



# Material Safety Data Sheet

## 1. PRODUCT AND COMPANY IDENTIFICATION

ADVALUBE™ B-4540 Specialty Lubricant

Revision Date: 01/27/2012

**Supplier** ROHM AND HAAS CHEMICALS LLC  
A Subsidiary of The Dow Chemical Company  
100 INDEPENDENCE MALL WEST  
PHILADELPHIA, PA 19106-2399 United States

**For non-emergency information contact:** 215-592-3000

**Emergency telephone number**  
1 800 424 9300

**Local emergency telephone number**  
989-636-4400

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Fatty acid esters	Not Hazardous	10.0 - 15.0 %
Dicarboxylic acid ester	Not Hazardous	25.0 - 35.0 %
Synthetic wax	Not Hazardous	5.0 - 10.0 %
Hydrous silicate	Not Hazardous	45.0 - 55.0 %

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

#### Appearance

Form Powdered solid or beads

Colour off-white

#### Hazard Summary

**CAUTION!**  
MAY CAUSE EYE AND SKIN IRRITATION.  
IRRITATING TO RESPIRATORY SYSTEM.

**Potential Health Effects**

**Eyes:** Like any foreign body, particles can cause mechanical irritation.

**Skin:** Prolonged or repeated skin contact can cause the following:  
slight irritation

**Inhalation:** Inhalation of dust can cause the following:  
irritation of nose, throat, and lungs

**Chronic Exposure:** Prolonged or repeated exposure to dust can cause the following:  
silicosis, a pneumoconiosis which causes scar tissue

**Carcinogenicity**

Component	List	Classification
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**4. FIRST AID MEASURES**

**Inhalation:** Move to fresh air.

**Skin contact:** Take off all contaminated clothing immediately. Wash off with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before re-use. Do not take clothing home to be laundered.

**Eye contact:** Rinse with plenty of water. If eye irritation persists, consult a specialist.

**Ingestion:** Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Consult a physician.

**5. FIREFIGHTING MEASURES**

<b>Flash point</b>	not applicable
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable

**Suitable extinguishing media:** Dry chemical

Carbon dioxide (CO<sub>2</sub>)

Water spray

Foam

Use extinguishing media appropriate for surrounding fire.

**Specific hazards during firefighting:** Material as sold is combustible; burns vigorously with intense heat.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit.

**Further information:** Use water spray to cool unopened containers.

Remain upwind.

Avoid breathing smoke.

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## 6. ACCIDENTAL RELEASE MEASURES

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### Personal precautions

Use personal protective equipment.  
Keep people away from and upwind of spill/leak.

### Environmental precautions

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

### Methods for cleaning up

Keep people away from and upwind of spill/leak.  
Material can create slippery conditions.  
Transfer spilled material to suitable containers for recovery or disposal.  
Avoid dust formation.  
Avoid breathing dust.

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## 7. HANDLING AND STORAGE

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### Handling

Static charges can accumulate: use bonding and grounding between transfer equipment and receiving containers and for any other operations capable of generating static electricity. Avoid dust formation. Avoid inhalation of vapour or mist. Avoid contact with eyes, skin and clothing. Wash after handling and shower at end of work period. Keep container closed. For personal protection see section 8. Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required.

### Storage

**Storage conditions:** Store away from excessive heat (e.g. steampipes, radiators), from sources of ignition and from reactive materials. Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

### Further information:

Vapors can be evolved when material is heated during processing operations. See SECTION 8, Exposure Controls/Personal Protection, for types of ventilation required.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Exposure limit(s)

Exposure limits are listed below, if they exist.

### Exposure controls

**Engineering measures:** Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to the current edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Protective measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Individual protection measures**

**Eye/face protection:** Safety glasses with side-shields Eye protection worn must be compatible with respiratory protection system employed.

**Skin protection**

**Hand protection:** For prolonged or repeated contact use protective gloves.

**Respiratory protection:** A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required under normal operating conditions. Where vapors and/or mists may occur, wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor cartridges and N95 filters. If oil mist is present, use R95 or P95 filters. Use NIOSH approved respiratory protection.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Appearance</b>	
<b>Form</b>	Powdered solid or beads
<b>Colour</b>	off-white
<b>pH</b>	neutral
<b>Melting point/range</b>	ca.95 °C ( 203 °F)
<b>Boiling point/boiling range</b>	no data available
<b>Flash point</b>	not applicable
<b>Evaporation rate</b>	not applicable
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Vapour pressure</b>	not applicable
<b>Relative vapour density</b>	not applicable
<b>Relative density</b>	no data available
<b>Water solubility</b>	no data available
<b>Percent volatility</b>	0 %

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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**10. STABILITY AND REACTIVITY**

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<b>Hazardous reactions</b>	None known. Stable
<b>Materials to avoid</b>	Strong oxidizing agents Acids and bases

**polymerisation**                      Product will not undergo polymerization.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information on this product or its components appear in this section when such data is available.*

Information given is based on data on the components and the toxicology of similar products.

Component: **Hydrous silicate**

**Acute oral toxicity**                      LD50 rat >5,110 mg/kg

Component: **Hydrous silicate**

**Acute inhalation toxicity**                      LC50 rat 4 Hour >5.3 mg/l

Component: **Hydrous silicate**

**Acute dermal toxicity**                      LD50 rabbit >2,000 mg/kg

Component: **Hydrous silicate**

**Skin irritation**                              rabbit practically non-irritating

Component: **Hydrous silicate**

**Eye irritation**                              rabbit slight irritation

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## 12. ECOLOGICAL INFORMATION

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*Ecotoxicological information on this product or its components appear in this section when such data is available.*

There is no data available for this product.

**Hydrous silicate**

**Ecotoxicity effects**

**Toxicity to fish**

semi-static test LC50 Zebra fish (Danio/Brachydanio rerio) 96 Hour  
OECD Test Guideline 203 or Equivalent  
1,800 mg/l

**Toxicity to fish**

LC50 Rainbow trout (Oncorhynchus mykiss) 96 Hour OECD Test  
Guideline 203 or Equivalent  
1,800 mg/l

**Toxicity to algae**

EC50 Algae (Scenedesmus subspicatus) 96 Hour OECD Test  
Guideline 201  
18 mg/l

**Toxicity to algae**

EC50 Algae 72 Hour OECD Test Guideline 201  
130 mg/l

**Toxicity to bacteria**

EC50 Pseudomonas putida 16 Hour  
1,550 mg/l

**Toxicity to aquatic invertebrates**      static test EC50 Daphnia magna 24 Hour OECD Test Guideline 202 or Equivalent  
2,808 mg/l

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### 13. DISPOSAL CONSIDERATIONS

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**Environmental precautions:** CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**Disposal**

**Waste Classification:** When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33. The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

For disposal, incinerate this material at a facility that complies with local, state, and federal regulations.

**Contaminated packaging:** CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied.

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### 14. TRANSPORT INFORMATION

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**DOT**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

Not regulated (Not dangerous for transport)

*Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations*

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### 15. REGULATORY INFORMATION

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**Workplace Classification**

OSHA:            This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**SARA TITLE III: Section 311/312 Categorizations (40CFR370):** Chronic Health Hazard

**United States TSCA Inventory (US.TSCA):** All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**Pennsylvania**

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

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**16. OTHER INFORMATION**

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**Legend**

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior MSDS.

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be 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.

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