

Revision Date: 15.10.2020

# SAFETY DATA SHEET

## 1. Identification

Product identifier: Reagent Alcohol

Other means of identification

**Product No.:** 6183, 7019, 7284, 9229, 9401, A478

Recommended use and restriction on use

Recommended use: For Laboratory, Research or Manufacturing Use.

Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200

Radnor, PA 19087

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: Product Information Compliance E-mail: info@avantormaterials.com

**Emergency telephone number:** 

CHEMTREC: 1-800-424-9300 within US and Canada (24 hrs/day, 7 days/week)

#### 2. Hazard identification

#### **Hazard Classification**

#### **Physical Hazards**

Flammable liquids Category 2 Static-accumulating flammable liquid Category 1

**Health Hazards** 

Acute toxicity (Oral)

Acute toxicity (Dermal)

Acute toxicity (Inhalation - vapor)

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Toxic to reproduction

Specific Target Organ Toxicity 
Category 4

Category 4

Category 1

Category 1

Category 1

Category 2

Category 1

Single Exposure

# **Target Organs**

1. Central nervous system, Eyes

## **Unknown toxicity - Health**

Acute toxicity, oral 0 %
Acute toxicity, dermal 88 %
Acute toxicity, inhalation, vapor 88 %



Revision Date: 15.10.2020

#### **Label Elements**

#### **Hazard Symbol:**



Signal Word: Danger

**Hazard Statement:** Highly flammable liquid and vapor.

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

Causes serious eye irritation.
May cause respiratory irritation.
Suspected of damaging fertility.
May cause damage to organs.

Precautionary Statements

**Prevention:** 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. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting] equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in

a well-ventilated area.

**Response:** In case of fire: Use water spray, foam, dry powder or carbon dioxide for

extinction. IF exposed: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. 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. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse

mouth.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly

closed.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

## 3. Composition/information on ingredients



Revision Date: 15.10.2020

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	Content in percent (%)*
Isopropyl alcohol	, 2-Propanol	67-63-0	4,00 - 6,00%
Methanol	, Methyl alcohol	67-56-1	3,50 - 5,50%
Ethanol	, Ethyl alcohol	64-17-5	88,00 - 92,50%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# 4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

Ingestion: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

**Inhalation:** Move to fresh air. Get medical attention if symptoms occur.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if

symptoms occur. Wash contaminated clothing before reuse.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. If eye irritation persists: Get medical

advice/attention.

Most important symptoms/effects, acute and delayed

**Symptoms:** Harmful if inhaled. Harmful if swallowed. Irritating to eyes, respiratory

system and skin.

Hazards: None known.

Indication of immediate medical attention and special treatment needed

**Treatment:** Symptoms may be delayed. Treat symptomatically.

5. Fire-fighting measures

**General Fire Hazards:** In case of fire and/or explosion do not breathe fumes. Vapors may cause a

flash fire or ignite explosively.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing

media:

Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from

the chemical:

Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent

buildup of vapors or gases to explosive concentrations.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move

containers from fire area if you can do so without risk.



Revision Date: 15.10.2020

Special protective equipment for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up:

In case of leakage, eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Collect in a non-combustible container for prompt disposal. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures:** 

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

**Environmental Precautions:** 

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

# 7. Handling and storage

Precautions for safe handling:

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Use personal protective equipment as required. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8 of the SDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities:

Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

#### 8. Exposure controls/personal protection

#### **Control Parameters**

**Occupational Exposure Limits** 

Chemical Identity	Туре	<b>Exposure Limit Values</b>	Source
Ethanol	TWA	1.000 ppm 1.880 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Ethanol	STEL	1.000 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethanol	STEL	1.000 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Ethanol	STEL	1.000 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Ethanol	8 HR ACL	1.000 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	1.250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)



Revision Date: 15.10.2020

			(05 2009)
Ethanol	TWA	1.000 ppm 1.880 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Ethanol	STEL	1.000 ppm	US. ACGIH Threshold Limit Values (2011)
Isopropyl alcohol	STEL	400 ppm 984 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	TWA	200 ppm 492 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Isopropyl alcohol	TWA	200 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	400 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Isopropyl alcohol	TWA	200 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
	STEL	400 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Isopropyl alcohol	TWA	200 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	400 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Isopropyl alcohol	8 HR ACL	200 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	400 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Isopropyl alcohol	STEL	500 ppm 1.230 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	400 ppm 983 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Isopropyl alcohol	TWA	200 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	400 ppm	US. ACGIH Threshold Limit Values (2011)
Methanol	STEL	328 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	TWA	262 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Methanol	STEL	250 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	200 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Methanol	TWA	200 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
	STEL	250 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Methanol	STEL	250 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	TWA	200 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Methanol	15 MIN ACL	250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	8 HR ACL	200 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Methanol	STEL	250 ppm 328 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	200 ppm 262 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)



Revision Date: 15.10.2020

Methanol	TWA	200 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	250 ppm	US. ACGIH Threshold Limit Values (2011)

**Biological Limit Values** 

Chemical Identity	Exposure Limit Values	Source
Isopropyl alcohol (acetone: Sampling time: End of shift at	40 mg/l (Urine)	ACGIH BEI (03 2013)
end of work week.)		

**Appropriate Engineering** 

Controls

No data available.

#### Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area. Use explosion-proof ventilation equipment.

**Eyelface protection:** Wear safety glasses with side shields (or goggles). Wear face shield if there

is risk of splashes.

**Skin Protection** 

Hand Protection: Chemical resistant gloves

Other: Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator.

**Hygiene measures:** Provide eyewash station and safety shower. Always observe good personal

hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

## 9. Physical and chemical properties

## **Appearance**

Physical state: Liquid
Form: Liquid
Color: Colorless

Odor: Mild pleasant odor
Odor threshold: No data available.
pH: No data available.

Melting point/freezing point:  $-114 \,^{\circ}\text{C}$ Initial boiling point and boiling range:  $78 \,^{\circ}\text{C}$ Flash Point:  $13 \,^{\circ}\text{C}$ 

**Evaporation rate:**No data available. **Flammability (solid, gas):**No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): 19 %(V)
Flammability limit - lower (%): 3,3 %(V)

Explosive limit - upper (%):

No data available.

Explosive limit - lower (%):

No data available.

Vapor pressure: 8,1 kPa

SDS\_CA - SDSMIX000950



Revision Date: 15.10.2020

Vapor density:No data available.Density:0,79 g/ml (20 °C)Relative density:0,79 (20 °C)

Solubility(ies)

Solubility in water: Soluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: 422 °C

**Decomposition temperature:**No data available. **Viscosity:**No data available.

# 10. Stability and reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical Stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

**Conditions to avoid:** Heat, sparks, flames. Contact with incompatible materials.

Incompatible Materials: Strong oxidizing agents. Alkali metals. Inorganic salts. Organic -

organometallic. Inorganic hydrides.

**Hazardous Decomposition** 

**Products:** 

Thermal decomposition may release oxides of carbon.

## 11. Toxicological information

#### Information on likely routes of exposure

**Inhalation:** Harmful if inhaled. May cause irritation to the respiratory system.

**Skin Contact:** Harmful if absorbed through skin. Causes mild skin irritation.

**Eye contact:** Causes serious eye irritation.

**Ingestion:** Harmful if swallowed.

# Information on toxicological effects

# Acute toxicity (list all possible routes of exposure)

Oral

**Product:** ATEmix (Rat): 1.818,18 mg/kg

**Dermal** 

**Product:** No data available.



Revision Date: 15.10.2020

Specified substance(s):

Isopropyl alcohol LD 50 (Rabbit): 12.800 mg/kg

Methanol LD 50 (Rabbit): 15.800 mg/kg

Ethanol LDLo (Rabbit): 20.000 mg/kg

Inhalation

**Product:** No data available.

Specified substance(s):

Ethanol LC 50 (Rat): 116,9 - 133,8 mg/l

Repeated dose toxicity

**Product:** No data available.

Skin Corrosion/Irritation

**Product:** Causes mild skin irritation.

Serious Eye Damage/Eye Irritation

**Product:** Causes serious eye irritation.

Respiratory or Skin Sensitization

**Product:** Not a skin nor a respiratory sensitizer.

Carcinogenicity

**Product:** This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

**ACGIH Carcinogen List:** 

No carcinogenic components identified

**Germ Cell Mutagenicity** 

In vitro

**Product:** No mutagenic components identified

In vivo

**Product:** No mutagenic components identified

Reproductive toxicity

**Product:** May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure** 

**Product:** Central nervous system. Eyes. Respiratory tract irritation.

**Specific Target Organ Toxicity - Repeated Exposure** 

Product: None known.

**Aspiration Hazard** 



Revision Date: 15.10.2020

Product: Not classified

Other effects: None known.

## 12. Ecological information

## **Ecotoxicity:**

## Acute hazards to the aquatic environment:

Fish

**Product:** No data available.

Specified substance(s):

Isopropyl alcohol LC 50 (Fathead minnow (Pimephales promelas), 96 h): 5.770 - 11.130 mg/l

LC 50 (Harlequinfish, red rasbora (Rasbora heteromorpha), 96 h): 4.200

mg/l

LC 50 (Bluegill (Lepomis macrochirus), 96 h): > 1.400 mg/l

LC 50 (Western mosquitofish (Gambusia affinis), 96 h): > 1.400 mg/l

Methanol LC 50 (Bluegill (Lepomis macrochirus), 96 h): 15.400 mg/l

LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 19.500

- 20.700 mg/l

LC 50 (Fathead minnow (Pimephales promelas), 96 h): 28.500 - 30.400 mg/l

Ethanol LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 11.850

- 20.100 mg/l

LC 50 (Fathead minnow (Pimephales promelas), 96 h): 13.480 - 29.400 mg/l

LC 50 (Carp (Leuciscus idus melanotus), 48 h): 8.140 mg/l EC 50 (Fathead minnow (Pimephales promelas); Rainbow trout

(Oncorhynchus mykiss), 96 h): 12.900 - 28.900 mg/l

EC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 13.000

mg/l

**Aquatic Invertebrates** 

**Product:** No data available.

Specified substance(s):

Isopropyl alcohol EC 50 (Daphnia magna, 24 h): 9.714 mg/l

LC 50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 900 - 1.950

mg/l

Methanol LC 50 (Cockle (Cerastoderma edule), 48 h): 1.000 mg/l

EC 50 (Water flea (Daphnia obtusa), 48 h): 21.100 - 23.400 mg/l LC 50 (Water flea (Daphnia magna), 48 h): 2.461 - 4.395 mg/l

Ethanol EC 50 (Water flea (Daphnia obtusa), 48 h): 10.100 - 22.200 mg/l

LC 50 (Water flea (Daphnia magna), 48 h): 7.560 - 15.386 mg/l

LC 50 (Ceriodaphnia dubia, 48 h): 5.012 mg/l

EC 50 (Water flea (Daphnia magna), 48 h): > 10.000 mg/l

## Chronic hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.



Revision Date: 15.10.2020

**Toxicity to Aquatic Plants** 

**Product:** No data available.

Persistence and Degradability

**Biodegradation** 

**Product:** Expected to be readily biodegradable.

**BOD/COD** Ratio

**Product:** No data available.

Bioaccumulative potential

**Bioconcentration Factor (BCF)** 

**Product:** No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

Specified substance(s):

Isopropyl alcohol Log Kow: 0,05

Methanol Log Kow: -0,77

Ethanol Log Kow: -0,31

**Mobility in soil:** The product is water soluble and may spread in water systems.

Other adverse effects: The product components are not classified as environmentally hazardous.

However, this does not exclude the possibility that large or frequent spills

can have a harmful or damaging effect on the environment.

13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws. Residual vapors may explode on ignition; do not cut, drill, grind, or

weld on or near this container.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even

after container is emptied.

#### 14. Transport information

TDG

UN Number: UN 1987

UN Proper Shipping Name: ALCOHOLS, N.O.S. (ETHANOL, METHANOL, ISOPROPANOL)

Transport Hazard Class(es)

Class: 3
Label(s): 3
Packing Group: II
Marine Pollutant: No



Revision Date: 15.10.2020

Special precautions for user: Not determined.

**IMDG** 

UN Number: UN 1987

UN Proper Shipping Name: ALCOHOLS, N.O.S. (ETHANOL, METHANOL, ISOPROPANOL)

Transport Hazard Class(es)

Class: 3 Label(s): 3

EmS No.: F-E, S-D

Packing Group: II
Marine Pollutant: No

Special precautions for user: Not determined.

IATA

UN Number: UN 1987

UN Proper Shipping Name: Alcohols, n.o.s.(Ethanol, Methanol, Isopropanol)

Transport Hazard Class(es):

Class: 3
Label(s): 3

Packing Group: II

Marine Pollutant: No

Special precautions for user: Not determined.

Cargo aircraft only: Allowed.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

## 15. Regulatory information

## **Canada Federal Regulations**

List of Toxic Substances (CEPA, Schedule 1)

Not Regulated

# Export Control List (CEPA 1999, Schedule 3)

Not Regulated

#### **National Pollutant Release Inventory (NPRI)**

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional

**Reporting Requirements** 

NPRI PT5 Ethanollsopropyl alcoholMethanol

alconolivicularioi

#### Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI Isopropyl alcoholMethanol

#### **Greenhouse Gases**

Not Regulated

# **Controlled Drugs and Substances Act**

CA CDSI Not Regulated

CA CDSII Not Regulated

CA CDSIII Not Regulated

CA CDSIV Not Regulated

CA CDSV Not Regulated

CA CDSVII Not Regulated



Revision Date: 15.10.2020

CA CDSVIII Not Regulated

## **Precursor Control Regulations**

Not Regulated

#### International regulations

#### Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

#### Rotterdam convention

Not applicable

## **Kyoto protocol**

Not applicable

# **Inventory Status:**

Australia AICS:

Canada DSL Inventory List:

China Inv. Existing Chemical Substances:

On or in compliance with the inventory
On or in compliance with the inventory

Japan (ENCS) List:

On or in compliance with the inventory

Not in compliance with the inventory.

Korea Existing Chemicals Inv. (KECI):

Mexico INSQ:

On or in compliance with the inventory
On or in compliance with the inventory

New Zealand Inventory of Chemicals:

On or in compliance with the inventory
Philippines PICCS:

On or in compliance with the inventory

Taiwan Chemical Substance Inventory:

On or in compliance with the inventory

US TSCA Inventory:

EINECS, ELINCS or NLP:

On or in compliance with the inventory
On or in compliance with the inventory

## 16. Other information

**Revision Date:** 15.10.2020

Version #: 1.3

**Source of information:** Sources of information used in preparing this SDS included one or more of

the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other

manufacturer's SDSs and other sources, as appropriate.

Further Information: No data available.



Revision Date: 15.10.2020

#### Disclaimer:

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR PERFORMANCE MATERIALS ("AVANTOR") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of Avantor's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR DISCLAIMS LIABILITY FOR, AND BY USING AVANTOR'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL AVANTOR BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.