

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : LC-300 Solid Film Lubricant
Product code : V765-G75
Military/Aerospace Specification : SAE AS5272 Type 1

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Sandstrom Products Company
224 S Main St
Port Byron, IL 61275
USA
T 309-523-2121 - F 309-230-9745

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300 | (703) 527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 1	H224	Extremely flammable liquid and vapor
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Carcinogenicity Category 1A	H350	May cause cancer
Reproductive toxicity Category 2	H361	Suspected of damaging fertility or the unborn child
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H224 - Extremely flammable liquid and vapor
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H350 - May cause cancer

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Precautionary statements (GHS US)

H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a poison center or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

74.19% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
81.3% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
95.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	GHS US classification
Methyl Ethyl Ketone	CAS-No.: 78-93-3	15 – 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
1,3-dioxolane, stabilised	CAS-No.: 646-06-0	10 – 15	Flam. Liq. 2, H225 STOT RE 2, H373
Propylene Glycol Methyl Ether	CAS-No.: 107-98-2	10 – 15	Flam. Liq. 3, H226 STOT SE 3, H336
Diantimony trioxide	CAS-No.: 1309-64-4	5 – 10	Carc. 2, H351
poly(bisphenol A-co-epichlorohydrin), glycidyl end-capped, MM= 348	CAS-No.: 25036-25-3	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335
toluene	CAS-No.: 108-88-3	5 – 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
zinc phosphate	CAS-No.: 7779-90-0	1 – 5	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
n-butyl acetate	CAS-No.: 123-86-4	1 – 5	Flam. Liq. 2, H225 STOT SE 3, H336
Ethanol	CAS-No.: 64-17-5	1 – 5	Flam. Liq. 1, H224 Carc. 1A, H350
methyl isobutyl ketone; MIBK	CAS-No.: 108-10-1	0.1 – 0.5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
- Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
Wear respiratory protection.

Personal protective equipment symbol(s):



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Gray
Odor	: strong Solvent
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 18.5 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.2197 lb/gal
Density	: 10.15 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 85 – 115 SEC, #1 ZAHN
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content : 5.96 lb/gal

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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Unknown acute toxicity (GHS US)	74.19% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 81.3% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 95.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
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zinc phosphate (7779-90-0)

LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation - Rat	> 5.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (dust), 14 day(s))

Diantimony trioxide (1309-64-4)

LD50 oral rat	> 20000 mg/kg (Rat, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 8300 mg/kg body weight Animal: rabbit, Remarks on results: other:
LC50 Inhalation - Rat	> 5.2 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: other:, Remarks on results: other:

poly(bisphenol A-co-epichlorohydrin), glycidyl end-capped, MM= 348 (25036-25-3)

LD50 oral rat	11400 mg/kg (Rat, Oral)
ATE US (oral)	11400 mg/kg body weight

1,3-dioxolane, stabilised (646-06-0)

LD50 oral rat	> 3000 mg/kg (Rat, Oral)
LD50 dermal rabbit	8480 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 20 mg/l (4 h, Rat, Inhalation)
LC50 Inhalation - Rat [ppm]	22574 ppm
ATE US (dermal)	8480 mg/kg body weight
ATE US (gases)	22574 ppmV/4h

Propylene Glycol Methyl Ether (107-98-2)

LD50 oral rat	4016 mg/kg body weight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (Equivalent or similar to EU Method B.3, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg Source: ECHA
ATE US (oral)	4016 mg/kg body weight

Ethanol (64-17-5)

LD50 oral rat	10470 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 9720 - 11380
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Ethanol (64-17-5)	
ATE US (oral)	10470 mg/kg body weight
methyl isobutyl ketone; MIBK (108-10-1)	
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Diantimony trioxide (1309-64-4)	
IARC group	2B - Possibly carcinogenic to humans
Ethanol (64-17-5)	
IARC group	1 - Carcinogenic to humans
methyl isobutyl ketone; MIBK (108-10-1)	
IARC group	2B - Possibly carcinogenic to humans
toluene (108-88-3)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause drowsiness or dizziness.
poly(bisphenol A-co-epichlorohydrin), glycidyl end-capped, MM= 348 (25036-25-3)	
STOT-single exposure	May cause respiratory irritation.
Methyl Ethyl Ketone (78-93-3)	
STOT-single exposure	May cause drowsiness or dizziness.
Propylene Glycol Methyl Ether (107-98-2)	
STOT-single exposure	May cause drowsiness or dizziness.
methyl isobutyl ketone; MIBK (108-10-1)	
STOT-single exposure	May cause drowsiness or dizziness.
toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.
n-butyl acetate (123-86-4)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
zinc phosphate (7779-90-0)	
LOAEL (oral,rat,90 days)	53.8 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

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zinc phosphate (7779-90-0)	
NOAEL (oral,rat,90 days)	31.52 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
1,3-dioxolane, stabilised (646-06-0)	
NOAEL (oral,rat,90 days)	75 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Propylene Glycol Methyl Ether (107-98-2)	
LOAEL (oral,rat,90 days)	2757 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (oral,rat,90 days)	919 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (dermal,rat/rabbit,90 days)	> 1000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
Ethanol (64-17-5)	
LOAEL (oral,rat,90 days)	3200 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral,rat,90 days)	1730 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:
methyl isobutyl ketone; MIBK (108-10-1)	
LOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation,rat,vapor,90 days)	4106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
toluene (108-88-3)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: 85 – 115 SEC, #1 ZAHN
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

zinc phosphate (7779-90-0)	
LC50 - Fish [1]	0.169 mg/l (ASTM E729-88, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read-across, Lethal)

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zinc phosphate (7779-90-0)	
EC50 - Crustacea [1]	0.86 mg/l (EPA 600/4-85/013: Method for measuring the acute toxicity of effluents to freshwater and marine organisms, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)
Diantimony trioxide (1309-64-4)	
LC50 - Fish [1]	14.4 mg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	6.9 mg/l Test organisms (species): other:
ErC50 algae	> 36.6 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Antimony)
1,3-dioxolane, stabilised (646-06-0)	
LC50 - Fish [1]	10000 mg/l
EC50 - Crustacea [1]	6950 mg/l
NOEC (chronic)	197.4 mg/l Test organisms (species): other:
NOEC chronic fish	546.3 mg/l Test organisms (species): no data Duration: '30 d'
Propylene Glycol Methyl Ether (107-98-2)	
LC50 - Fish [1]	≥ 1000 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	21100 – 25900 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	2954 mg/l Test organisms (species): other aquatic crustacea:
ErC50 algae	> 1000 mg/l (7 day(s), Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Ethanol (64-17-5)	
EC50 - Crustacea [1]	> 10000 mg/l Test organisms (species): Daphnia magna
methyl isobutyl ketone; MIBK (108-10-1)	
LC50 - Fish [1]	> 179 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 200 mg/l Test organisms (species): Daphnia magna
n-butyl acetate (123-86-4)	
EC50 - Other aquatic organisms [1]	32 mg/l Test organisms (species): Artemia salina

12.2. Persistence and degradability

zinc phosphate (7779-90-0)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
Diantimony trioxide (1309-64-4)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

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poly(bisphenol A-co-epichlorohydrin), glycidyl end-capped, MM= 348 (25036-25-3)	
Persistence and degradability	Biodegradability in water: no data available.
1,3-dioxolane, stabilised (646-06-0)	
Persistence and degradability	Not readily biodegradable in water.
Propylene Glycol Methyl Ether (107-98-2)	
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
ThOD	1.95 g O ₂ /g substance

12.3. Bioaccumulative potential

zinc phosphate (7779-90-0)	
BCF - Other aquatic organisms [1]	116 – 60960 (21 day(s), Gammarus sp., Semi-static system, Salt water, Read-across, Fresh weight)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
Diantimony trioxide (1309-64-4)	
BCF - Other aquatic organisms [1]	5.6 l/kg (17 day(s), Hyalella azteca, Fresh water, Experimental value, Fresh weight)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

poly(bisphenol A-co-epichlorohydrin), glycidyl end-capped, MM= 348 (25036-25-3)	
Bioaccumulative potential	No bioaccumulation data available.
1,3-dioxolane, stabilised (646-06-0)	
Partition coefficient n-octanol/water (Log Pow)	-0.37
Bioaccumulative potential	Not bioaccumulative.
Propylene Glycol Methyl Ether (107-98-2)	
Partition coefficient n-octanol/water (Log Pow)	< 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

zinc phosphate (7779-90-0)	
Surface tension	70.4 mN/m (20 °C, 2.7E-4 %, OECD 115: Surface Tension of Aqueous Solutions)
Ecology - soil	Adsorbs into the soil.
Diantimony trioxide (1309-64-4)	
Surface tension	No data available in the literature
Ecology - soil	Adsorbs into the soil.
Propylene Glycol Methyl Ether (107-98-2)	
Surface tension	70.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

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12.5. Other adverse effects

No additional information available




SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
1263	Not applicable	1263	1263
14.2. Proper Shipping Name			
Paint related material	Not applicable	PAINT RELATED MATERIAL	Paint related material
14.3. Transport hazard class(es)			
3	Not applicable	3	3
 Not applicable			
14.4. Packing group			
II	Not applicable	II	II
14.5. Environmental hazards			
Dangerous for the environment: No	Not applicable	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

DOT
UN-No.(DOT) : UN1263

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DOT Special Provisions (49 CFR 172.102)	: 149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons). 367 - For the purposes of documentation and package marking: a. The proper shipping name "Paint related material" may be used for consignments of packages containing "Paint" and "Paint related material" in the same package; b. The proper shipping name "Paint related material, corrosive, flammable" may be used for consignments of packages containing "Paint, corrosive, flammable" and "Paint related material, corrosive, flammable" in the same package; c. The proper shipping name "Paint related material, flammable, corrosive" may be used for consignments of packages containing "Paint, flammable, corrosive" and "Paint related material, flammable, corrosive" in the same package; and d. The proper shipping name "Printing ink related material" may be used for consignments of packages containing "Printing ink" and "Printing ink related material" in the same package. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. B131 - When transported by highway, rail, or cargo vessel, waste Paint and Paint related material (UN1263; PG II and PG III), when in plastic or metal inner packagings of not more than 26.5 L (7 gallons), are excepted from the marking requirements in §172.301(a) and (c) and the labeling requirements in §172.400(a), when further packed in the following specification and non-specification bulk outer packagings and under the following conditions: a. Primary receptacles must conform to the general packaging requirements of subpart B of part 173 of this subchapter and may not leak. If they do leak, they must be overpacked in packagings conforming to the specification requirements of part 178 of this subchapter or in salvage packagings conforming to the requirements in §173.12 of this subchapter. b. Primary receptacles must be further packed in non-specification bulk outer packagings such as cubic yard boxes, plastic rigid-wall bulk containers, dump trailers, and roll-off containers. Bulk outer packagings must be liquid tight through design or by the use of lining materials. c. Primary receptacles may also be further packed in specification bulk outer packagings. Authorized specification bulk outer packagings are UN11G fiberboard intermediate bulk containers (IBC) and UN13H4 woven plastic, coated and with liner flexible intermediate bulk containers (FIBCs) meeting the Packing Group II performance level and lined with a plastic liner of at least 6 mil thickness. d. All inner packagings placed inside bulk outer packagings must be blocked and braced to prevent movement during transportation that could cause the container to open or fall over. Specification IBCs and FIBCs are to be secured to a pallet. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F). TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 173
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L

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DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

TDG

Emergency Response Guide (ERG) Number : 128

IMDG

Special provision (IMDG) : 163, 367
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP8, TP28
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG) : B
Properties and observations (IMDG) : Miscibility with water depends upon the composition.

IATA

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A3, A72, A192
ERG code (IATA) : 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Methyl Ethyl Ketone	CAS-No. 78-93-3	15 – 25%
1,3-dioxolane, stabilised	CAS-No. 646-06-0	10 – 15%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Diantimony trioxide	CAS-No. 1309-64-4	5 – 10%
Lead Metal	CAS-No. 7439-92-1	< 0.1%
methyl isobutyl ketone; MIBK	CAS-No. 108-10-1	0.1 – 0.5%

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toluene	CAS-No. 108-88-3	5 – 10%
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Diantimony trioxide (1309-64-4)

CERCLA RQ	1000 lb
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methyl isobutyl ketone; MIBK (108-10-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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toluene (108-88-3)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	1000 lb
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n-butyl acetate (123-86-4)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

zinc phosphate (7779-90-0)

Listed on the Canadian DSL (Domestic Substances List)

Diantimony trioxide (1309-64-4)

Listed on the Canadian DSL (Domestic Substances List)

poly(bisphenol A-co-epichlorohydrin), glycidyl end-capped, MM= 348 (25036-25-3)

Listed on the Canadian DSL (Domestic Substances List)

Propylene Glycol Methyl Ether (107-98-2)

Listed on the Canadian DSL (Domestic Substances List)

Ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

methyl isobutyl ketone; MIBK (108-10-1)

Listed on the Canadian DSL (Domestic Substances List)

toluene (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

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n-butyl acetate (123-86-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Diantimony trioxide (1309-64-4)

Listed on IARC (International Agency for Research on Cancer)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Propylene Glycol Methyl Ether (107-98-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

methyl isobutyl ketone; MIBK (108-10-1)

Listed on IARC (International Agency for Research on Cancer)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

toluene (108-88-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

n-butyl acetate (123-86-4)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations



WARNING:

This product can expose you to methyl isobutyl ketone; MIBK, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

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Revision date : 10/26/2022

Full text of H-phrases

H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction

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Full text of H-phrases	
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, WE MAKE NO WARRANTY, EXPRESSED, OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. WE ASSUME NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.