Safety Data Sheet

Issue Date: 01-Sep-2012 **Revision Date:** 03-Jan-2014 **Version** 1

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 Dry film lubricant 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	68604-99-9	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		
Appearance	Milky white dispersion	**Odor**	Slight alcohol
Color	Milky white	**Odor Threshold**	Not determined

Property	**Values**	**Remarks • Method**
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	(1=Water)
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 Avoid breathing vapors or mists.

Ingestion Do not taste or swallow.

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.

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

TSCA	Listed

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*

US Federal Regulations

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl alcohol - 67-63-0	67-63-0	1-6	1.0

US State Regulations

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

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	Not determined	Not determined	Not determined	Not determined
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal Protection**
	1	3	0	B

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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