

1. IDENTIFICATION

Product Identifier

Product Name D.F.L. Dry Film Lube Mold Release

Other means of identification

SDS # 41112N

Product Code 41112N

Synonyms Slide Dry Film Lubricant
Low Molecular Weight PTFE Dispersion.

UN/ID No UN1950

Other Information Formula: 53122.

Recommended use of the chemical and restrictions on use

Recommended Use Industrial mold release.

Details of the supplier of the safety data sheet

Supplier Address

Slide Products Inc.
430 S. Wheeling Road
Wheeling, IL 60090

Emergency Telephone Number

Company Phone Number Phone: 1-847-541-7220

Fax: 1-847-541-7986

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Milky white dispersion

Physical State Aerosol

Odor Slight alcohol

Classification

Flammable Aerosols

Category 2

Signal Word

Warning

Hazard Statements

Flammable Aerosol



Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Do not spray on an open flame or other ignition source
 Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

Slide Dry Film Lubricant
 Low Molecular Weight PTFE Dispersion.

Chemical Name	CAS No	Weight-%
Dimethyl ether	115-10-6	45-55
1,1 difluoroethane	75-37-6	45-55
PTFE Solid	9002-84-0	1-5
Isopropyl alcohol	67-63-0	1-6

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Call a physician immediately.
Skin Contact	Wash with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

Symptoms	Inhalation symptoms may include dizziness and headache. Nausea. Concentrated spray may cause freezing of skin area. Direct contact with eyes may cause temporary irritation.
-----------------	--

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO₂). Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Aerosols may rupture violently at temperatures above 120 F. Aerosol flame projection test: 10-12" flame projection.

Hazardous Combustion Products Hydrogen chloride. Hydrogen fluoride. Traces of phosgene upon pyrolysis.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Personal Precautions** Use personal protective equipment as required.
- Environmental Precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

- Methods for Containment** Remove leaking container to outside disposal site. Remove all sources of ignition.
- Methods for Clean-Up** Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

- Advice on Safe Handling** Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not drop, puncture, or incinerate. Do not spray on floors.

Conditions for safe storage, including any incompatibilities

- Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Do not expose to temperatures exceeding 50 °C/122 °F. Protect from direct sunlight.
- Incompatible Materials** Powdered or alkaline earth metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines Threshold Limit Value: 400 ppm

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³

Appropriate engineering controls

- Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Proper eye care is needed in all industrial operations.
- Skin and Body Protection** Protective gloves are not required, but recommended.

Respiratory Protection No protection is ordinarily required under normal conditions of use and with adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Aerosol	Odor	Slight alcohol
Appearance	Milky white dispersion	Odor Threshold	Not determined
Color	Milky white		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	Not determined		
Melting Point/Freezing Point	< -45 °C / <-50 °F		
Boiling Point/Boiling Range	Not available		
Flash Point	Not applicable		
Evaporation Rate	Extremely rapid		
Flammability (Solid, Gas)	Flammable aerosol		
Upper Flammability Limits	25.0%		
Lower Flammability Limit	4.0%		
Vapor Pressure	Not available		
Vapor Density	Not available		
Specific Gravity	1.0	(Water = 1)	
Water Solubility	Not soluble		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		
Density	Weight per gallon: 8.37		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

High heat or open flames.

Incompatible Materials

Powdered or alkaline earth metals.

Hazardous Decomposition Products

Hydrogen chloride. Hydrogen fluoride. Traces of phosgene upon pyrolysis.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl ether 115-10-6	-	-	= 308.5 mg/L (Rat) 4 h
Isopropyl alcohol 67-63-0	= 4396 mg/kg (Rat)	= 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)	= 72.6 mg/L (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms	Please see section 4 of this SDS for symptoms.
-----------------	--

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	Isopropyl Alcohol (IPA) is listed as an IARC Monograph Group 3 chemical. However, IARC Group 3 chemicals are "not classifiable as human carcinogens". IPA is classified as an IARC Group 1 chemical ONLY when manufactured by the strong-acid process. The IPA used in this product is NOT manufactured by the strong-acid process and is therefore not classifiable as a human carcinogen.
------------------------	---

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0		Group 3		X

Legend

IARC (International Agency for Research on Cancer)
 Group 3 IARC components are "not classifiable as human carcinogens"
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isopropyl alcohol 67-63-0	1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50		13299: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Dimethyl ether 115-10-6	-0.18
Isopropyl alcohol 67-63-0	0.05

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Isopropyl alcohol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. **Based on package size, product may be eligible for limited quantity exception.**

DOT

	(each not exceeding 1 L capacity)
UN/ID No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1

IATA

UN/ID No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1

IMDG

UN/ID No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Dimethyl ether	Present	X		Present		Present	X	Present	X	X
1,1 difluoroethane	Present	X		Present		Present	X	Present	X	X
PTFE Solid	Present	X		Present				Present		X
Isopropyl alcohol	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl alcohol - 67-63-0	67-63-0	3	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Dimethyl ether 115-10-6	X	X	X
1,1 difluoroethane 75-37-6	X	X	
Isopropyl alcohol 67-63-0	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 1	Flammability 3	Physical Hazards 0	Personal Protection B

Issue Date: 01-Sep-2012
 Revision Date: 01-Jan-2015
 Revision Note: New format

Disclaimer

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.

End of Safety Data Sheet