

Safety Data Sheet

Issue Date: 01-Sep-2012 Revision Date: 01-Jan-2015 Version 2

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

SDS # 41112N-EU **Product Code** 41112N

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

Formula 53122

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended Use Industrial mold release

1.3. Details of the Supplier of the Safety Data Sheet

Supplier

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

For further information, please contact

Contact Point Slide Products: 1-847-541-7220 Email Address info@slideproducts.com

1.4. Emergency telephone number

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

1-800-535-5053 (North America)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Regulation (EC) No 1272/2008

Flammable Aerosols Category 2

Classification according to 67/548/EEC

Full text of R-phrases: see section 16

R-code(s)

R10

2.2. Label Elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP].



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Signal Word

Warning

Hazard Statements

H223 - Flammable aerosol

EUH210 - Safety data sheet available on request

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking

P211 - Do not spray on an open flame or other ignition source

P251 - Pressurized container: Do not pierce or burn, even after use

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

2.3. Other Hazards

General Hazards

None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical Name	EC No	CAS No	Weight-%	Classification according to 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Dimethyl ether	Present	115-10-6	45-55	F+; R12	Flam. Gas 1 (H220) Press. Gas (H280)	Not determined
1,1 difluoroethane	Present	75-37-6	45-55	F+; R12	Liq. Gas (H280) Flam. Gas 1 (H220)	Not determined
PTFE Solid	Present	9002-84-0	1-5	-	Not determined	Not determined
Isopropyl alcohol	Present	67-63-0	1-6	F; R11 Xi; R36 R67	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)	Not determined

Full text of R-phrases: see section 16

Full text of H- and EUH-phrases: see section 16

Additional Information

Substances which do not meet the criteria for classification are included in order to provide full disclosure of the product

Section 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

Eye ContactRinse 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.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

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.

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4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to Physician Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO2). Foam.

Unsuitable Extinguishing Media

Not determined.

5.2. Special Hazards Arising from the Substance or Mixture

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

Hazardous Combustion

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

Products

5.3. Advice for Firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Use personal protective equipment as required.

For Emergency Responders

Use personal protection recommended in Section 8.

6.2. Environmental Precautions

See Section 12 for additional Ecological Information.

6.3. 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.

6.4. Reference to Other Sections

See Section 13: DISPOSAL CONSIDERATIONS.

Section 7: HANDLING AND STORAGE

7.1. 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.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

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7.2. 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 ℃/122 ℃. Protect from direct sunlight.

7.3. Specific End Use(s)

Specific Use(s)

Industrial mold release.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure Limits Threshold Limit Value: 400 ppm.

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Dimethyl ether	TWA 1000 ppm	STEL: 500 ppm	TWA: 1000 ppm	TWA: 1000 ppm	TWA: 1000 ppm
115-10-6	TWA 1920 mg/m ³	STEL: 958 mg/m ³	TWA: 1920 mg/m ³	TWA: 1920 mg/m ³	TWA: 1900 mg/m ³
		TWA: 400 ppm			Ceiling / Peak: 8000
		TWA: 766 mg/m ³			ppm
					Ceiling / Peak: 15200
					mg/m³
Isopropyl alcohol		STEL: 500 ppm	STEL: 400 ppm	STEL: 400 ppm	TWA: 200 ppm
67-63-0		STEL: 1250 mg/m ³	STEL: 980 mg/m ³	STEL: 1000 mg/m ³	TWA: 500 mg/m ³
		TWA: 400 ppm		TWA: 200 ppm	Ceiling / Peak: 400
		TWA: 999 mg/m ³		TWA: 500 mg/m ³	ppm
					Ceiling / Peak: 1000
					mg/m³
Component	Italy	Portugal	Netherlands	Finland	Denmark
Dimethyl ether	TWA: 1000 ppm	Portugal	STEL: 1500 mg/m ³	TWA: 1000 ppm	TWA: 1000 ppm
Dimethyl ether 115-10-6 (45-55)	,	J	***************************************	TWA: 1000 ppm TWA: 2000 mg/m ³	TWA: 1000 ppm TWA: 1920 mg/m ³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol	TWA: 1000 ppm	STEL: 400 ppm	STEL: 1500 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m ³ TWA: 200 ppm	TWA: 1000 ppm TWA: 1920 mg/m ³ TWA: 200 ppm
Dimethyl ether 115-10-6 (45-55)	TWA: 1000 ppm	J	STEL: 1500 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m ³ TWA: 200 ppm TWA: 500 mg/m ³	TWA: 1000 ppm TWA: 1920 mg/m ³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol	TWA: 1000 ppm	STEL: 400 ppm	STEL: 1500 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m ³ TWA: 2000 ppm TWA: 500 mg/m ³ STEL: 250 ppm	TWA: 1000 ppm TWA: 1920 mg/m ³ TWA: 200 ppm
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6)	TWA: 1000 ppm TWA: 1920 mg/m ³	STEL: 400 ppm TWA: 200 ppm	STEL: 1500 mg/m ³ TWA: 950 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m ³ TWA: 2000 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 620 mg/m ³	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6) Chemical Name	TWA: 1000 ppm TWA: 1920 mg/m³	STEL: 400 ppm TWA: 200 ppm	STEL: 1500 mg/m ³ TWA: 950 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m³ TWA: 2000 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 620 mg/m³	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6) Chemical Name Dimethyl ether	TWA: 1000 ppm TWA: 1920 mg/m³ Austria STEL 2000 ppm	STEL: 400 ppm TWA: 200 ppm Switzerland TWA: 1000 ppm	STEL: 1500 mg/m ³ TWA: 950 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m³ TWA: 2000 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 620 mg/m³ Norway TWA: 200 ppm	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6) Chemical Name	TWA: 1000 ppm TWA: 1920 mg/m³ Austria STEL 2000 ppm STEL 3820 mg/m³	STEL: 400 ppm TWA: 200 ppm	STEL: 1500 mg/m ³ TWA: 950 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m³ TWA: 2000 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 620 mg/m³ Norway TWA: 200 ppm TWA: 384 mg/m³	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6) Chemical Name Dimethyl ether	TWA: 1000 ppm TWA: 1920 mg/m³ Austria STEL 2000 ppm	STEL: 400 ppm TWA: 200 ppm Switzerland TWA: 1000 ppm	STEL: 1500 mg/m ³ TWA: 950 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m³ TWA: 2000 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 620 mg/m³ Norway TWA: 200 ppm	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6) Chemical Name Dimethyl ether	TWA: 1000 ppm TWA: 1920 mg/m³ Austria STEL 2000 ppm STEL 3820 mg/m³ TWA: 1000 ppm	STEL: 400 ppm TWA: 200 ppm Switzerland TWA: 1000 ppm	STEL: 1500 mg/m ³ TWA: 950 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m³ TWA: 2000 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 620 mg/m³ Norway TWA: 200 ppm TWA: 384 mg/m³ STEL: 250 ppm	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6) Chemical Name Dimethyl ether 115-10-6	TWA: 1000 ppm TWA: 1920 mg/m³ Austria STEL 2000 ppm STEL 3820 mg/m³ TWA: 1000 ppm TWA: 1910 mg/m³	STEL: 400 ppm TWA: 200 ppm Switzerland TWA: 1000 ppm TWA: 1910 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³	STEL: 1500 mg/m³ TWA: 950 mg/m³ Poland TWA: 1000 mg/m³	TWA: 1000 ppm TWA: 2000 mg/m³ TWA: 2000 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 620 mg/m³ Norway TWA: 200 ppm TWA: 384 mg/m³ STEL: 250 ppm STEL: 480 mg/m³	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³
Dimethyl ether 115-10-6 (45-55) Isopropyl alcohol 67-63-0 (1-6) Chemical Name Dimethyl ether 115-10-6 Isopropyl alcohol	TWA: 1000 ppm TWA: 1920 mg/m³ Austria STEL 2000 ppm STEL 3820 mg/m³ TWA: 1000 ppm TWA: 1910 mg/m³ STEL 800 ppm	STEL: 400 ppm TWA: 200 ppm Switzerland TWA: 1000 ppm TWA: 1910 mg/m ³ STEL: 400 ppm	STEL: 1500 mg/m³ TWA: 950 mg/m³ Poland TWA: 1000 mg/m³ STEL: 1200 mg/m³	TWA: 1000 ppm TWA: 2000 mg/m³ TWA: 2000 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 620 mg/m³ Norway TWA: 200 ppm TWA: 384 mg/m³ STEL: 250 ppm STEL: 480 mg/m³ TWA: 100 ppm	TWA: 1000 ppm TWA: 1920 mg/m³ TWA: 200 ppm TWA: 490 mg/m³ Ireland TWA: 1000 ppm TWA: 1920 mg/m³

8.2. Exposure Controls

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

Personal Protective Equipment

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

Skin and Body Protection Suitable protective clothing.

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Respiratory ProtectionNo protection is ordinarily required under normal conditions of use and with adequate

ventilation.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State Aerosol

AppearanceMilky white dispersionOdorSlight alcoholColorMilky whiteOdor ThresholdNot determined

<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
Flash Point
Evaporation Rate
Flammability (Solid, Gas)

Not available
Not applicable
Extremely rapid
Flammable aerosol

Flammability Limits in Air

Upper Flammability Limits 25.0% Lower Flammability Limit 4.0%

Vapor Pressure Not available Vapor Density Not available

Relative Density 1.0

Water Solubility Not soluble Solubility(ies) 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

9.2. Other information

Density Weight per gallon: 8.37

Section 10: STABILITY AND REACTIVITY

(Water = 1)

10.1. Reactivity

Not reactive under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

High heat or open flames.

10.5. Incompatible Materials

Powdered or alkaline earth metals.

10.6. Hazardous Decomposition Products

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

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Do not inhale.

Ingestion Do not ingest.

The following values are calculated based on chapter 3.1 of the GHS document:

Inhalation

 Mist
 2,420.00

 Units
 mg/L

 Vapor
 516.30

 Units
 mg/L

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl ether			= 308.5 mg/L (Rat) 4 h
Isopropyl alcohol	= 4396 mg/kg (Rat)	= 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)	= 72.6 mg/L (Rat) 4 h

Skin corrosion/irritation Not classified.

Serious eye damage/eye irritation Not classified.

Sensitization Not classified.

Germ cell mutagenicity Not classified.

Carcinogenicity None known based on information supplied.

Reproductive toxicity Not classified.

STOT - single exposure Not classified.

STOT - repeated exposure Not classified.

Aspiration hazard Not classified.

Symptoms Please see section 4 of this SDS for symptoms.

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Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

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

12.2. Persistence and Degradability

Not determined.

12.3. Bioaccumulative Potential

Chemical Name	Partition Coefficient	
Dimethyl ether	-0.18	
Isopropyl alcohol	0.05	

12.4. Mobility in Soil

Mobility

Not determined.

12.5. Results of PBT and vPvB Assessment

Not determined.

12.6. Other Adverse Effects

Not determined.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste from Residues / Unused

Products

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Improper disposal or reuse of this container may be dangerous and illegal.

Section 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

IMDG

14.1 UN/ID No 14.2 Proper Shipping NameUN1950
Aerosols

14.3 Hazard Class 2.1

RID

14.1 UN/ID No UN1950

14.2 Proper Shipping Name Aerosols **14.3 Hazard Class** 2.1

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ADR

 14.1 UN/ID No
 UN1950

 14.2 Proper Shipping Name
 Aerosols

 14.3 Hazard Class
 2.1

ICAO (air)

14.1 UN/ID No UN1950

14.2 Proper Shipping Name Aerosols, flammable

14.3 Hazard Class 2.1

<u>IATA</u>

14.1 UN/ID No UN1950

14.2 Proper Shipping Name Aerosols, flammable

14.3 Hazard Class 2.1

Section 15: REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Occupational Illnesses (R-463-3, France)

Chemical Name	French RG number	Title
Isopropyl alcohol 67-63-0	RG 84	

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

International Inventories

TSCA Listed
EINECS/ELINCS DSL/NDSL PICCS ENCS IECSC AICS KECL -

Legend

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

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

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Section 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R12 - Extremely flammable

R11 - Highly flammable

R67 - Vapors may cause drowsiness and dizziness

R36 - Irritating to eyes

R10 - Flammable

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Full text of H-Statements referred to under sections 2 and 3

H220 - Extremely flammable gas

H280 - Contains gas under pressure; may explode if heated

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

Classification Procedure

Calculation method

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Revision Note: New format.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Regulation (EU) No. 453/2010

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
