

SAFETY DATA SHEET.

Issuing date 10-Feb-2018

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Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name DRY FILM LUBRICANT

Recommended use of the chemical and restrictions on use

Product code F03284

Product Type Extremely flammable aerosol
Synonyms None

Supplier's details

Manufactured for LAB LLC Dry Film Lubricant.
No information available

Emergency telephone number

Chemical Emergency Phone Number
Company Emergency Phone Number

Chemtrec 1-800-262-8200 ID 1195
734-721-5930

2. HAZARDS IDENTIFICATION

Classification


Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements
 Causes skin irritation
 Causes serious eye irritation
 Suspected of damaging fertility or the unborn child
 May cause drowsiness or dizziness
 May cause damage to organs (Central Nervous System, Eyes, Kidneys, Liver, Respiratory System, and Skin) through prolonged or repeated exposure.
 May be fatal if swallowed and enters airways
 Extremely flammable aerosol
 Contains gas under pressure; may explode if heated



Appearance opaque **Physical state** Aerosol **Odor** Solvent

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Wear protective gloves/protective clothing/eye protection/face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- 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 - Response

- If exposed or concerned: Get medical advice/attention
- Specific treatment (see first aid on this label)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention
- IF ON SKIN: Wash with plenty of soap and water.
- Take off contaminated clothing and wash before reuse
- If skin irritation occurs: Get medical advice/attention

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

- Harmful to aquatic life with long lasting effects

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	35-45
ACETONE	67-64-1	20-30
TOLUENE	108-88-3	20-30
ISOPROPYL ALCOHOL	67-63-0	1-10
AROMATIC HYDROCARBON	64742-95-6	0.1-1

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Artificial respiration and/or oxygen may be necessary. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

Main Symptoms Causes skin and eye irritation. May cause respiratory irritation. May be harmful if swallowed and cause lung damage.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Specific hazards arising from the chemical**Explosion Data**

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge none.

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**

Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid skin contact. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Environmental precautions**Environmental precautions**

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

Methods and materials for containment and cleaning up**Methods for Containment**

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE**Precautions for safe handling****Advice on safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, or oxidizing agents.

Aerosol Level 3

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6:TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³ 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³ 106-97-8:TWA: 800 ppm TWA: 1900 mg/m ³ 75-28-5:TWA: 800 ppm TWA: 1900 mg/m ³
ACETONE 67-64-1	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
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

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Chemical resistant apron. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Aerosol	Odor	Solvent
Appearance	opaque	Odor Threshold	
Color	hazy		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	-96.4 °C / -141 °F	Based on propellant
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity		
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	
Decomposition temperature		
Viscosity	No information available	
Explosive properties		

Other information

VOC Content(%) 68.98

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, or oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Vapors may irritate throat and respiratory system. May cause drowsiness and dizziness based on components. May cause irritation of respiratory tract. Avoid breathing vapors or mists.
Eye contact	Irritating to eyes.
Skin contact	Causes skin irritation.
Ingestion	May be harmful if swallowed. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ACETONE 67-64-1	= 5800 mg/kg (Rat)	-	= 50100 mg/m ³ (Rat) 8 h
TOLUENE 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
ISOPROPYL ALCOHOL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
AROMATIC HYDROCARBON 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Causes irritation to the eyes. May cause skin and respiratory tract system irritation. May be harmful if swallowed.

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

Sensitization None known.
Germ Cell Mutagenicity None known.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
TOLUENE 108-88-3	-	Group 3	-	-

*IARC: (International Agency for Research on Cancer)
 Group 3 - Not Classifiable as to Carcinogenicity in Humans*

Reproductive toxicity Product is or contains a chemical which is a known or suspected reproductive hazard.
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness and dizziness.
Specific target organ systemic toxicity (repeated exposure) May cause damage to organs through prolonged or repeated exposure.
Chronic toxicity May cause adverse liver effects.
Target Organ Effects Central Nervous System (CNS), Eyes, Kidney, Liver, Respiratory system, Skin.
Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (dermal) 10498 mg/kg

12. ECOLOGICAL INFORMATIONEcotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	-	-	-	-
ACETONE 67-64-1	-	4.74 - 6.33 mL/L LC50 Oncorhynchus mykiss 96h 6210 - 8120 mg/L LC50 Pimephales promelas 96h static 8300 mg/L LC50 Lepomis macrochirus 96h	-	10294 - 17704 mg/L EC50 Daphnia magna 48h Static 12600 - 12700 mg/L EC50 Daphnia magna 48h
TOLUENE 108-88-3	433 mg/L EC50 Pseudokirchneriella subcapitata 96h 12.5 mg/L EC50 Pseudokirchneriella subcapitata 72h static	15.22 - 19.05 mg/L LC50 Pimephales promelas 96h flow-through 12.6 mg/L LC50 Pimephales promelas 96h static 5.89 - 7.81 mg/L LC50 Oncorhynchus mykiss 96h flow-through 14.1 - 17.16 mg/L LC50 Oncorhynchus mykiss 96h static 5.8 mg/L LC50 Oncorhynchus mykiss 96h semi-static 11.0 - 15.0 mg/L LC50 Lepomis macrochirus 96h static 54 mg/L LC50 Oryzias latipes 96h static 28.2 mg/L LC50 Poecilia reticulata 96h semi-static 50.87 - 70.34 mg/L LC50 Poecilia reticulata 96h static	-	5.46 - 9.83 mg/L EC50 Daphnia magna 48h Static 11.5 mg/L EC50 Daphnia magna 48h
ISOPROPYL ALCOHOL 67-63-0	1000 mg/L EC50 Desmodemus subspicatus 96h 1000 mg/L EC50 Desmodemus subspicatus 72h	9640 mg/L LC50 Pimephales promelas 96h flow-through 11130 mg/L LC50 Pimephales promelas 96h static 1400000 µg/L LC50 Lepomis macrochirus 96h	-	13299 mg/L EC50 Daphnia magna 48h
AROMATIC HYDROCARBON 64742-95-6	-	9.22 mg/L LC50 Oncorhynchus mykiss 96h	-	6.14 mg/L EC50 Daphnia magna 48h

Persistence and degradability

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Bioaccumulation

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Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	<=2.8
ACETONE 67-64-1	-0.24
TOLUENE 108-88-3	2.65
ISOPROPYL ALCOHOL 67-63-0	0.05

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment****Waste Disposal Methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

IMDG UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
ACETONE	X	X	X	X	X	X	X	X
TOLUENE	X	X	X	X	X	X	X	X
ISOPROPYL ALCOHOL	X	X	X	X	X	X	X	X
AROMATIC HYDROCARBON	X	X	X	Not listed	X	X	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 Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - 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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
TOLUENE - 108-88-3	108-88-3	20-30	1.0
ISOPROPYL ALCOHOL - 67-63-0	67-63-0	1-10	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes

Reactive Hazard no

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TOLUENE 108-88-3	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ACETONE 67-64-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
TOLUENE 108-88-3	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
TOLUENE - 108-88-3	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ACETONE 67-64-1	X	X	X
TOLUENE 108-88-3	X	X	X
ISOPROPYL ALCOHOL 67-63-0	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION

NFPA Health Hazard 2 Flammability 4 Instability 0 Physical and chemical hazards -
HMIS Health Hazard 2 Flammability 4 Physical Hazard 1 Personal protection B

Prepared By Manufacturer
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Revision Note

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet