

AL-2000 MIST LUBRICANT

PRODUCT DESCRIPTION

AL-2000 is a high-efficiency metalworking lubricant that forms a high strength molecular coating on the cutting edge of the tool, reducing friction and extending tool life. AL-2000 is a fully synthetic fluid containing no petroleum and is non-toxic, non-flammable, and nonpolluting. AL-2000 is designed for use with an air driven spray mist system suitable for high-efficiency fluids. AL-2000 produces “dry” chips as it is used up in the cutting operation eliminating costly clean up and disposal.

GENERAL APPLICATION

AL-2000 is designed for use in applications where flood coolants are prohibited or not required. AL-2000 is designed for most cutting, sawing, turning, tapping, drilling, and milling operations where fluid can be applied directly to the working edge of the tool. AL-2000 does not contain sulfur or chlorine (which can stain certain materials) and can be used on mild steel, aluminum, titanium, stainless steel, and most other ferrous and non-ferrous metals.

ATTRIBUTES

- Easy to Use
- Increased Tool Life
- Clean Mist Application
- Greatly Decreased Disposal Cost
- Operator and Environmentally Safe

TYPICAL PHYSICAL PROPERTIES

Appearance:	Clear Liquid
Wt/Gallon (25°C):	7.2 lbs/gal
Flash Point:	158°C
Operating Range:	0°F – 120°F

DIRECTIONS

For best results, the tool should be lubricated through the entire operation. Use slow to moderate RPM's and higher feed rates to achieve better tool life and maximum productivity. DO NOT dilute or attempt to reduce fluid. AL-2000 is ready for use directly from the container and requires no mixing.

For industrial use only on metal cutting operations. Not suitable for lubricating purposes.

Data in this Product Data Sheet is believed to be correct and reliable. However, the DoALL Company does not assume responsibility for it or any recommendations contained in it, inasmuch as conditions and methods of use are beyond our control. Further, we make no warranty, expressed or implied, of any kind regarding this product or its use, and purchaser assumes all risks of use or handling either in accordance with directions or not.



DoALL Cutting Fluids
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MATERIAL SAFETY DATA SHEET

I. CHEMICAL PRODUCT AND MANUFACTURER IDENTIFICATION

PRODUCT NAME: AL-2000
PRODUCT CLASS: Cutting Fluid For Misting Application
MSDS N.: MS219
MANUFACTURER'S NAME: DoALL COMPANY
ADDRESS: 2375-B Touhy Ave., Elk Grove Village, IL 60007
EMERGENCY PHONE: (800) 535-5053 (INFOTRAC)
GENERAL INFORMATION: (888) 362-5572 x68916
REVISION DATE: September 1, 2007

II. HAZARDOUS INGREDIENTS IDENTIFICATION

OCCUPATIONAL EXPOSURE LIMITS				
INGREDIENTS	CAS #	OSHA PEL	ACGIH TLV	PERCENT
Fatty Ester	142-91-6	5 mg./cu. m.	5 mg./cu. m.	100.0

NOTE: This product is not considered hazardous under the law.

III. PHYSICAL DATA

Boiling Point: 150°C @ 15mmHg
Specific Gravity: 0.86 (water = 1)
Vapor Pressure: < 1 mm Hg @ 68 °F
Melting Point: NA
Vapor Density: >1 (air = 1)
Evaporation Rate: Nil (Water = 1)
Solubility in Water: Insoluble
pH: NA
Appearance: Clear Water-White Liquid
Odor: Mild

IV. FIRE AND EXPLOSION DATA

FLASH POINT: 158 degrees Celsius COC.

EXTINGUISHING MEDIA: Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents.

FIRE FIGHTING PROCEDURES: The extinguishing media agents mentioned may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire or

circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists. Wear SCBA gear in fire area.

UNUSUAL FIRE AND
EXPLOSION HAZARDS: None

V. HEALTH HAZARD DATA

ROUTES OF EXPOSURE AND EFFECTS OF OVER-EXPOSURE

INHALATION: Breathing difficulty. Comprehensive exposure to mist may cause upper respiratory irritation.

EYE CONTACT: Minor irritation such as stinging sensation in the eye.

SKIN CONTACT: Minor irritation to the skin if used as directed and good personal hygiene practiced.

INGESTION: If swallowed in small quantities, may cause nausea, vomiting or Diarrhea.

CARCINOGENICITY:

LISTED BY NTP: No

LISTED BY IARC: No

LISTED BY OSHA: No

EMERGENCY FIRST AID PROCEDURES

INHALATION: Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If over exposed to oil mist, remove from further exposure until excessive oil mist condition subsides.

INGESTION: If ingested, DO NOT INDUCE VOMITING. Immediately seek medical attention.

EYE CONTACT: If splashed into the eyes, flush with clear water for 15 minutes lifting upper and lower lids until any discomfort subsides. Remove contact lenses if applicable. If irritation persists seek medical attention.

SKIN CONTACT: In case of skin contact, remove any contaminated clothing. Wash skin thoroughly with plenty of mild soap and flowing warm water only for a minimum of 15 minutes. Do not use harsh soap or solvent.

SKIN ABSORPTION: Seek medical attention.

VI. REACTIVITY DATA

STABILITY: This product is stable and will not react violently with water.

INCOMPATIBILITY: None known.

HAZARDOUS
DECOMPOSITION PRODUCTS: None known.

HAZARDOUS
POLYMERIZATION: Will not occur.

VII. HANDLING PRECAUTIONS

IN CASE OF ACCIDENTAL RELEASE:

Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize skin contact. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas.

SMALL SPILLS: Use absorbent material

LARGE SPILLS: Dike and pump into drums

WASTE DISPOSAL METHOD: Treat as an oily waste and dispose of in accordance with local, state, and federal regulations

STORAGE: Store in a closed container in a cool place away from any fire source at <85°F

OTHER PRECAUTIONS: Avoid breathing MIST

VII. PROTECTIVE MEASURES

VENTILATION: General mechanical ventilation should be adequate. If misting occurs, provide local ventilation. No smoking or open lights.

RESPIRATORY PROTECTION: Use supplied-air respiratory protection in confined or enclosed spaces, if needed.

PROTECTIVE GLOVES: The use of NEOPRENE gloves that are impermeable to oil is recommended.

EYE PROTECTION: Use safety goggles or face shield when eye contact may occur.

OTHER PROTECTION: An emergency shower and eyewash station should be available in the work area. Practice reasonable

personal hygiene. Wash exposed skin with mild soap and warm water only. Oil-soaked clothing should be changed promptly and laundered before re-wearing. Removes contaminated shoes and thoroughly clean before reuse; discard if oil-soaked.

PERSONAL HYGIENE: Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with mild soap and warm water.

IX. REGULATION COMPLIANCE INFORMATION

CAA: Contains no ozone depleting substance.

DOT: Not classified as hazardous.

RCRA: As received, not a hazardous waste material.

SARA 302/304: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). No chemical components present in this product exceed the de minimus reporting level established under this statute.

SARA 311/312: The Superfund Amendments and Reauthorization Act of 1989 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by A Hazard Category as defined in 40 CFR 370.2.

SARA 313: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of an annual A Toxic Chemicals \cong Release Inventory report under 40 CFR 372. Chemical substances that must be accounted for under SARA Section 313 must also be identified in all product MSDSs that are impacted by the regulation. No chemical components present in this product exceed the de minimus reporting level established under this statute.

TSCA: All of the components of this product are listed on the Toxic Substance Control Act (TSCA) inventory.

VOC: THIS MATERIAL IS LISTED ON THE CANADIAN DOMESTIC SUBSTANCE LIST. THIS MATERIAL IS LISTED ON THE EUROPEAN CORE INVENTORY (EINECS# 203-935-4).

X. HMIS

HEALTH: 1
FLAMMABILITY: 1
REACTIVITY: 0

XI. WHIMIS

HEALTH: 1
FLAMMABILITY: 1
REACTIVITY: 0

XII. Abbreviations and Symbols used in this MSDS

NA Not Applicable < - Less Than
ND Not Determined > - Greater Than
BuAc Butyl Acetate

Data in this MSDS is believed to be correct and reliable. However, The DoALL Co. does not assume responsibility for it, or any recommendations contained in it, inasmuch as conditions and methods of use are beyond our control. Further, we make no warranty, expressed or implied, of any kind regarding this product or its use, and purchaser assumes all risks of use or handling either in accordance with directions or not.