SAFETY DATA SHEET.

Issuing date 28-Apr-2017 Revision Date 29-May-2018 Version 2

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

Product identifier

Product name KRYFILM DRY WAXY SPRAY V-116

Recommended use of the chemical

and restrictions on use

Product code F03841

Product Type Extremely Flammable Aerosol

Synonyms None

Supplier's details

Recommended Use Mold Release.

Uses advised against No information available

Manufacturer:

Plastic Process Equipment,Inc. 8303 Corporate Park Dr. Macedonia, Ohio 44056 Phone: 800-321-0562

Emergency telephone number

Chemical Emergency Phone

Number

1-800-262-8200 ID 1195 (UNITED STATES)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
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

Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs (Central Nervous System, Eyes, Peripheral Nervous System, 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 Hazy 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 ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

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 /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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # 64742-49-0, COMMERCIAL HEXANES, MAY BE SUBSTITUTED FOR CAS #110-54-3.

Chemical Name	CAS-No	Weight %*
1,1-DIFLUOROETHANE	75-37-6	40-50
DIMETHYLETHER	115-10-6	20-30
HEXANE	110-54-3	20-30
ISOPROPYL ALCOHOL	67-63-0	1-10

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

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas.

Eye contact Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove

any contact lenses and continue flushing. If eve irritation persists, consult a doctor.

Skin contact Wash off with soap and plenty of water. Remove and wash contaminated clothing before

re-use. If skin irritation persists, call a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped,

contact emergency medical services immediately.

Ingestion Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never

give anything by mouth to an unconscious person. Risk of product entering the lungs on

vomiting after ingestion.

Most important symptoms/effects, acute and delayed

Main Symptoms Causes skin irritation. Suspected of damaging fertility or the unborn child. May cause

respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog. Carbon Dioxide (CO2), Foam, Dry Chemical. Cool Tanks/ containers with water spray. Water fog.Dry chemical. Foam.Carbon dioxide (CO2). Cool containers/tanks with water spray. Water fog. Dry chemical. Foam. Carbon dioxide (CO2). Cool containers / tanks with water spray. Carbon dioxide (CO2). Water spray. Alcohol-resistant foam.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire. Cool containers / tanks with water spray. Keep away from sources of ignition - No smoking. Do not smoke, Remove all sources of ignition. .

Specific hazards arising from the chemical

Extremely Flammable / Flammable. Keep product and empty container away from heat and sources of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire and/or explosion do not breathe fumes. Risk of ignition. In the event of fire, cool tanks with water spray. Flammable.

Explosion Data

Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge

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. Use shielding to protect fire-fighters from bursting containers. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use with adequate ventiliation to keep the exposure levels below the OELS. Follow safe Personal precautions

handling advice and personal protective equipment recommendations.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Do not flush into surface water or sanitary sewer

system. Report spills as required by local and federal regulations. Do not allow material to

contaminate ground water 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. Do not allow material to

contaminate ground water system. Prevent product from entering drains.

Methods for cleaning up Soak up with inert absorbent material. Contain liquid and collect with an inter,

non-combustible material. Pick up and transfer to properly labeled containers. 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

Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away Advice on safe handling

from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety

practice. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Revision Date 29-May-2018

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, oxidizing agents.

Aerosol Level

2

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,1-DIFLUOROETHANE 75-37-6	TWA 1000 PPM 8 hours	-	-
DIMETHYLETHER 115-10-6	STEL: 500 PPM TWA: 400PPM	TWX: 400 PPM TWA: 1200 mg/m ³	IDLH: 1900 PPM (10 % LEL)
HEXANE 110-54-3	TWA: 50 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 500 ppm TWA: 1800 mg/m³ (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m³	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m³
ISOPROPYL ALCOHOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³

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, and ventilation systems. Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits. Showers.

Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

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 When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area

and clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Avoid breathing

vapors, mist or gas. Wear personal protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Revision Date 29-May-2018

Physical state Aerosol

Appearance Hazy Odor Solvent

Color White Odor Threshold

<u>Property</u> <u>Values</u> <u>Remarks • Methods</u>

pH No information available
Melting/freezing point No information available

Boiling point/boiling range

Flash Point -50 °C / -58 °F Based on propellant

Evaporation rateFlammability (solid, gas)
No information available
No information available

Flammability Limits in Air upper flammability limit lower flammability limit

Vapor pressure Vapor density

Specific Gravity 0.776 Water solubility None

Partition coefficient: n-octanol/water

Autoignition temperature No information available Not applicable

Decomposition temperature

Viscosity No information available

Explosive properties

Other information

VOC Content(%) 54.59 **MIR Value** 0.60

MIR Coating Category MRC - Mold Release Coating < 1.10 MIR

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides, Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause respiratory irritation. May cause drowsiness or dizziness.

Eye contact Eye irritation may occur if excessive exposure to product occurs.

Skin contact Causes skin irritation.

Ingestion May be fatal if swallowed and enters airways.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
DIMETHYLETHER	-	-	= 308.5 mg/L (Rat) 4 h
115-10-6			
HEXANE	= 25 g/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h
110-54-3			
ISOPROPYL ALCOHOL	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
67-63-0			

Information on toxicological effects

Symptoms Causes skin irritation. Suspected of damaging fertility or the unborn child. May cause

> drowsiness or dizziness. May cause respiratory irritation. May cause damage to organs (listed below) through prolonged or repeated exposure. May be fatal if swallowed and

enters airways.

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

Skin corrosion/irritation Irritating to skin.

Under normal conditions there is no eye irritation. Excessive conditions to product may Eye damage/irritation

cause eye irritation.

Not a known sensitizer. Sensitization **Germ Cell Mutagenicity** Not a germ cell mutagen.

Carcinogenicity There are no carcinogenic chemicals in this product.

Reproductive toxicity This product contains a chemical(s) which is a known or suspected reproductive hazard.

Specific target organ systemic toxicity (single exposure)

May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ systemic toxicity (repeated exposure)

May cause damage to target organs listed below through prolonged and repeated exposure.

Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or

fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and

potential cardiac arrest.

Target Organ Effects Neurological effects

Eyes, Skin, Respiratory System, Central Nervous System, and Peripheral Nervous System. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or

May be fatal if swallowed and enters airways. **Aspiration hazard**

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 .

99066 mg/kg ATEmix (oral) ATEmix (dermal) 11888 mg/kg ATEmix (inhalation-gas) 93548 mg/l ATEmix (inhalation-vapor) 190207 ma/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
HEXANE	-	2.1 - 2.98 mg/L LC50	-	-
110-54-3		Pimephales promelas 96h		
		flow-through		

Revision Date 29-May-2018

ISOPROPYL ALCOHOL	1000 mg/L EC50	9640 mg/L LC50	-	13299 mg/L EC50 Daphnia
67-63-0	Desmodesmus subspicatus	Pimephales promelas 96h		magna 48h
	96h 1000 mg/L EC50	flow-through 11130 mg/L		
	Desmodesmus subspicatus	LC50 Pimephales promelas		
	72h	96h static 1400000 μg/L		
		LC50 Lepomis macrochirus		
		96h		

Persistence and degradability

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Bioaccumulation

Chemical Name	log Pow
DIMETHYLETHER 115-10-6	-0.18
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). Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with federal, state, and local regulations. Dispose of contents/container in

accordance with local regulation.

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, 2.1, LTD.QTY

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
1,1-DIFLUOROETHA NE	Х	Х	X	Х	Х	Х	Х	Х
DIMETHYLETHER	Х	Х	Х	X	Х	Х	Х	Х
HEXANE	Х	Х	Х	Х	Х	Х	Х	Х

Revision Date 29-May-2018

ISOPROPYL	Х	Х	Х	Х	Х	Х	Х	Х
ALCOHOL								

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 does contain 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 %
HEXANE - 110-54-3	110-54-3	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 Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

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).

CERCLA

This material, as supplied, does contain 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
HEXANE	5000 lb		RQ 5000 lb final RQ
110-54-3			RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Prop. 65	
HEXANE - 110-54-3	Male Development 20-30%	

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,1-DIFLUOROETHANE 75-37-6	X	X	
DIMETHYLETHER 115-10-6	X	X	Х
HEXANE 110-54-3	X	X	Х
ISOPROPYL ALCOHOL 67-63-0	X	X	Х

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.

WHMIS Hazard Class

A Compressed gases B5 Flammable aerosol D2B Toxic materials

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

Chronic Hazard Star Legend Chronic Health Star Hazard Repeated or prolonged exposure may cause central nervous system

damage

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Revision Note

(M)SDS sections updated 15

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