



# SAFETY DATA SHEET

Product: MARC 168 ANTI-SEIZE - COPPER

Form R04132

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 168 ANTI-SEIZE - COPPER**

SDS DATE: 08/26/2019

SUPPLIER: Mid-American Research Chemical Corp.

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

PHONE: 402-564-7104 FAX: 402-563-1290

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E-MAIL: marc@marc1.com

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**RECOMMENDED USE:** Anti-seize. This product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

PREPARED BY: MARC

## SECTION 2: HAZARDS IDENTIFICATION

**CLASSIFICATION:** Specific Target Organ Toxicity -Single Exposure (Respiratory Tract Irritation) - Category 3. Specific Target Organ Toxicity - Repeated Exposure - Category 2. Skin Irritation - Category 2. Eye Irritation - Category 2A. Aerosol - Category 1. Carcinogenicity - Category 2. Chronic aquatic toxicity - Category 1. Acute aquatic toxicity - Category 1. Acute toxicity Dermal Category 5. Acute toxicity Oral Category 4.  
**Signal Word:** Danger. **Hazardous Statements - Physical:** H222, H229 - Extremely flammable aerosol, Pressurized container may burst if heated. **Hazardous Statements - Health:** H335 - May cause respiratory irritation. H302 - Harmful if swallowed. H313 - May be harmful in contact with skin. H373 - May cause damage to organs through prolonged or repeated exposure. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H351 - Suspected of causing cancer.

**Hazardous Statements - Environmental:** H410 - Very toxic to aquatic life with long lasting effects. **Precautionary Statements - General:** P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read label before use. **Precautionary Statements - Prevention:** P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P211 - Do not spray on an open flame or other ignition source. P251 - Do not pierce or burn, even after use. P261 - Avoid breathing/dust/fume/gas/mist/vapors/spray. P271 - Use only outdoors or in a well-ventilated area. P264 - Wash thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P202 - Do not handle until all safety precautions have been read and understood. **Precautionary Statements - Response:** P391 - Collect spillage. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P332 + P313 - If skin irritation occurs: Get medical advice/attention. P370 + P378 - In case of fire: Use water fog, dry chemical or carbon dioxide to extinguish. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P301 + P312 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice/attention. P308 + P313 - IF exposed or concerned: Get medical advice/attention. **Precautionary Statements - Storage:** P235 - Keep cool. P403 + P405 - Store in a well-ventilated place. Store locked up. P410 - Protect from sunlight. P412 - Do not expose to temperatures exceeding 50°C/122°F. **Precautionary Statements - Disposal:** P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations



## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	CHEMICAL NAME	% BY WT.
0000075-09-2	Methylene Chloride	35% - 63%
0007440-50-8	Copper	18% - 32%
0000106-97-8	Butane	5% -11%
0000074-98-6	Propane	2% - 5%
0000075-28-5	Isobutane	2% - 5%

Specific percentages may be claimed as a trade secret.

## SECTION 4: FIRST AID MEASURES

**EYES:** 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



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minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention immediately.

**SKIN:** Immediately take off all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash skin with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Call a POISON CONTROL CENTER/doctor if irritation develops and persists or if you feel unwell. Store contaminated clothing under water and wash before reuse or discard.

**INGESTION:** If swallowed, rinse mouth. **DO NOT INDUCE VOMITING!** Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.  
Never give anything by mouth to an unconscious or convulsing victim. Keep person warm and quiet.

**INHALATION:** Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/feel unwell/concerned: call a POISON CENTER/doctor

**ACUTE HEALTH HAZARDS:** N/A

**CHRONIC HEALTH HAZARDS:** N/A

**NOTES TO PHYSICIAN:** N/A

## SECTION 5: FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Use water, fog, dry chemical, or carbon dioxide.  
Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**UNSUITABLE EXTINGUISHING MEDIA:** Water may be ineffective but can be used to cool containers exposed to heat or flame.

### SPECIAL FIRE FIGHTING PROCEDURES/ EQUIPMENT:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear. Care should always be exercised in dust/mist areas. 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. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. (See Section 13 DISPOSAL CONSIDERATIONS).

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Contents under pressure. Keep away from ignition sources and open flame. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Aerosol cans may rupture when heated. Heated cans may burst.

**HAZARDOUS DECOMPOSITION PRODUCTS:** In fire, will decompose to carbon dioxide, carbon monoxide.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**EMERGENCY PROCEDURES:** Flammable/combustible material.  
ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stay upwind; keep out of low areas. Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal.

### PERSONAL PRECAUTIONS/ PROTECTIVE EQUIPMENT:

Use personal protection recommended in Section 8. Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

**METHODS AND MATERIALS FOR CONTAINMENT:** Same as Emergency Procedures.

**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.



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## SECTION 7: HANDLING AND STORAGE

### GENERAL HANDLING/ STORAGE:

Do not get into eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard. Store at temperatures below 120°F.

**OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN!! FOR INDUSTRIAL AND INSTITUTIONAL USE ONLY. FOR USE BY TRAINED PERSONNEL ONLY. CAREFULLY READ ENTIRE LABEL BEFORE USE!**

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### APPROPRIATE ENGINEERING CONTROLS/ VENTILATION:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors.

When spraying more than one half can continuously or more than one can consecutively, use NIOSH approved respirator.

**EYE PROTECTION:** Chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

**SKIN PROTECTION/PROTECTIVE GLOVES:** Wear suitable gloves. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Avoid unnecessary skin contact.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Wear long sleeved shirt, long pants, and other protective clothing as required to minimize skin contact. Chemical-resistant clothing is recommended to avoid prolonged contact. Eyewash stations and showers should be available in areas where this material is used and stored.

**WORK HYGIENIC PRACTICES:** Handle according to established industrial hygiene and safety practices. Don't eat, drink or smoke in work area. Wash hands after handling and before eating, drinking or smoking.

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
BUTANE								800	1900			
COPPER		[0.1]; [1(a):			1				0.1, 1a			
ISOBUTANE								800	1900			
METHYLENE CHLORIDE	25 (a)		125/15 minutes		1,2	1		b				1
PROPANE	1000	1800			1			1000	1800			

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
BUTANE	1000			
COPPER			[0.2]; [1];	
ISOBUTANE	1000			
METHYLENE CHLORIDE	50	174		
PROPANE	See Appendix			



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	F: Minimal Oxygen Content			
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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

DENSITY:	10.61734 lb/gal
DENSITY VOC:	1.85803 lb/gal
% VOC	17.50000%
VOC Actual	1.85803 lb/gal
VOC Actual	222.64822 g/l
VOC Regulatory	1.85803 lb/gal
VOC Regulatory	222.64822 g/l
APPEARANCE-	Copper-colored aerosol spray
FRAGRANCE:	N.A.
ODOR THRESHOLD:	N.A.
pH:	N.A.
SOLUBILITY IN WATER:	Nil
FLAMMABILITY:	Flashpoint below 73°F
FLASH POINT SYMBOL:	<
FLASH POINT:	0°F
VISCOSITY:	N.A.
LOWER EXPLOSION LEVEL:	1.9
UPPER EXPLOSION LEVEL:	9.5
MELTING/FREEZING POINT:	N.A.
VAPOR DENSITY:	Slower than ether.
LOW BOILING POINT:	0°F
HIGH BOILING POINT:	105°F
DECOMPOSITION TEMPERATURE:	0
AUTO-IGNITION TEMPERATURE:	N.A.
EVAPORATION RATE:	Slower than ether.
SPECIFIC GRAVITY: (H2O = 1):	1.273
VAPOR PRESSURE (mmHg):	N.A.
PARTITION COEFFICIENT, n-OCTANOL/WATER:	N.A..

## SECTION 10: STABILITY AND REACTIVITY

### CONDITIONS OF REACTIVITY:

STABILITY: Stable.

CONDITIONS TO AVOID: High temperatures.

INCOMPATIBILITY (MATERIAL TO AVOID): None known.

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

HAZARDOUS POLYMERIZATION/REACTIONS: Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

SERIOUS EYE DAMAGE/IRRITATION: Overexposure will cause redness and burning sensation. Causes serious eye irritation.

SKIN CORROSION/IRRITATION: Overexposure will cause defatting of skin. Causes skin irritation.

INGESTION: Harmful if swallowed. Aspiration hazard. No data available.

INHALATION: Acute Toxicity. Effect of overexposure include irritation of respiratory tract, headache dizziness, nausea, and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death.

CARCINOGENICITY: Suspected of causing cancer.

GERM CELL MUTAGENICITY: No data available.



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**REPRODUCTIVE TOXICITY:** No data available.

**RESPIRATORY/SKIN SENSITIZATION:** No data available.

**SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE:** May cause respiratory irritation.

**SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE:** May cause damage to organs through prolonged or repeated exposure.

**ASPIRATION HAZARD:** No data available.

**0000075-09-2 METHYLENE CHLORIDE**  
LC50 (guinea pig): 11600 ppm (6-hour exposure) (7)  
LC50 (rat): 57000 ppm (15-minute exposure) (8)  
LC50 (mouse): 16186 ppm (8-hour exposure) (9)

LD50 (oral, rat): 2100 to 3000 mg/kg (1)

**0007440-50-8 COPPER**  
LD50 (intraperitoneal, mouse): 3.5 mg/kg (1)

**0000075-28-5 ISOBUTANE**  
LC50 (mouse, inhalation): 520,000 ppm (52%) (2-hour exposure) (4)

**0000106-97-8 BUTANE**  
LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure): cited as 680 mg/L (2-hour exposure) (9)  
LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure): cited as 658 mg/L (4-hour exposure) (9)

## ACUTE EXPOSURE

**0000075-09-2 METHYLENE CHLORIDE**  
The substance is irritating to the eyes, skin and respiratory tract. It can cause effects on the CNS, blood, liver, heart and lungs. Exposure could cause carbon monoxide poisoning resulting in impaired functions. Exposure at high concentrations could cause lowering of consciousness and death. Methylene Chloride is a potent irritant of mucous membranes. If swallowed, the substance may cause vomiting and could result in aspiration pneumonitis.

## CHRONIC EXPOSURE

**0000075-09-2 METHYLENE CHLORIDE**  
Inhalation exposure may result in neurological symptoms, including paraesthesiae, respiratory irritation and gastrointestinal disturbances. Long term exposure causes damage to the CNS and to the liver. Repeated or prolonged contact with skin may cause dermatitis.

## POTENTIAL HEALTH EFFECTS – MISCELLANEOUS

**0000075-09-2 METHYLENE CHLORIDE**  
Is an IARC, NTP or OSHA Carcinogen. There is limited evidence that this substance causes spontaneous abortions. Contact can severely irritate and burn the skin and eyes with possible eye damage. Skin contact may cause inflammation and burns. Inhalation of high concentrations can have narcotic effects. Carbon monoxide produced as a metabolite in the body.

## SECTION 12: ECOLOGICAL INFORMATION

**TOXICITY:** Very toxic to aquatic life with long lasting effects.

**PERSISTENCE AND DEGRADABILITY:** No data available.

**BIOACCUMULATIVE POTENTIAL:** No data available.

**MOBILITY IN SOIL:** No data available.

**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.



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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.

## SECTION 14: TRANSPORT INFORMATION

**CONTAINER SIZES(S):** Aerosol Can (14 oz.)  
**PROPER SHIPPING NAME:** LUBRICATING OIL, GREASE OR PETROLEUM.  
**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
0000074-98-6	PROPANE	2% - 5%	SARA 312, VOC, TSCA, ACGIH, OSHA
0000075-09-2	METHYLENE CHLORIDE	35% - 63%	CERCLA, HAPS, SARA312, SARA313, TSCA, RCRA, ACGIH, CA_Prop65 – California Proposition 65, OSHA
0000075-28-5	ISOBUTANE	2% - 5%	SARA 312, VOC, TSCA, ACGIH
0000106-97-8	BUTANE	5%-11%	SARA 312, VOC, TSCA, ACGIH
0007440-50-8	COPPER	18%-32%	CERCLA, SARA312, SARA313, TSCA, RCRA, OH_TOX, ACGIH

**FEDERAL REGULATIONS:** This product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** See above.

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** See above.

**SARA 311/312 HAZARD CATEGORIES:** See above.

**SARA 313 REPORTABLE INGREDIENTS:** See above.

## 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.

**HMIS/NFPA Ratings:** Health = 2  
Flammability = 3  
Reactivity = 0  
Other = -  
Protection = -

**REVISION DATE:** 08/26/2019

**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.