

Arterial L.E 28. Samurai

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015
Issue date: 2022-05-19 Revision date: 2024-12-18 Version: 3.0

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	Arterial L.E 28 Samurai
Other means of identification	:	

1.2. Recommended use and restrictions on use

Recommended use	:	Arterial embalming chemical
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1.3. Supplier

Manufacturer	Distributor
Genelyn North America 711 Ontario Street Unit 3 Cobourg, ON, K9A3C6 Canada T 905-376-3108 www.mygenelyn.com	

1.4. Emergency telephone number

Emergency number	:	For Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident, call CANUTEC at 1-888-CAN-UTEC (226-8832) Genelyn North America/Asia (833)436-3596 Operating hours 24 hours / 24 hours, 7 days a week
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Flam. Liq. 4
Acute Tox. 4 (Oral)
Acute Tox. 3 (Dermal)
Acute Tox. 3 (Inhalation:vapour)
Skin Irrit. 2
Eye Dam. 1
Skin Sens. 1
Muta. 2
Carc. 1A
Repr. 1B
STOT SE 2
STOT SE 3

2.2. GHS Label elements, including precautionary statements

GHS labelling

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Hazard pictograms (GHS)

:



Signal word (GHS)

:

Danger

Hazard statements (GHS)

:

Combustible liquid
Harmful if swallowed.
Toxic in contact with skin or if inhaled
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.
Suspected of causing genetic defects.
May cause cancer.
May damage fertility or the unborn child.
May cause damage to organs.

Precautionary statements (GHS)

:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Call a poison center or doctor.
If swallowed: Call a poison center or doctor if you feel unwell.
Rinse mouth.
If on skin: Wash with plenty of water.
Take off immediately all contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center or doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
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

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

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Name	Chemical name / Synonyms	Product identifier	%
Formaldehyde	Formalin Formic aldehyde Methanal Formaldehyde solution FORMALDEHYDE Formaldehyde solution, flammable Formaldehyde ...% Methaldehyde	CAS-No.: 50-00-0	10 – 30
Propylene glycol monomethyl ether	Propylene glycol monomethyl ether 1-Methoxy-2-propanol 1-Methoxypropanol-2 METHOXYISOPROPANOL Methoxyisopropanol Propylene glycol methyl ether Propylene glycol 1-methyl ether Propan-2-ol, 1-methoxy- 1-Methoxypropan-2-ol 1-Methoxy-2-hydroxypropane 2-Methoxy-1-methylethanol Propylene glycol monomethyl ether 2-Propylene glycol 1-monomethyl ether Methyl proxitol Monomethyl ether of propylene glycol Propyleneglycol monomethyl ether Propanol, methoxy-	CAS-No.: 107-98-2	5 - 10
Methanol	methanol METHYL ALCOHOL Wood alcohol Methyl hydroxide Carbinol Methyl alcohol	CAS-No.: 67-56-1	1 – 7
Glycerin	Glycerin GLYCERIN 1,2,3-Trihydroxypropane Glycerol Glycerine Glycerin Propane-1,2,3-triol	CAS-No.: 56-81-5	1 – 5

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Name	Chemical name / Synonyms	Product identifier	%
Borax (B ₄ Na ₂ O ₇ ·10H ₂ O)	Borax (B ₄ Na ₂ O ₇ ·10H ₂ O) Borax Borax (Na ₂ (B ₄ O ₇)·10H ₂ O) Sodium tetraborate decahydrate Disodium tetraborate, decahydrate Sodium tetraborate, decahydrate Disodium tetraborate decahydrate Sodium borate decahydrate Sodium borate, decahydrate SODIUM BORATE DECAHYDRATE Sodium borate Borax decahydrate Disodium tetraborate, anhydrous SODIUM BORATE Borate, tetrasodium salt	CAS-No.: 1303-96-4	0.1 – 1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Call a POISON CENTER/doctor.
First-aid measures after inhalation	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of Water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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

Symptoms/effects	: May cause damage to organs.
Symptoms/effects after inhalation	: Toxic if inhaled. May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Toxic in contact with skin. Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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|--------------------------------|---|---|
| Suitable extinguishing media | : | Use extinguishing media appropriate for surrounding fire. |
| Unsuitable extinguishing media | : | Do not use water jet. |

5.2. Specific hazards arising from the chemical

- | | | |
|-------------|---|---|
| Fire hazard | : | Combustible liquid. Products of combustion may include, and are not limited to: oxides of carbon. Irritating vapours. Metal oxides. |
|-------------|---|---|

5.3. Special protective equipment and precautions for fire-fighters

- | | | |
|--------------------------------|---|--|
| Firefighting instructions | : | Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray. |
| Protection during firefighting | : | Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | | |
|------------------|---|---|
| General measures | : | Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. |
|------------------|---|---|

6.1.1. For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.1.2. For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

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|-------------------------|---|--|
| For containment | : | Stop leak if safe to do so. Remove ignition sources. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment. |
| Methods for cleaning up | : | Sweep or shovel spills into appropriate container for disposal. Provide ventilation. |

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe dust, fume, gas, mist, spray, vapours. Do not swallow. Do not get in eyes, on skin, or on clothing. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store locked up.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

Borax (B₄Na₂O₇·10H₂O) (1303-96-4)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	2 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
ACGIH OEL STEL	6 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
ACGIH chemical category	Not Classifiable as a Human Carcinogen

USA - NIOSH - Occupational Exposure Limits

NIOSH REL TWA	5 mg/m ³
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Glycerin (56-81-5)

USA - OSHA - Occupational Exposure Limits

Local name	Glycerin (mist)
OSHA PEL TWA	15 mg/m ³ (mist, total particulate) 5 mg/m ³ (mist, respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Propylene glycol monomethyl ether (107-98-2)

USA - ACGIH - Occupational Exposure Limits

Local name	1-Methoxy-2-propanol
ACGIH OEL TWA	50 ppm
ACGIH OEL STEL	100 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH chemical category	Not Classifiable as a Human Carcinogen

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Propylene glycol monomethyl ether (107-98-2)	
Regulatory reference	ACGIH 2020
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	360 mg/m³
	100 ppm
NIOSH REL STEL	540 mg/m³
	150 ppm
Formaldehyde (50-00-0)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.1 ppm
ACGIH OEL STEL	0.3 ppm
ACGIH chemical category	Confirmed Human Carcinogen, dermal sensitizer
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	0.75 ppm
OSHA PEL STEL	2 ppm (see 29 CFR 1910.1048)
Remark (OSHA)	Formaldehyde is subject to the standard 29 CFR 1910.1048, which may contain specific requirements for handling including protective equipment, regulated areas, monitoring and medical surveillance. The employer should review the standard and assure compliance with applicable requirements.
USA - IDLH - Occupational Exposure Limits	
IDLH	20 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	0.016 ppm
NIOSH REL C	0.1 ppm
US-NIOSH chemical category	SK: DIR(IRR)-SEN Apr 2011
Methanol (67-56-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	200 ppm
ACGIH OEL STEL	250 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA - ACGIH - Biological Exposure Indices	
BEI	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	260 mg/m³
	200 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	6000 ppm

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Methanol (67-56-1)	
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	260 mg/m³
	200 ppm
NIOSH REL STEL	325 mg/m³
	250 ppm
US-NIOSH chemical category	Potential for dermal absorption

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable gloves resistant to chemical penetration. Consult glove manufacturer's product information on material suitability and material thickness.

Eye protection:
Wear eye/face protection

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

Other information:
Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: Brown Orange
Odour	: No data available
Odour threshold	: No data available
pH	: 7.8 – < 8.4
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Combustible
Vapour pressure	: No data available
Relative vapour density at 20°C / 68 °F	: No data available
Relative density	: No data available
Solubility	: Easily soluble in the following materials: cold water and hot
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Sources of ignition. Incompatible materials.

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10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Toxic in contact with skin.
Acute toxicity (inhalation)	: Inhalation:vapour: Toxic if inhaled.

Arterial Ultra Series	
ATE US (oral)	317.537 mg/kg bodyweight
ATE US (dermal)	880.681 mg/kg bodyweight
ATE US (vapours)	3 mg/l/4h

Borax (B4Na2O7.10H2O) (1303-96-4)	
LD50 oral rat	3493 mg/kg (Source: NZ_CCID)
LD50 oral	4450 mg/kg
LD50 dermal rabbit	> 10000 mg/kg (Source: JAPAN_GHS)
LC50 inhalation rat	> 2 mg/m³ (Exposure time: 4 h Source: NLM_HSDB)

Glycerin (56-81-5)	
LD50 oral rat	12600 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 10 g/kg (Source: NLM_CIP)
LC50 inhalation rat	> 2.75 mg/l/4h

Propylene glycol monomethyl ether (107-98-2)	
LD50 oral rat	5000 mg/kg (Source: JAPAN_GHS)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LD50 dermal rabbit	13 g/kg (Source: NLM_CIP)
LC50 inhalation rat	> 7559 ppm (Exposure time: 6 h Source: OECD_SIDS)

Formaldehyde (50-00-0)	
LD50 oral rat	100 mg/kg (Source: NLM_CIP)
LD50 oral	605 mg/kg
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	270 mg/kg
LC50 inhalation rat	< 463 ppm/4h
LC50 Inhalation - Rat (Vapours)	0.578 mg/l/4h

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Methanol (67-56-1)

LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	15840 mg/kg (Source: NLM_HSDB)
LC50 inhalation rat	64000 ppm/4h

Skin corrosion/irritation : Causes skin irritation.
pH: 8 – < 8.4

Formaldehyde (50-00-0)

pH	2.8 – 4
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Serious eye damage/irritation : Causes serious eye damage.
pH: 8 – < 8.4

Formaldehyde (50-00-0)

pH	2.8 – 4
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Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : May cause cancer.

Formaldehyde (50-00-0)

IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes
In OSHA Specifically Regulated Carcinogen list	Yes

Reproductive toxicity : May damage fertility or the unborn child.

Methanol (67-56-1)

NOAEL (animal/male, F0/P)	< 1000 mg/kg bodyweight Animal: mouse, Animal sex: male
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STOT-single exposure : May cause damage to organs. May cause respiratory irritation.

Borax (B4Na2O7.10H2O) (1303-96-4)

STOT-single exposure	May cause respiratory irritation.
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Propylene glycol monomethyl ether (107-98-2)

STOT-single exposure	May cause drowsiness or dizziness.
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Formaldehyde (50-00-0)

STOT-single exposure	May cause respiratory irritation.
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Methanol (67-56-1)	
STOT-single exposure	Causes damage to organs. May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified.

Propylene glycol monomethyl ether (107-98-2)	
LOAEL (oral, rat, 90 days)	2757 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	919 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : Not classified.

Viscosity, kinematic : No data available

Propylene glycol monomethyl ether (107-98-2)	
Viscosity, kinematic	1.848 mm²/s

Symptoms/effects	: May cause damage to organs.
Symptoms/effects after inhalation	: Toxic if inhaled. May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Toxic in contact with skin. Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Borax (B4Na2O7.10H2O) (1303-96-4)	
LC50 - Fish [1]	501 mg/l

Glycerin (56-81-5)	
LC50 - Fish [1]	54000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)

Propylene glycol monomethyl ether (107-98-2)	
LC50 - Fish [1]	20.8 g/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)
EC50 - Crustacea [1]	23300 mg/l (Exposure time: 48 h - Species: Daphnia magna)

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Propylene glycol monomethyl ether (107-98-2)

EC50 - Other aquatic organisms [1]	2954 mg/l Test organisms (species): other aquatic crustacea:Acartia tonsa
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Formaldehyde (50-00-0)

LC50 - Fish [1]	1.8 mg/l
EC50 - Crustacea [1]	2 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	1510 µg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
EC50 - Crustacea [2]	11.3 – 18 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC (chronic)	≥ 6.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 48 mg/l Test organisms (species): Oryzias latipes Duration: '28 d'

Methanol (67-56-1)

LC50 - Fish [1]	15400 mg/l Test organisms (species): Lepomis macrochirus
LC50 - Fish [2]	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	446.7 mg/l Test organisms (species): Pimephales promelas Duration: '28 d'

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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Borax (B4Na2O7.10H2O) (1303-96-4)

Persistence and degradability	Rapidly degradable
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Glycerin (56-81-5)

Persistence and degradability	Not rapidly degradable
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Propylene glycol monomethyl ether (107-98-2)

Persistence and degradability	Rapidly degradable
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Formaldehyde (50-00-0)

Persistence and degradability	Rapidly degradable
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Methanol (67-56-1)

Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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Glycerin (56-81-5)

BCF - Fish [1]	(no bioaccumulation)
Partition coefficient n-octanol/water	-1.75 (at 25 °C (at pH 7.4)

Propylene glycol monomethyl ether (107-98-2)

BCF - Fish [1]	(2 dimensionless)
Partition coefficient n-octanol/water	< 1 (at 20 °C (at pH 6.8)

Formaldehyde (50-00-0)

Partition coefficient n-octanol/water	0.35 (at 25 °C)
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Methanol (67-56-1)

BCF - Fish [1]	(10 dimensionless)
Partition coefficient n-octanol/water	-0.77

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	: Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

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According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

14.1. UN number

UN-No.(DOT)	:	UN2209
UN-No. (TDG)	:	UN2209
UN-No. (IMDG)	:	2209
UN-No. (IATA)	:	2209

14.2. UN proper shipping name

Proper Shipping Name (DOT)	:	Formaldehyde solutions
Proper Shipping Name (TDG)	:	FORMALDEHYDE SOLUTION
Proper Shipping Name (IMDG)	:	FORMALDEHYDE SOLUTION
Proper Shipping Name (IATA)	:	Formaldehyde solution

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	:	8
Hazard labels (DOT)	:	8



TDG

Transport hazard class(es) (TDG)	:	8
Hazard labels (TDG)	:	8



IMDG

Transport hazard class(es) (IMDG)	:	8
Danger labels (IMDG)	:	8



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IATA

Transport hazard class(es) (IATA) : 8

Danger labels (IATA) : 8



14.4. Packing group

Packing group (DOT) : III

Packing group (TDG) : III

Packing group (IMDG) : III

Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

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. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

15.3. US State regulations



WARNING:

This product can expose you to chemicals including Formaldehyde, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

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Other information : None.
Prepared by : Genelyn North America/Asia
www.mygenelyn.com

Full text of hazard classes and H-statements	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Carc. 1A	Carcinogenicity, Category 1A
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 4	Flammable liquids, Category 4
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

SDS HazCom 2012 - WHMIS 2015 - 2023

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