

MATERIAL SAFETY DATA SHEET

The Valvoline Company

Page 001

Date Prepared: 10/11/05

Date Printed: 09/01/06

MSDS No: 525.0405562-001.002

MG 2000 - A036C

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: MG 2000 - A036C

Company

The Valvoline Company  
P.O. Box 14000  
Lexington, KY 40512

Telephone Numbers

Emergency: 1-800-274-5263  
Information: 1-859-357-7206

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient (s)	CAS Number	% (by weight)
ALIPHATIC HYDROCARBONS (STODDARD TYPE)	8052-41-3	8.0- 18.0
KEROSINE, STRAIGHT RUN, KEROSENE	8008-20-6	2.4- 12.0
ALUMINUM SILICATE	66402-68-4	1.0- 10.0
ALIPHATIC PETROLEUM DISTILLATES	64742-47-8	1.0- 7.0
OLEIC DIETHANOLAMIDE	68155-20-4	1.0- 7.0
POLY(DIMETHYLSILOXANE)	63148-62-9	1.0- 7.0
SORBITAN MONOOLEATE	1338-43-8	1.0- 7.0
ISOPROPANOL	67-63-0	1.0- 7.0

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3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause severe eye irritation and injure eye tissue.

Skin

Can cause severe skin irritation. Additional symptoms of skin contact may include: skin blistering, Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

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Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8). Prolonged or repeated breathing of dust may result in progressive and irreversible lung disease (fibrosis) which may cause death from respiratory and/or heart failure. Symptoms include coughing and difficult breathing which becomes worse with physical activity.

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways), lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, low blood pressure, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), lung edema (fluid buildup in the lung tissue), kidney damage, convulsions, coma, and death.

Target Organ Effects

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate preexisting disorders of these organs in humans: mild, reversible liver effects.

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Developmental Information

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration. This product (or a component) is a petroleum-derived material. Similar materials and certain compounds occurring naturally in petroleum oils have been shown to cause skin cancer in laboratory animals following repeated exposure without washing or removal.

Other Health Effects

When heated to temperatures above 150 degrees C in the presence of air, this product can form formaldehyde vapors. Formaldehyde has been identified as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) and the Occupational Safety and Health Administration (OSHA). Formaldehyde is irritating to the eyes, nose, throat, and airways, and can cause an allergic reaction (causes narrowing of the air passages of the lungs, sweating, flushing, hives, rapid heart rate, and lowered blood pressure). In addition, formaldehyde can cause an allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects). It is harmful if inhaled, swallowed or absorbed through skin.

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

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4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

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Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs ( or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), kidneys, Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

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5. FIRE FIGHTING MEASURES

Flash Point

108.0 F (42.2 C)

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Explosive Limit

No data

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, formaldehyde, hydrogen, silicon oxides, various hydrocarbons.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

alcohol foam, water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Not determined

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6. ACCIDENTAL RELEASE MEASURES

Small Spill

Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Absorb liquid on vermiculite, floor absorbent or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

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Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames, including pilot lights, electrical sparks).

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7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Storage

Store in closed containers in a dry, well-ventilated area. Do not store near extreme heat, open flame, or sources of ignition.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

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Skin Protection

Wear impervious gloves (consult your safety equipment supplier).  
To prevent skin contact, wear impervious full-body protective  
clothing. Other protective equipment: eyewash station, emergency  
shower.

Respiratory Protections

If workplace exposure limit(s) of product or any component is  
exceeded (See Exposure Guidelines), a NIOSH/MSHA approved air  
supplied respirator is advised in absence of proper environmental  
control. OSHA regulations also permit other NIOSH/MSHA  
respirators (negative pressure type) under specified conditions  
(consult your industrial hygienist). Engineering or  
administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust)  
ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

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ALIPHATIC HYDROCARBONS (STODDARD TYPE) (8052-41-3)

OSHA VPEL 100.000 ppm - TWA

ACGIH TLV 100.000 ppm - TWA

KEROSINE, STRAIGHT RUN, KEROSENE (8008-20-6)

ACGIH TLV 200.000 mg/m3 - TWA ((Skin))

ALUMINUM SILICATE (66402-68-4)

No exposure limits established

ALIPHATIC PETROLEUM DISTILLATES (64742-47-8)

OSHA VPEL 5.000 mg/m3 - TWA

ACGIH TLV 200.000 mg/m3 - TWA ((Skin))

OLEIC DIETHANOLAMIDE (68155-20-4)

No exposure limits established

POLY(DIMETHYLSILOXANE) (63148-62-9)

No exposure limits established

SORBITAN MONOOLEATE (1338-43-8)

No exposure limits established

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ISOPROPANOL (67-63-0)

OSHA VPEL 400.000 ppm - TWA

OSHA VPEL 500.000 ppm - STEL

ACGIH TLV 200.000 ppm - TWA

ACGIH TLV 400.000 ppm - STEL

Provide adequate ventilation to control formaldehyde exposures to within the OSHA permissible exposure limits of 0.75 ppm (TWA) and 2 ppm (STEL) or 0.3 ppm (ACGIH ceiling).

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) > 150.0 F (65.5 C) @ 760.00 mmHg

Vapor Pressure

(for component) 33.000 mmHg

Specific Vapor Density

No data

Specific Gravity

.980 @ 60.00 F

Liquid Density

8.180 lbs/gal @ 60.00 F

8.180 lbs/gal @ 60.00 F

Percent Volatiles (Including Water)

No data

Evaporation Rate

No data

Appearance

No data

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State

LIQUID

Physical Form

No data

Color

PINK

Odor

CHERRY

pH

No data

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10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, formaldehyde, hydrogen, silicon oxides, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: acetaldehyde, acids, chlorine, ethylene oxide isocyanates, peroxides, strong oxidizing agents, Do not use with aluminum equipment at temperatures above 120 deg F.

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11. TOXICOLOGICAL INFORMATION

No data

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12. ECOLOGICAL INFORMATION

No data

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13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

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14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

Not Regulated

Container/Mode:

CASES/SURFACE - NO EXCEPTIONS

NOS Component:

None

RQ (Reportable Quantity) - 49 CFR 172.101

Not applicable

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15. REGULATORY INFORMATION

US Federal Regulations

CERCLA RQ - 40 CFR 302.4

None

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SARA 302 Components - 40 CFR 355 Appendix A  
None

Section 311/312 Hazard Class - 40 CFR 370.2  
Immediate(X) Delayed(X) Fire(X) Reactive( ) Sudden  
Release of Pressure( )

SARA 313 Components - 40 CFR 372.65  
None

International Regulations  
Inventory Status  
Not determined

State and Local Regulations  
California Proposition 65  
None

New Jersey RTK Label Information

STODDARD SOLVENT	8052-41-3
KEROSENE	8008-20-6
ISOPROPYL ALCOHOL	67-63-0

Pennsylvania RTK Label Information

STODDARD SOLVENT	8052-41-3
KEROSINE (PETROLEUM)	8008-20-6
2-PROPANOL	67-63-0

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16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.