



Revision date 14-July-2022

SAFETY DATA SHEET

according to the Hazardous Products Regulation (February 11, 2015)
Issue date: 7/14/2022 Revision date: 7/14/2022 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : **K100S**

1.2. Recommended use and restrictions on use

Recommended use : Gas Fuel Treatment

1.3. Supplier

Manufactured For:
FMSI EDELMANN FITTINGS
1070 HERITAGE ROAD
BURLINGTON, ON L7L 4X9



1.4. Emergency telephone number

Emergency number : For 24 hour emergency Information call Chemtrec +1 (800) 424-9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flam. Liq. 3	H226	Flammable liquid and vapour.
Acute Tox. 4 (Oral)	H302	Harmful if swallowed.
Acute Tox. 3 (Dermal)	H311	Toxic in contact with skin.
Acute Tox. 3 (Inhalation:vapour)	H331	Toxic if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Dam. 1	H318	Causes serious eye damage.
Repr. 1B	H360	May damage fertility or the unborn child.
STOT SE 1	H370	Causes damage to organs.
STOT SE 3	H336	May cause drowsiness or dizziness.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 1	H372	Causes damage to organs through prolonged or repeated exposure.

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA)



Signal word (GHS CA)

: Danger

Hazard statements (GHS-CA)

: H226 - Flammable liquid and vapour.
H302 - Harmful if swallowed.
H311+H331 - Toxic in contact with skin or if inhaled
H315 - Causes skin irritation.
H318 - Causes serious eye damage.



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Precautionary statements (GHS-CA)

H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H360 - May damage fertility or the unborn child.
H370 - Causes damage to organs.
H372 - Causes 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 action to prevent static discharges.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330 - Rinse mouth.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P314 - Get medical advice/attention if you feel unwell.
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

No additional information available

2.4. Unknown acute toxicity (GHS CA)

10% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

10% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
2-butoxyethanol	2-Butoxy-1-ethanol / Butoxyethanol / Ethanol, 2-butoxy- / Ethylene glycol monobutyl ether	CAS-No.: 111-76-2	30 – 60



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Name	Chemical name / Synonyms	Product identifier	%
1-Butanol	n-Butyl alcohol / n-Butanol / Butanol, 1- / 1-Butyl alcohol	CAS-No.: 71-36-3	15 – 40
Primary Alkyl Alcohol	Primary Alkyl Alcohol	CAS-No.: Trade Secret	10 – 30
Cyclic Secondary Amine	Cyclic Secondary Amine	CAS-No.: Trade Secret	≤ 10

Comments : *Chemical name, CAS number and/or exact concentration have been withheld as a trade secret. Refer to Section 15 for additional information regarding this CBI claim.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation 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: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. 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 after inhalation : Toxic if inhaled. May cause irritation to the respiratory tract. May cause drowsiness or dizziness.

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.

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 : May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

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

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use water jet.

5.3. Specific hazards arising from the hazardous product

Fire hazard : Flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon. Nitrogen oxides. Hydrogen cyanide. Ammonia. Formaldehyde. irritating vapours.

Explosion hazard : May form flammable/explosive vapour-air mixture.



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5.4. 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). Vapours may be heavier than air and may travel along the ground to a distant ignition source and flash back.

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. Remove all sources of ignition.

6.2. Methods and materials for containment and cleaning up

- For containment : Stop leak if safe to do so. Eliminate all sources of ignition. 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.

6.3. Reference to other sections

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

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. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Do not breathe dust, fume, gas, mist, spray, vapours. Do not swallow. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Handle and open container with care. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Wash hands, forearms and face thoroughly after handling.
- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store locked up. Store in a dry, cool and well-ventilated place. Protect from freezing. Keep away from heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-butoxyethanol (111-76-2)

USA - ACGIH - Occupational Exposure Limits

Local name	2-Butoxyethanol (EGBE)
ACGIH OEL TWA [ppm]	20 ppm



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2-butoxyethanol (111-76-2)

Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Regulatory reference	ACGIH 2020

USA - ACGIH - Biological Exposure Indices

BEI	200 mg/g creatinine Parameter: Butoxyacetic acid with hydrolysis - Medium: urine - Sampling time: end of shift
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1-Butanol (71-36-3)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA [ppm]	20 ppm
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Primary Alkyl Alcohol (Trade Secret)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA [ppm]	200 ppm
ACGIH OEL STEL [ppm]	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: Primary Alkyl Alcohol - Medium: urine - Sampling time: end of shift (background, nonspecific)
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Cyclic Secondary Amine (Trade Secret)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA [ppm]	20 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route

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

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing



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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.

Other information:

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: yellowish
Odour	: Mild Sweet ether-like odour
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: 0.41
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 123 °C (253.5°F)
Flash point	: 40.5 °C (105°F) (Cleveland open cup)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapour.
Vapour pressure	: 4 mm Hg (torr)
Relative vapour density at 20 °C	: 2.71 (air = 1)
Relative density	: 0.85 @ 20 °C (68 °F)
Solubility	: Water: 100 %
Partition coefficient n-octanol/water	: No data available
Viscosity, kinematic	: No data available
Explosive limits	: Lower explosion limit: 1.1 vol % Upper explosion limit: 10.6 vol %

2-butoxyethanol (111-76-2)

Boiling point	168.4 °C
Flash point	62 °C
Auto-ignition temperature	230 °C
Vapour pressure	0.8 hPa Temp.: 20 °C

1-Butanol (71-36-3)

Boiling point	117.7 °C
Flash point	37 °C
Auto-ignition temperature	343 °C
Vapour pressure	0.658 hPa (at 20 °C)

Primary Alkyl Alcohol (Trade Secret)

Boiling point	64.7 °C Atm. press.: 1013 hPa
Flash point	9.7 °C Atm. press.: 1013 hPa



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Primary Alkyl Alcohol (Trade Secret)

Auto-ignition temperature	464 °C
Vapour pressure	169.27 hPa Temp.: 25 °C

Cyclic Secondary Amine (Trade Secret)

Boiling point	128 °C
Flash point	37 °C (open cup)
Auto-ignition temperature	295 °C
Vapour pressure	10 hPa (at 20 °C)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	: No dangerous reactions known under normal conditions of use.
Chemical stability	: Stable under normal conditions. May form flammable/explosive vapour-air mixture.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Heat. Incompatible materials. Sources of ignition. Direct sunlight.
Incompatible materials	: Strong oxidizers. Hydrogen peroxide. Metals. Carbon tetrachloride. Alkali metals. Acetyl bromide. Dichloromethane. Perchloric acid. Potassium tert-butoxide. aluminium alkyls. Beryllium compound. Cyanuric chloride. Isocyanates. Phosphorus oxides. diethyl zinc . Mineral acids. Organic acids. Acid anhydrides. Acid chlorides. Sodium hydroxide. Chloroform. cellulose nitrate; nitrocellulose. nitromethane. Nitrites. nitrous acid. Nitrogen oxides. Aluminum. Halogens. Lithium aluminum hydride.
Hazardous decomposition products	: May include, and are not limited to: oxides of carbon. Nitrogen oxides. Hydrogen cyanide. ammonia. Formaldehyde. Peroxides. May release flammable gases.
Hardening time:	: No additional information available

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)	: Toxic if inhaled.

ATE CA (oral)	350.605 mg/kg bodyweight
ATE CA (Dermal)	965.179 mg/kg bodyweight
ATE CA (vapours)	4.417 mg/l/4h
Unknown acute toxicity (GHS CA)	7% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 7% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

2-butoxyethanol (111-76-2)

LD50 oral rat	1746 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1322 - 2301
LD50 oral	1414 mg/kg bodyweight Animal: guinea pig, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1020 - 1961
LD50 dermal rabbit	435 mg/kg



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2-butoxyethanol (111-76-2)

LC50 inhalation rat	2.35 mg/l
LC50 inhalation rat	486 ppm/4h
ATE CA (oral)	1414 mg/kg bodyweight
ATE CA (Dermal)	435 mg/kg bodyweight
ATE CA (Gases (except aerosol dispensers and lighters))	486 ppmv/4h
ATE CA (vapours)	2.35 mg/l/4h
ATE CA (dust,mist)	2.35 mg/l/4h

1-Butanol (71-36-3)

LD50 oral rat	700 mg/kg
LD50 oral	2100 mg/kg
LD50 dermal rabbit	3402 mg/kg
LD50 dermal	3400 mg/kg
LC50 inhalation rat	> 8000 ppm/4h
ATE CA (oral)	700 mg/kg bodyweight
ATE CA (Dermal)	3400 mg/kg bodyweight

Primary Alkyl Alcohol (Trade Secret)

LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	15840 mg/kg
LC50 inhalation rat	22500 ppm (Exposure time: 8 h)
ATE CA (oral)	100 mg/kg bodyweight
ATE CA (Dermal)	15840 mg/kg bodyweight
ATE CA (Gases (except aerosol dispensers and lighters))	700 ppmv/4h
ATE CA (vapours)	3 mg/l/4h
ATE CA (dust,mist)	0.5 mg/l/4h

Cyclic Secondary Amine (Trade Secret)

LD50 oral rat	1050 mg/kg
LD50 dermal rabbit	310 – 810 mg/kg
LC50 inhalation rat	> 8000 ppm (Exposure time: 8 h)
ATE CA (oral)	1050 mg/kg bodyweight
ATE CA (Dermal)	310 mg/kg bodyweight
ATE CA (Gases (except aerosol dispensers and lighters))	4500 ppmv/4h
ATE CA (vapours)	11 mg/l/4h
ATE CA (dust,mist)	1.5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.



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Cyclic Secondary Amine (Trade Secret)

pH 13 (pure liquid)

Serious eye damage/irritation : Causes serious eye damage.

Cyclic Secondary Amine (Trade Secret)

pH 13 (pure liquid)

Respiratory or skin sensitization : Not classified.

Germ cell mutagenicity : Not classified.

Carcinogenicity : Not classified.

2-butoxyethanol (111-76-2)

IARC group 3 - Not classifiable

Cyclic Secondary Amine (Trade Secret)

IARC group 3 - Not classifiable

Reproductive toxicity : May damage fertility or the unborn child.

Primary Alkyl Alcohol (Trade Secret)

NOAEL (animal/male, F0/P) < 1000 mg/kg bodyweight Animal: mouse, Animal sex: male

STOT-single exposure : Causes damage to organs. May cause drowsiness or dizziness. May cause respiratory irritation.

2-butoxyethanol (111-76-2)

STOT-single exposure May cause respiratory irritation.

1-Butanol (71-36-3)

STOT-single exposure May cause drowsiness or dizziness. May cause respiratory irritation.

Primary Alkyl Alcohol (Trade Secret)

STOT-single exposure Causes damage to organs. May cause drowsiness or dizziness.

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

2-butoxyethanol (111-76-2)

NOAEL (dermal, rat/rabbit, 90 days) > 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study), Remarks on results: other:

STOT-repeated exposure Causes damage to organs through prolonged or repeated exposure.

1-Butanol (71-36-3)

LOAEL (oral, rat, 90 days) 500 mg/kg bodyweight Animal: rat

NOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Animal: rat

Cyclic Secondary Amine (Trade Secret)

LOAEL (oral, rat, 90 days) 500 mg/kg bodyweight Animal: rat, Animal sex: female

Aspiration hazard : Not classified.

2-butoxyethanol (111-76-2)

Animal studies and expert judgment for classification False

1-Butanol (71-36-3)

Viscosity, kinematic 3.638 mm²/s

Animal studies and expert judgment for classification False



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Primary Alkyl Alcohol (Trade Secret)

Animal studies and expert judgment for classification False

Cyclic Secondary Amine (Trade Secret)

Viscosity, kinematic 2.23 mm²/s

Animal studies and expert judgment for classification False

Symptoms/effects after inhalation : Toxic if inhaled. May cause irritation to the respiratory tract. May cause drowsiness or dizziness.
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.
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 : May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.
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.
Hazardous to the aquatic environment, short-term (acute) : Not classified.
Hazardous to the aquatic environment, long-term (chronic) : Not classified.

2-butoxyethanol (111-76-2)

LC50 - Fish [1]	1474 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [2]	2950 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
EC50 - Crustacea [1]	≈ 1800 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	911 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	1840 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC chronic fish	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '21 d'
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

1-Butanol (71-36-3)

LC50 - Fish [1]	1730 – 1910 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
LC50 - Fish [2]	1740 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	1983 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 - Crustacea [2]	1897 – 2072 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 72h - Algae [1]	> 500 mg/l (Species: Desmodesmus subspicatus)
EC50 96h - Algae [1]	> 500 mg/l (Species: Desmodesmus subspicatus)
NOEC (chronic)	4.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	4.1 mg/l



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Primary Alkyl Alcohol (Trade Secret)

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])
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'

Cyclic Secondary Amine (Trade Secret)

LC50 - Fish [1]	350 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 - Fish [2]	375 – 460 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 - Crustacea [1]	45 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	28 mg/l (Species: Pseudokirchneriella subcapitata [static])
NOEC (chronic)	5 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

Husky Corporation SDS G+ (MG+ S+)

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

Husky Corporation SDS G+ (MG+ S+)

Bioaccumulative potential	Not established.
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2-butoxyethanol (111-76-2)

Partition coefficient n-octanol/water	0.81 (at 25 °C)
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1-Butanol (71-36-3)

BCF - Fish [1]	0.64
Partition coefficient n-octanol/water	0.785 (at 25 °C)

Primary Alkyl Alcohol (Trade Secret)

BCF - Fish [1]	< 10
Partition coefficient n-octanol/water	-0.77

Cyclic Secondary Amine (Trade Secret)

BCF - Fish [1]	0.3 – 2.8
Partition coefficient n-octanol/water	-2.55 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified.
Other information : No other effects known.



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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 TDG

14.1. UN number

UN-No. (TDG) : UN1993

14.2. UN proper shipping name

Proper Shipping Name (TDG) : FLAMMABLE LIQUID, N.O.S. (1-Butanol, Primary Alkyl Alcohol)

14.3. Transport hazard class(es)

TDG

Transport hazard class(es) (TDG) : 3

Hazard labels (TDG) : 3



14.4. Packing group

Packing group (TDG) : III

14.5. Environmental hazards

Marine pollutant : Yes (IMDG only)



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.

TDG

UN-No. (TDG) : UN1993



SAFETY DATA SHEET

according to the Hazardous Products Regulation (February 11, 2015)

Revision date 14-July-2022

Issue date: 7/14/2022

Revision date: 7/14/2022

Version: 1.0

TDG Special Provisions

- : 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks).
- (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:
- (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;
- (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;
- (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;
- (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or
- (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.
- (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:
- (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or
- (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan). SOR-2019-101

- Explosive Limit and Limited Quantity Index : 5 L
- Excepted quantities (TDG) : E1
- Passenger Carrying Road Vehicle or Passenger : 60 L
- Carrying Railway Vehicle Index
- Emergency Response Guide (ERG) Number : 128

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. National regulations

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.

Canada WHMIS Confidential Business Information (CBI): HMIRA registry number 10020. The date of filing is 2020-01-31.

15.2. International regulations

No additional information available

SECTION 16: Other information

- Issue date : 07/14/2022
- Revision date : 07/14/2022
- Other information : None.
- Prepared by : Nexreg Compliance Inc.
www.Nexreg.com



Safety Data Sheet (SDS), Canada - Nexreg 2021

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