

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| | |
|--|---|
| Product: MR-2, MR-2A Manufacturer: AGS Company Street Address: 2651 Hoyt St City/ State/ Zip Muskegon Hts., MI 49444 Phone: 800-253-0403 Phone: 231-733-2101 FAX: 231-733-1784 Transportation Emergency: CHEM-TEL Phone: 800-255-3924 | Trade Name: Mr. Penetrant Common Name: Penetrating Lube Original Issue Date: 7/23/1997 Revision No 10 Date 12/10/2012 |
|--|---|

SECTION 2 - COMPOSITION/ INFORMATION ON INGREDIENTS

| ITEM | CAS NUMBER | WT/WT % |
|-----------------------------|------------|---------|
| 1 Stoddard Solvent | 8052-41-3 | 40-70 |
| 2 Oxygenated Hydrocarbon | Mixture | 15-40 |
| 3 Phosphate Esters | 68937-41-7 | 10-30 |
| 4 Nonyl Phenoxy Acetic Acid | 3115-49-9 | 0.1-1 |

EXPOSURE LIMITS

| ITEM | ACGIH | | OSHA | |
|------|---------|----------|---------|-------------|
| | TLV-TWA | TLV-STEL | PEL-TWA | PEL-CEILING |
| 1 | 100 ppm | N.E. | 100 ppm | 500 ppm |
| 2 | N.E. | N.E. | N.E. | N.E. |
| 3 | N.E. | N.E. | N.E. | N.E. |
| 4 | N.E. | N.E. | N.E. | N.E. |

(See Section 16 for abbreviation legend)

SECTION 3 - HAZARDS IDENTIFICATION

EYE CONTACT: Liquid and vapors may be irritating and can cause pain, tearing, reddening and swelling.

SKIN CONTACT: Prolonged or repeated contact may result in irritation and/or dermatitis.

INHALATION: Prolonged inhalation may cause headaches, dizziness and nausea.

INGESTION: This material may be harmful or fatal if swallowed.

CHRONIC HAZARDS: Overexposure may cause nervous system, pulmonary and kidney damage.

Primary Route(s) of Entry Skin and eye contact or ingestion.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN CONTACT: Immediately flush with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

INGESTION: Get medical attention immediately. If swallowed, DO NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

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SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 101°F 38°C LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT: 6 %

AUTOIGNITION TEMPERATURE: N.D.

EXTINGUISHING MEDIA: Water fog, dry chemical, CO², foam, and alcohol foam

UNUSUAL FIRE AND EXPLOSION HAZARDS: Container(s) may explode and cause injury or death. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue and can be dangerous. Do not expose container to heat, flame, sparks or other sources of ignition.

SPECIAL FIREFIGHTING PROCEDURES: Wear NIOSH/MSHA approved self-contained breathing apparatus and protective gear. Water spray may be utilized to cool containers.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

RECOVERY PROCEDURES: Absorb spill with inert material then place in a chemical waste container.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Wash thoroughly after handling

STORAGE: Keep away from heat, sparks, and flame.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use in well ventilated area. Local exhaust could be utilized to remove fumes.

RESPIRATORY PROTECTION: For most conditions, no respiratory protection should be needed, however, if high vapor concentration should develop, use a NIOSH approved organic vapor respirator.

SKIN PROTECTION: Where contact is likely, wear chemical resistant gloves.

EYE PROTECTION: Wear safety glasses with side shields or goggles.

OTHER PROTECTIVE EQUIPMENT: Eye wash in work area.

HYGIENIC PRACTICES: Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Avoid prolonged or repeated contact with eyes, skin, and clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|------------|------------------|------------------------------|
| BOILING RANGE | N.D. | VAPOR DENSITY: | Is heavier than air |
| ODOR | Solvent | ODOR THRESHOLD | N.D. |
| APPEARANCE | Dark Gray | EVAPORATION RATE | Is slower than Butyl Acetate |
| SOLUBILITY IN H ₂ O | Negligible | | |
| FREEZE POINT | N.D. | SPECIFIC GRAVITY | 0.86 |
| VAPOR PRESSURE | N.D. | pH @ 0.0% | N.A. |
| PHYSICAL STATE | Liquid | VISCOSITY: | N.D. |
| COEFFICIENT OF WATER / OIL DISTRIBUTION: Negligible (See Section 16 for abbreviation legend) | | | |

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SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Sources of ignition.

INCOMPATIBILITY: Strong acid or alkali, oxidizers and amines.

HAZARDOUS DECOMPOSITION PRODUCTS Oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

PRODUCT LD-50 >5000 mg/kg PRODUCT LC-50 >5500 ppm

COMPONENT TOXICOLOGICAL INFORMATION:

| CHEMICAL NAME | LD50 | LC50 |
|---------------------------|-----------------|---------------------------------|
| Stoddard Solvent | >5000 mg/kg/rat | >5500 mg/m ³ /4h/rat |
| Oxygenated Hydrocarbon | N.E. | N.E. |
| Phosphate Esters | N.E. | N.E. |
| Nonyl Phenoxy Acetic Acid | N.E. | N.E. |

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No information

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME Consumer Commodity

DOT TECHNICAL NAME ORM-D

DOT HAZARD CLASS HAZARD SUBCLASS: N.A.

DOT UN / NA NUMBER: PACKING GROUP: NA RESP. GUIDE PAGE

SECTION 15 - REGULATORY INFORMATION

U.S FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 cfr 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD

FIRE HAZARD

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SARA SECTION 313

This product contains the following substance subject to the reporting requirements of Section 313 of Title of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

| CHEMICAL NAME | CAS NUMBER | WT /WT % IS LESS THAN |
|---|------------|-----------------------|
| No SARA Section 313 components exist in this product. | | % |

TOXIC SUBSTANCE CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12 (B) if exported from the United States:

| CHEMICAL NAME | CAS NUMBER |
|------------------|------------|
| Stoddard Solvent | 8052-41-3 |

U.S. STATE REGULATIONS: AS FOLLOWS -

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

| CHEMICAL NAME | CAS NUMBER |
|--|------------|
| No non-hazardous materials are among the top five ingredients. | |

PENNSYLVANIA RIGHT-TO-Know

The following non-hazardous ingredients are present in the product at greater than 3%:

| CHEMICAL NAME | CAS NUMBER |
|---|------------|
| No non-hazardous ingredients are present at greater than 3% | |

CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are know to the state of California to causes cancer, birth defects or other reproductive harm.

| CHEMICAL NAME | CAS NUMBER |
|---|------------|
| No Propositon 65 chemicals exist in this product. | |

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

SECTION 16 - OTHER INFORMATION

| | | | | | | | | |
|---------------|--------|---|--------------|---|------------|---|-----|---|
| HMIS RATINGS: | Health | 0 | Flammability | 2 | Phys. Haz. | 0 | PPE | A |
| NFPA | Health | 0 | Flammability | 2 | Reactivity | 0 | | |

VOLATILE ORGANIC COMPOUNDS (VOCs): 4.48 lbs / gal 537 grams / liter

| | | | | |
|---------|------|----------------|------|-----------------|
| LEGEND: | N.A. | Not Applicable | N.E. | Not Established |
| | N.D. | Not Determined | | |

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