

PRO HEAVY DUTY COMPOUND 1/128 OZ

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: PRO HEAVY DUTY COMPOUND 1/128 OZ

General or Generic ID: AUTOMOTIVE CHEMICAL

Company

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

Telephone Numbers

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
ALUMINUM OXIDE	1344-28-1	36.0- 36.0
SILICON DIOXIDE	1317-95-9	5.0- 15.0
MORPHOLINE	110-91-8	1.0- 6.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation.

Skin

May cause mild skin irritation. 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.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

Breathing of dust, vapor, and/or fume 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 of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: thirst, runny nose, cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), muscle weakness, pain in the abdomen, lung edema (fluid buildup in the lung tissue), kidney damage, liver damage, lung damage.

Target Organ Effects

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: nasal damage, eye damage, kidney damage, liver damage, lung damage.

Developmental Information

There are no data available for assessing risk to the fetus from maternal exposure to this material.

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.

Other Health Effects

Nitrites should not be added to this material because this can result in formation of nitrosamines. Many nitrosamines cause cancer in laboratory animals.

Primary Route(s) of Entry

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

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.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If 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

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract skin, lung (for example, asthma-like conditions), liver, kidneys, eye.

5. FIRE FIGHTING MEASURES

Flash Point

185.0 F (85.0 C) PMCC

Explosive Limit

(for component) Lower 1.8 Upper 10.8 %

Autoignition Temperature

No data

Hazardous Products of Combustion

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

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and 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

regular foam, carbon dioxide, dry chemical.

Fire Fighting Instructions

Water may be used to keep fire-exposed containers cool until fire is out. 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

Health - 1, Flammability - 2, Reactivity - 0

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.

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).

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. Avoid prolonged or repeated contact. 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

Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

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

ALUMINUM OXIDE (1344-28-1)

OSHA VPEL 5.000 mg/m³ - TWA respirable fraction

OSHA VPEL 10.000 mg/m³ - TWA total dust

ACGIH TLV 10.000 mg/m³ - TWA as Al (The value is for total dust containing no asbestos and < 1% crystalline silica)

SILICON DIOXIDE (1317-95-9)

OSHA VPEL 0.100 mg/m3 - TWA respirable dust (as quartz)
ACGIH TLV 0.000 - TWA 0.1 mg/m3 TWA (this TLV is for the respirable fraction of dust)
ACGIH TLV 0.100 mg/m3 - TWA (this TLV is for the respirable fraction of dust)

MORPHOLINE (110-91-8)
OSHA VPEL 20.000 ppm - TWA ((Skin))
OSHA VPEL 70.000 mg/m3 - TWA ((Skin))
OSHA VPEL 105.000 mg/m3 - STEL ((Skin))
OSHA VPEL 30.000 ppm - STEL ((Skin))
ACGIH TLV 71.000 mg/m3 - TWA ((Skin))
ACGIH TLV 20.000 ppm - TWA ((Skin))
ACGIH TLV 107.000 mg/m3 - STEL ((Skin))
ACGIH TLV 30.000 ppm - STEL ((Skin))

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point
(for component) 212.0 F (100.0 C) @ 760 mmHg

Vapor Pressure
(for component) 17.500 mmHg @ 68.00 F

Specific Vapor Density
No data

Specific Gravity
1.390 @ 60.00 F

Liquid Density
11.580 lbs/gal @ 60.00 F
1.390 kg/l @ 15.60 C

Percent Volatiles (Including Water)
No data

Evaporation Rate
SLOWER THAN ETHYL ETHER

Appearance
VISCIOUS

State
LIQUID

Physical Form
No data

Color
OFF WHITE

Odor
PINE

pH
No data

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

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

Chemical Stability

Stable. This product should not be heated above 140 F(60 C) in the presence of aluminum due to excessive corrosion and potential chemical reaction releasing flammable hydrogen gas.

Incompatibility

Avoid contact with: oxygen, strong alkalies, strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

Chronic/Carcinogenicity

One study with morpholine in laboratory animals produced cancer, while others have not. The tumors in the one study may have resulted from exposure to N-nitrosomorpholine, an animal carcinogen. N-nitrosomorpholine can occur as a contaminant in morpholine or as a result of the interaction of morpholine with nitrite of unknown origin. There is no evidence that morpholine causes cancer in humans.

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations.

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

15. REGULATORY INFORMATION

US Federal Regulations

CERCLA RQ - 40 CFR 302.4
None

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

Section 313 Component(s)	CAS Number
ALUMINUM OXIDE (FIBROUS FORM ONLY)	1344-28-1

International Regulations

Inventory Status
Not determined

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.
SILICON DIOXIDE

New Jersey RTK Label Information

ALUMINUM OXIDE	1344-28-1
SILICA, TRIPOLI	1317-95-9
MORPHOLINE	110-91-8

Pennsylvania RTK Label Information

ALUMINUM OXIDE (AL ₂ O ₃)	1344-28-1
TRIPOLI	1317-95-9
MORPHOLINE	110-91-8

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.

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