#### Safety Data Sheet

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

Issue date: 2021-03-11 Revision date: 2023-01-30 Version: 1.1

#### **SECTION 1: Identification**

#### 1.1. Product identifier

Product form : Mixture
Product name : SESA

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Dry sea salt CRM, for laboratory use only

#### 1.3. Details of the supplier of the safety data sheet

National Research Council Canada 1200 Montreal Road Ottawa, K1A 0R6 - Canada T 613-993-2359

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National Research Council Canada Conseil national de recherches Canada

#### 1.4. Emergency telephone number

Emergency number : CANUTEC 1-613-996-6666

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### **GHS** classification

Not classified.

#### 2.2. Label elements

#### **GHS** labelling

No labelling applicable

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS)

Not applicable

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	% (by weight)
Kent Reef Marine Salt Mix	Not applicable	99.6707181261
Water	(CAS-No.) 7732-18-5	0.1661178635
Isopropyl alcohol	(CAS-No.) 67-63-0	0.1305686407
Acetonitrile	(CAS-No.) 75-05-8	0.0195607107
Sodium nitrate	(CAS-No.) 7631-99-4	0.0090502417
Methane, dichloro-	(CAS-No.) 75-09-2	0.001711014
Methanol	(CAS-No.) 67-56-1	0.001711014
Toluene	(CAS-No.) 108-88-3	0.0002740945
Hexane	(CAS-No.) 110-54-3	0.0002740945

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#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical advice/attention if you feel

unwell.

First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical

attention if irritation persists.

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. If eye irritation

persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by

mouth to an unconscious person. Get medical advice/attention if you feel

unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or

cracking.

Symptoms/effects after eye contact : Dust may cause eye irritation. Symptoms may include discomfort or pain,

excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea,

vomiting and diarrhea.

#### 4.3. Indication of any immediate medical attention and special treatment needed

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

#### **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

Fire hazard : Products of combustion may include, and are not limited to: oxides of

carbon. Toxic vapours. Toxic gases.

#### 5.3. Advice for firefighters

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.

#### 6.2. Methods and material for containment and cleaning up

For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then

place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

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".



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#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing

dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open

container with care. When using do not eat, drink or smoke.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after

handling the product.

#### 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.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

SESA	
No additional information available	

Water (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

Isopropyl alcohol (67-63-0)		
USA - ACGIH - Occupational Exposure L	imits	
ACGIH OEL TWA [ppm]	200 ppm	
ACGIH OEL STEL [ppm]	400 ppm	
ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA - ACGIH - Biological Exposure Indic	USA - ACGIH - Biological Exposure Indices	
BEI	40 mg/L Parameter: Acetone - Medium: urine - Sampling time: end of shift at end of workweek (background, nonspecific)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [1]	980 mg/m³	
OSHA PEL TWA [2]	400 ppm	
USA - IDLH - Occupational Exposure Lim	nits	
IDLH [ppm]	2000 ppm (10% LEL)	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA	980 mg/m³	
NIOSH REL TWA [ppm]	400 ppm	
NIOSH REL STEL	1225 mg/m³	
NIOSH REL STEL [ppm]	500 ppm	

Toluene (108-88-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Toluene
ACGIH OEL TWA [ppm]	20 ppm



Remark (ACGIH)  TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI  ACGIH chemical category  Regulatory reference  Not Classifiable as a Human Carcinogen  ACGIH 2020  USA - ACGIH - Biological Exposure Indices  BEI  O.02 mg/L Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/L Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)  USA - OSHA - Occupational Exposure Limits  Local name  Toluene  OSHA PEL TWA [2]  OSHA PEL C [ppm]  Acceptable maximum peak above the acceptable eailing concentration for an 8-hr shift  Regulatory reference (US-OSHA)  USA - IDLH - Occupational Exposure Limits  IDLH [ppm]  500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA  375 mg/m³  NIOSH REL TWA  NIOSH REL TWA  NIOSH REL STEL  560 mg/m³  NIOSH REL STEL  560 mg/m³  NIOSH REL STEL  NIOSH REL STEL		<u> </u>
Regulatory reference ACGIH 2020  USA - ACGIH - Biological Exposure Indices  BEI  0.02 mg/L Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/L Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)  USA - OSHA - Occupational Exposure Limits  Local name  Toluene  OSHA PEL TWA [2]  OSHA PEL C [ppm]  Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA)  USA - IDLH - Occupational Exposure Limits  IDLH [ppm]  500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA  375 mg/m³  NIOSH REL TWA [ppm]  100 ppm  NIOSH REL STEL  560 mg/m³	Remark (ACGIH)	
USA - ACGIH - Biological Exposure Indices  BEI  0.02 mg/L Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/L Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)  USA - OSHA - Occupational Exposure Limits  Local name  Toluene  OSHA PEL TWA [2]  OSHA PEL C [ppm]  Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA)  OSHA Annotated Table Z-2  USA - IDLH - Occupational Exposure Limits  IDLH [ppm]  500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA  375 mg/m³  NIOSH REL TWA [ppm]  100 ppm  NIOSH REL STEL  560 mg/m³	ACGIH chemical category	Not Classifiable as a Human Carcinogen
BEI    0.02 mg/L Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek   0.03 mg/L Parameter: Toluene - Medium: urine - Sampling time: end of shift   0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)    USA - OSHA - Occupational Exposure Limits   Local name	Regulatory reference	ACGIH 2020
to last shift of workweek 0.03 mg/L Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)  USA - OSHA - Occupational Exposure Limits  Local name Toluene  OSHA PEL TWA [2] 200 ppm  OSHA PEL C [ppm] 300 ppm  Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA) OSHA Annotated Table Z-2  USA - IDLH - Occupational Exposure Limits  IDLH [ppm] 500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA 375 mg/m³  NIOSH REL TWA [ppm] 100 ppm  NIOSH REL STEL 560 mg/m³	USA - ACGIH - Biological Exposure India	ces
Local name  OSHA PEL TWA [2]  OSHA PEL C [ppm]  Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA)  OSHA Annotated Table Z-2  USA - IDLH - Occupational Exposure Limits  IDLH [ppm]  500 ppm  500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA  NIOSH REL TWA  NIOSH REL TWA [ppm]  100 ppm  NIOSH REL STEL  560 mg/m³	BEI	to last shift of workweek 0.03 mg/L Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium:
OSHA PEL TWA [2] 200 ppm  OSHA PEL C [ppm] 300 ppm  Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA) OSHA Annotated Table Z-2  USA - IDLH - Occupational Exposure Limits  IDLH [ppm] 500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA 375 mg/m³  NIOSH REL TWA [ppm] 100 ppm  NIOSH REL STEL 560 mg/m³	USA - OSHA - Occupational Exposure Li	mits
OSHA PEL C [ppm]  Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA)  OSHA Annotated Table Z-2  USA - IDLH - Occupational Exposure Limits  IDLH [ppm]  500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA  375 mg/m³  NIOSH REL TWA [ppm]  100 ppm  NIOSH REL STEL  560 mg/m³	Local name	Toluene
Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA)  OSHA Annotated Table Z-2  USA - IDLH - Occupational Exposure Limits  IDLH [ppm]  500 ppm  500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA  375 mg/m³  NIOSH REL TWA [ppm]  100 ppm  NIOSH REL STEL  560 mg/m³	OSHA PEL TWA [2]	200 ppm
acceptable ceiling concentration for an 8-hr shift  Regulatory reference (US-OSHA)  OSHA Annotated Table Z-2  USA - IDLH - Occupational Exposure Limits  IDLH [ppm]  500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA  375 mg/m³  NIOSH REL TWA [ppm]  100 ppm  NIOSH REL STEL  560 mg/m³	OSHA PEL C [ppm]	300 ppm
USA - IDLH - Occupational Exposure Limits  IDLH [ppm] 500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA 375 mg/m³  NIOSH REL TWA [ppm] 100 ppm  NIOSH REL STEL 560 mg/m³	acceptable ceiling concentration for an 8-	500 ppm Peak (10 minutes)
IDLH [ppm] 500 ppm  USA - NIOSH - Occupational Exposure Limits  NIOSH REL TWA 375 mg/m³  NIOSH REL TWA [ppm] 100 ppm  NIOSH REL STEL 560 mg/m³	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2
USA - NIOSH - Occupational Exposure LimitsNIOSH REL TWA375 mg/m³NIOSH REL TWA [ppm]100 ppmNIOSH REL STEL560 mg/m³	USA - IDLH - Occupational Exposure Limits	
NIOSH REL TWA         375 mg/m³           NIOSH REL TWA [ppm]         100 ppm           NIOSH REL STEL         560 mg/m³	IDLH [ppm]	500 ppm
NIOSH REL TWA [ppm] 100 ppm NIOSH REL STEL 560 mg/m³	USA - NIOSH - Occupational Exposure Limits	
NIOSH REL STEL 560 mg/m <sup>3</sup>	NIOSH REL TWA	375 mg/m³
<del></del>		
NIOSH REL STEL [ppm] 150 ppm		560 mg/m³
	NIOSH REL STEL [ppm]	150 ppm

Methane, dichloro- (75-09-2)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	50 ppm	
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans	
USA - ACGIH - Biological Exposure Indices		
BEI	0.3 mg/L Parameter: Dichloromethane - Medium: urine - Sampling time: end of shift (semi-quantitative)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [2]	25 ppm	
OSHA PEL STEL [2]	125 ppm (see 29 CFR 1910.1052)	
USA - IDLH - Occupational Exposure Limits		
IDLH [ppm]	2300 ppm	

Methanol (67-56-1)	
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: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific)	
USA - OSHA - Occupational Exposure Li	mits	
OSHA PEL TWA [1]	260 mg/m³	
OSHA PEL TWA [2]	200 ppm	
USA - IDLH - Occupational Exposure Limits		
IDLH [ppm]	6000 ppm	
USA - NIOSH - Occupational Exposure L	imits	
NIOSH REL TWA	260 mg/m³	
NIOSH REL TWA [ppm]	200 ppm	
NIOSH REL STEL	325 mg/m³	
NIOSH REL STEL [ppm]	250 ppm	
US-NIOSH chemical category	Potential for dermal absorption	

Acetonitrile (75-05-8)	
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
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	70 mg/m³
OSHA PEL TWA [2]	40 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m³
NIOSH REL TWA [ppm]	20 ppm

Sodium nitrate (7631-99	-4)
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

Hexane (110-54-3)	Hexane (110-54-3)	
USA - ACGIH - Occupational Exposure L	imits	
ACGIH OEL TWA [ppm]	50 ppm	
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route	
USA - ACGIH - Biological Exposure Indices		
BEI	0.5 mg/L Parameter: 2,5-Hexanedione without hydrolysis - Medium: urine - Sampling time: end of shift	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [1]	1800 mg/m³	
OSHA PEL TWA [2]	500 ppm	

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USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	1100 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	180 mg/m³
NIOSH REL TWA [ppm]	50 ppm

Kent Reef Marine Salt Mix	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

#### 8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume,

vapor, etc.) below recommended exposure limits.

Hand protection : Wear suitable gloves.

Eye protection : Safety glasses or goggles are recommended when using product.

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.

Environmental exposure controls : Avoid release to the environment.

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 : Solid
Appearance : Powder
Colour : White
Odour : None

Odour threshold : No data available pH : No data available Melting point : No data available Freezing point : No data available Boiling point : No data available Flash point : No data available Relative evaporation rate (butyl : No data available

acetate=1)

Flammability (solid, gas)

Vapour pressure

Relative vapour density at 20 °C

Relative density

Solubility

Partition coefficient n-octanol/water

Not flammable

No data available

No data available

No data available



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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.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials.

### 10.5. Incompatible materials

Strong acids. Oxidizers.

#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Toxic vapours. Toxic gases.

#### **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

Isopropyl alcohol (67-63-0)		
LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)	
LD50 dermal rabbit	4059 mg/kg	
LC50 inhalation rat	72600 mg/m³ (Exposure time: 4 h)	
Toluene (108-88-3)		
LD50 oral rat	5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910	
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77	
LC50 inhalation rat	12.5 mg/L/4h	
Methane, dichloro- (75-09-2)		
LD50 oral rat	1600 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 inhalation rat	53 mg/L (Exposure time: 6 h)	



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Methanol (67-56-1)	
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)
Acetonitrile (75-05-8)	
LD50 oral rat	160 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	26.8 mg/L/4h
Sodium nitrate (7631-99-4)	
LD50 oral rat	1267 mg/kg
Hexane (110-54-3)	
LD50 oral rat	25 g/kg
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat	48000 ppm/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Isopropyl alcohol (67-63-0)	
IARC group	3 - Not classifiable
Toluene (108-88-3)	
IARC group	3 - Not classifiable
Methane, dichloro- (75-09-2)	
IARC group	2A - Probably carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen, 1 - Evidence of Carcinogenicity
In OSHA Specifically Regulated Carcinogen list	Yes
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Toluene (108-88-3)	
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/L air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

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Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Dust may cause eye irritation. Symptoms may include discomfort or pain,

excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea,

vomiting and diarrhea.

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.

Isopropyl alcohol (67-63-0)		
LC50 - Fish [1]	10000 mg/L Test organisms (species): Pimephales promelas	
EC50 - Crustacea [1]	13299 mg/L (Exposure time: 48 h - Species: Daphnia magna)	
LC50 - Fish [2]	9640 mg/L Test organisms (species): Pimephales promelas	
Toluene (108-88-3)		
LC50 - Fish [1]	5.5 mg/L Test organisms (species): Oncorhynchus kisutch	
EC50 - Crustacea [1]	5.46 – 9.83 mg/L (Exposure time: 48 h - Species: Daphnia magna [Static])	
LC50 - Fish [2]	12.6 mg/L (Exposure time: 96 h - Species: Pimephales promelas [static])	
EC50 - Crustacea [2]	11.5 mg/L (Exposure time: 48 h - Species: Daphnia magna)	
LOEC (chronic)	2.76 mg/L Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
NOEC (chronic)	0.74 mg/L Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
NOEC chronic fish	1.39 mg/L Test organisms (species): Oncorhynchus kisutch Duration: '40 d'	
NOEC chronic crustacea	0.74 mg/L	
Methane, dichloro- (75-09-2)		
LC50 - Fish [1]	140.8 – 277.8 mg/L (Exposure time: 96 h - Species: <i>Pimephales promelas</i> [flow-through])	
EC50 - Crustacea [1]	27 mg/L	
LC50 - Fish [2]	262 – 855 mg/L (Exposure time: 96 h - Species: <i>Pimephales promelas</i> [static])	
EC50 - Crustacea [2]	190 mg/L (Exposure time: 48 h - Species: Daphnia magna)	
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])	
NOEC (chronic)	208 mg/L Test organisms (species): Daphnia magna Duration: '21 d'	
Acetonitrile (75-05-8)		
LC50 - Fish [1]	1600 – 1690 mg/L (Exposure time: 96 h - Species: <i>Pimephales promelas</i> [flow-through])	
LC50 - Fish [2]	1000 mg/L (Exposure time: 96 h - Species: Pimephales promelas [static])	
Sodium nitrate (7631-99-4)		
LC50 - Fish [1]	2000 mg/L (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
LC50 - Fish [2]	994.4 – 1107 mg/L (Exposure time: 96 h - Species: <i>Oncorhynchus mykiss</i> [static])	
Hexane (110-54-3)		
LC50 - Fish [1]	2.1 – 2.98 mg/L (Exposure time: 96 h - Species: <i>Pimephales promelas</i> [flow-through])	

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#### 12.2. Persistence and degradability

SESA	
Persistence and degradability	Not established

#### 12.3. Bioaccumulative potential

•		
SESA		
Bioaccumulative potential	Not established	
Isopropyl alcohol (67-63-0)		
Partition coefficient n-octanol/water	0.05 (at 25 °C)	
Toluene (108-88-3)		
Partition coefficient n-octanol/water	2.7	
Methane, dichloro- (75-09-2)		
BCF - Fish [1]	6.4 – 40	
Partition coefficient n-octanol/water	1.25	
Methanol (67-56-1)		
BCF - Fish [1]	< 10	
Partition coefficient n-octanol/water	-0.77	
Acetonitrile (75-05-8)		
Partition coefficient n-octanol/water	-0.34	
Sodium nitrate (7631-99-4)		
Partition coefficient n-octanol/water	-3.8 (at 25 °C)	

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

# **SECTION 14: Transport information**

#### Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT/TDG Not regulated for transport

#### **Additional information**

Other information : No supplementary information available

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



### Safety Data Sheet

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

### **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, except for:

Endosulfan sulfate	CAS-No. 1031-07-8	< 1%
Liluosullali sullate	CAS-NO. 1031-07-0	< 1 / U

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, except for:

Endosulfan sulfate CAS-No. 1031-07-8 < 1%		
	Endosulfan sulfate	< 1%

Isopropyl alcohol (67-63-0)	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission	1 % (only if manufactured by the strong acid process, no supplier
Reporting	notification)

Toluene (108-88-3)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
SARA Section 313 - Emission Reporting	1 %

Methane, dichloro- (75-09-2)	
Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	R - R - indicates a substance that is the subject of a TSCA section 6 risk management rule.
CERCLA RQ	1000 lb
SARA Section 313 - Emission Reporting	0.1 %

Methanol (67-56-1)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

Acetonitrile (75-05-8)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

Anthracene (120-12-7)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission	1 %
Reporting	

Benz[a]anthracene (56-55-3)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	10 lb
SARA Section 313 - Emission Reporting	0.1 %

Acenaphthene (83-32-9)	
CERCLA RQ	100 lb

Benzo(b)fluoranthene (205-99-2)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1 lb
SARA Section 313 - Emission Reporting	0.1 %

Acenaphthylene (208-96-8)	
CERCLA RQ	5000 lb

Hexane (110-54-3)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

Phenanthrene (85-01-8)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

Fluoranthene (206-44-0)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1 %

Naphthalene (91-20-3)	
Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	0.1 %

Pyrene (129-00-0)	
Listed on the United States SARA Section 302	
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 – 10000 lb

Chrysene (218-01-9)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1 %

Indeno[1,2,3-cd]pyrene (193-39-5)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	0.1 %

Dibenz[a,h]anthracene (53-70-3)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1 lb
SARA Section 313 - Emission Reporting	0.1 %

Fluorene (86-73-7)	
CERCLA RQ	5000 lb

Benzo(ghi)perylene (191-24-2)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

Benzo(k)fluoranthene (207-08-9)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	0.1 %

Benzo(a)pyrene (50-32-8)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1 lb
SARA Section 313 - Emission Reporting	0.1 %

.alphaHexachlorocyclohexane (319-84-6)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	10 lb
SARA Section 313 - Emission Reporting	0.1 %

.betaBHC (319-85-7)	
CERCLA RQ	1 lb



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CERCLA RQ

ecording to the Hazard Communication Standard (CF	R29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015	
Lindane (58-89-9)		
Listed on the United States SARA S Subject to reporting requirements of		
CERCLA RQ	1 lb	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 – 10000 lb	
SARA Section 313 - Emission Reporting	0.1 %	
Bisphenol A (80-05-7)		
Subject to reporting requirements of	f United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 %	
Heptachlor epoxide (1024-57-3)		
CERCLA RQ	1 lb	
.deltaBHC (319-86-8)		
CERCLA RQ	1 lb	
.betaEndosulfan (33213-65-9)		
CERCLA RQ	1 lb	
4,4'-Dichlorodiphenyltrichloroeth	ane (50-29-3)	
EPA TSCA Regulatory Flag	S - S - indicates a substance that is identified in a final Significant New Use Rule.	
CERCLA RQ	1 lb	
Dieldrin (60-57-1)		
CERCLA RQ	1 lb	
Heptachlor (76-44-8)		
Subject to reporting requirements of	FUnited States SARA Section 313	
CERCLA RQ	1 lb	
SARA Section 313 - Emission Reporting	0.1 %	
· · ·		
Endrin (72-20-8) Listed on the United States SARA S	Continu 202	
CERCLA RQ	1 lb	
SARA Section 302 Threshold	500 – 10000 lb	
Planning Quantity (TPQ)	300 - 10000 lb	
Methoxychlor (72-43-5)		
Subject to reporting requirements of	f United States SARA Section 313	
CERCLA RQ	1 lb	
SARA Section 313 - Emission Reporting	1 %	
DDD (72-54-8)		
·/		

1 lb

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

1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene (72-55-9)	
CERCLA RQ	1 lb

Endrin aldehyde (7421-93-4)	
CERCLA RQ	1 lb

Pentachlorophenol (87-86-5)		
Subject to reporting requirements of United States SARA Section 313		
CERCLA RQ	10 lb	
SARA Section 313 - Emission Reporting	0.1 %	

.aipha:-Endosulian (333-36-6)		
CERCLA RQ	1 lb	
Endosulfan sulfate (1031-07-8)		
CERCLA RQ	1 lb	

#### 15.2 US State regulations

No additional information available

alpha Endocultan (050-09-9)

#### **SECTION 16: Other information**

Issue date : 2021-03-11
Revision date : 2023-01-30
Other information : None.
Version # : 1.0

Prepared by : Nexreg Compliance Inc.

#### **DISCLAIMER:**

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