMPOSITION TEMPERATURE:** No available data. **AUTO IGNITION TEMPERATURE:** 254°C / 489°F 1.3-2.1 @ 50°C KINEMATIC VISCOSITY: **DYNAMIC VISCOSITY:** No available data. **EXPLOSIVE PROPTETIES:** No available data. **SOFTENING POINT:** No available data. **DENSITY:** 6.78 lbs/gal **BULK DENSITY:** Not applicable.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: This product is non-reactive under normal conditions.

CHEMICAL STABILITY: The material is stable at 70°F, 760 mmHg pressure.

CONDITIONS TO AVOID: Excessive heat, sources of ignition, open flame.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known under normal conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID (POLYMERIZATION): Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

POTENTIAL SHORT-TERM ADVERSE EFFECTS FROM OVEREXPOSURES

EYES: Causes mild eye irritation.

SKIN: Causes skin irritation. Effects may become more serious with repeated or prolonged contact. May be absorbed through the

skin in harmful amounts.

INGESTION: May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract.

INHALATION: Inhalation of high vapor concentrations may cause irritation of the respiratory system. May cause drowsiness or

dizziness.

ACUTE TOXICOLOGICAL DATA



Product: MARC 15 SILICONIZED RELEASE AGENT

Form R04132

| NAME | ORAL LD50 | DERMAL LD50 | INHALATION LC50 | |
|-----------------------------|--|----------------------|-----------------------|--|
| Petroleum Distillate | Petroleum Distillate >5000 mg/kg (Rat) | | >5.28 mg/L (Rat) 4 h | |
| 8008-20-6 | | | | |
| Naphthalene 490 mg/kg (Rat) | | >2000 mg/kg (Rabbit) | >340 mg/Lm3 (Rat) 1 h | |
| 91020-3 | | | | |

DELAYED AND IMMEDIATE EFFECS AS WELL AS CHRONIC EFECTS FROM SHORT AND LONG-TERM EXPOSURE

Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage, delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

ADVERSE EFFECTS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

SIGNS & SYMPTOMS: Nausea, vomiting, signs of nervous system depression: headache, drowsiness, dizziness, loss of coordination,

disorientation and fatigue.

SENSITIZATION: Not expected to be a skin or respiratory sensitizer.

MUTAGENIC EFFECTS: None known.

CARCINOGENICITY: Cancer designations are listed in the table below.

| NAME | ACGIH (Class) | IARC (Class) | NTP | OSHA |
|-----------------------------------|----------------------------------|-----------------------------------|---|-------------|
| Petroleum Distillate 8008-20-6 | Confirmed animal carcinogen (A3) | Not classifiable (3) | Not listed. | Not listed. |
| Naphthalene 91020-3 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Reasonably anticipated to be a human carcinogen | Not listed. |

REPRODUCTIVE TOXICITY: None known.

SPECIFIC TARGET ORGAN TOXICITY

(STOT) - SINGLE EXPOSURE: Central nervous system.

SPECIFIC TARGET ORGAN TOXICITY

(STOT) - REPEATED EXPOSURE: Not classified.

May be fatal if swallowed or vomited and enters airways. **ASPIRATION HAZARD:**

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: This product should be considered toxic to aquatic organisms, with the potential to cause long lasting

adverse effects in the aquatic environment.

| NAME | ALGAE/AQUATIC | FISH | TOXICITY TO | CRUSTACEA |
|----------------------|---------------------|-----------------------------|----------------|-----------------------|
| | PLANTS | | MICROORGANISMS | |
| Petroleum Distillate | 72-hr EL50 = 5.0-11 | 96-hr LL50 = 18-25 mg/l | - | 48-hr EL50 = 1.4 -21 |
| 8008-20-6 | mg/l Algae | Fish | | mg/l Invertebrates |
| Naphthalene | - | 96-hr LC50 = 0.91-2.82 | - | 48-hr LC50 = 1.6 mg/l |
| 91020-3 | | mg/l Rainbow trout (static) | | Daphnia magna |
| | | 96-hr LC50 = 1.99 mg/l | | |
| | | Fathead minnow (static) | | |

PERSISTENCE AND DEGRADABILITY: Expected to be inherently biodegradable.

BIOACUMMULATION: Has the potential to bioaccumulate.

May partition into air, soil and water. **MOBILITY IN SOIL:**

OTHER ADVERSE EFFECTS: No information available.



Product: MARC 15 SILICONIZED RELEASE AGENT

Form R04132

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: The user is responsible for determining if any discarded material is a hazardous waste

(40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

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

CONTAINER SIZES(S): BULK, GALLONS

PROPER SHIPPING NAME: LUBRICATING OIL, GREASE OR PETROLEUM

HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENT: NONE

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA CHEMICAL INVENTORY SECTION 8 (b): This product and/or its components are listed on the TSCA Chemical Inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: N/A
313 REPORTABLE INGREDIENTS: N/A

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 2

Flammability = 2 Reactivity = 0 Other = -Protection = -

REVISION DATE: 01/04/2019

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.