

SAFETY DATA SHEET

Version 8.1
Revision Date 29.04.2021
Print Date 30.04.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : Sodium standard dissolved in oil 1 g/kg Na
Certipur®

Product Number : 1.15058
Catalogue No. : 115058
Brand : Millipore

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

Identified uses : Reagent for analysis

1.3 Details of the supplier of the safety data sheet

Company : Millipore (Canada) Ltd.
2149 Winston Park Dr. , Oakville
ONTARIO L6H 6J8
CANADA

Telephone : +1 905 829 9500
Fax : +1 905 829 9500

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA)
+1-703-527-3887 CHEMTREC
(International)
24 Hours/day; 7 Days/week

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****GHS Classification in accordance with Hazardous Products Regulations (HPR)
(SOR/2015-17)**

Flammable liquids (Category 4), H227
Reproductive toxicity (Category 2), H361
Aspiration hazard (Category 1), H304
Short-term (acute) aquatic hazard (Category 3), H402

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Millipore - 1.15058

Page 1 of 16

Hazard statement(s)	
H227	Combustible liquid.
H304	May be fatal if swallowed and enters airways.
H361	Suspected of damaging fertility or the unborn child.
H402	Harmful to aquatic life.
Precautionary statement(s)	
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.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P331	Do NOT induce vomiting.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403	Store in a well-ventilated place.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

- none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component	Classification	Concentration *
paraffin oils		
CAS-No. 8012-95-1 EC-No. 232-384-2	Asp. Tox. 1; H304	>= 80 - <= 100 %
* Weight %		
2-ethylhexanoic acid		
CAS-No. 149-57-5 EC-No. 205-743-6 Index-No. 607-230-00-6	Repr. 2; H361	>= 5 - < 10 %
* Weight %		
m-xylene		
CAS-No. 108-38-3 EC-No. 203-576-3 Index-No. 601-022-00-9 Registration number 01-2119484621-37-XXXX	Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; Asp. Tox. 1; Aquatic Acute 2; Aquatic Chronic 3; H226, H332,	>= 1 - < 5 %

Millipore - 1.15058

Page 2 of 16

		H312, H315, H319, H335, H304, H401, H412	
* Weight %			
p-xylene			
CAS-No.	106-42-3	Flam. Liq. 3; Acute Tox. 4;	>= 1 - < 5 %
EC-No.	203-396-5	Skin Irrit. 2; STOT SE 3;	
Index-No.	601-022-00-9	Asp. Tox. 1; Aquatic Acute	
Registration number	01-2119484661-33-XXXX	2; Aquatic Chronic 3;	
		H226, H332, H312, H315, H335, H304, H401, H412	
* Weight %			

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂) Dry powder Foam

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Millipore - 1.15058

Page 3 of 16

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons.

Recommended storage temperature see product label.

Storage class (TRGS 510): 10: Combustible liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
paraffin oils	8012-95-1	TWA	5 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	10 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	5 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	10 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	1 mg/m ³	Canada. British Columbia OEL
		TWA	5 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
2-ethylhexanoic acid	149-57-5	TWA	5 mg/m ³	Canada. British Columbia OEL
Remarks	Adverse reproductive effect Vapour and aerosol.			
		TWA	5 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	5 mg/m ³	Canada. British Columbia OEL
	Adverse reproductive effect			
		TWA	5 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
m-xylene	108-38-3	TWA	100 ppm 434 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	150 ppm 651 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)

		TWAEV	100 ppm 434 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	150 ppm 651 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	100 ppm	Canada. British Columbia OEL
		STEL	150 ppm	Canada. British Columbia OEL
		TWA	100 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	150 ppm	USA. ACGIH Threshold Limit Values (TLV)
p-xylene	106-42-3	TWA	100 ppm	Canada. British Columbia OEL
		STEL	150 ppm	Canada. British Columbia OEL
		TWA	100 ppm 434 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	150 ppm 651 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	100 ppm 434 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	150 ppm 651 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	100 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	150 ppm	USA. ACGIH Threshold Limit Values (TLV)

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Viton®

Minimum layer thickness: 0.70 mm

Break through time: > 480 min

Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.40 mm

Break through time: > 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Body Protection

protective clothing

Respiratory protection

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|-------------------|----------------------------------|
| a) Appearance | Form: liquid
Color: colorless |
| b) Odor | of xylene |
| c) Odor Threshold | No data available |
| d) pH | No data available |
| e) Melting | No data available |

	point/freezing point	
f)	Initial boiling point and boiling range	No data available
g)	Flash point	ca.63 °C (145 °F)
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	insoluble
o)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Exothermic reaction with:

Bases

Oxidizing agents

Reducing agents

10.4 Conditions to avoid

Strong heating.

Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - > 5,000 mg/kg
(Calculation method)

Acute toxicity estimate Inhalation - 4 h - > 40 mg/l
(Calculation method)

Acute toxicity estimate Dermal - > 5,000 mg/kg
(Calculation method)
No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

Suspected of damaging the unborn child.
Suspected of damaging fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

11.2 Additional Information

Not available

Other dangerous properties can not be excluded.

Millipore - 1.15058

Page 9 of 16

This substance should be handled with particular care.

Components

paraffin oils

Acute toxicity

LD50 Oral - Rat - > 5,000 mg/kg

LC0 Inhalation - Rat - 4 h - 200 mg/m³

LD50 Dermal - Rabbit - > 2,000 mg/kg

Skin corrosion/irritation

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks:

Information taken from reference works and the literature.

Respiratory or skin sensitization

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

Specific target organ toxicity - single exposure

Specific target organ toxicity - repeated exposure

Aspiration hazard

May be fatal if swallowed and enters airways.

2-ethylhexanoic acid

Acute toxicity

LD50 Oral - Rat - 3,000 mg/kg

Inhalation: No data available

LD50 Dermal - Rat - > 2,000 mg/kg

(OECD Test Guideline 402)

No data available

Skin corrosion/irritation

Mild skin irritation

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Human
lymphocyte
Remarks:
Sister chromatid exchange

Carcinogenicity

Reproductive toxicity

Suspected human reproductive toxicant Suspected of damaging the unborn child.
No data available
No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

m-xylene

Acute toxicity

LD50 Oral - Rat - male - 3,523 mg/kg
(EC Directive 92/69/EEC B.1 Acute Toxicity (Oral))
Symptoms: Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis.

LC50 Inhalation - Rat - male and female - 4 h - 27.12 mg/l
(US-EPA)

Symptoms: Inhalation may lead to the formation of oedemas in the respiratory tract.

LD50 Dermal - Rabbit - male - 12,126 mg/kg

Remarks:
(ECHA)
(Regulation (EC) No 1272/2008, Annex VI)
No data available

Skin corrosion/irritation

Skin - Rabbit
Result: Moderate skin irritation - 4 h
(Regulation (EC) No. 440/2008, Annex, B.4)
Drying-out effect resulting in rough and chapped skin. After long-term exposure to the chemical: Dermatitis

Serious eye damage/eye irritation

Eyes - Rabbit
Result: Severe eye irritation - 24 h
Remarks:
(RTECS)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse
Result: negative
(OECD Test Guideline 429)

Germ cell mutagenicity

sister chromatid exchange assay
Chinese hamster ovary cells
Result: negative
Ames test
Salmonella typhimurium
Result: negative
Remarks:
(National Toxicology Program)
Mutagenicity (mammal cell test): chromosome aberration.
Chinese hamster ovary cells
Result: negative
OECD Test Guideline 478
Mouse - male and female
Result: negative
OECD Test Guideline 474
Mouse - male - Red blood cells (erythrocytes)
Result: negative
Remarks:
(IUCLID)

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Acute oral toxicity - Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis.

Acute inhalation toxicity - Inhalation may lead to the formation of oedemas in the respiratory tract.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

May be fatal if swallowed and enters airways.

p-xylene

Acute toxicity

LD50 Oral - Rat - male - 3,523 mg/kg

(EC Directive 92/69/EEC B.1 Acute Toxicity (Oral))

LC50 Inhalation - Rat - male and female - 4 h - 27.12 mg/l

(US-EPA)

Symptoms: Inhalation may lead to the formation of oedemas in the respiratory tract.

LD50 Dermal - Rabbit - male - 12,126 mg/kg

Remarks:

(ECHA)

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Moderate skin irritation - 4 h

(Regulation (EC) No. 440/2008, Annex, B.4)

Drying-out effect resulting in rough and chapped skin. Dermatitis

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Germ cell mutagenicity

Ames test

Salmonella typhimurium

Result: negative

Remarks:

(National Toxicology Program)

sister chromatid exchange assay

Chinese hamster ovary cells

Result: negative

Mutagenicity (mammal cell test): chromosome aberration.

Chinese hamster ovary cells

Result: negative

OECD Test Guideline 474

Mouse - male - Red blood cells (erythrocytes)

Result: negative

Remarks:

(IUCLID)

OECD Test Guideline 478

Mouse - male and female

Result: negative

Carcinogenicity**Reproductive toxicity**

No data available

May cause reproductive disorders.

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Acute inhalation toxicity - Inhalation may lead to the formation of oedemas in the respiratory tract.

Specific target organ toxicity - repeated exposure**Aspiration hazard**

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

Discharge into the environment must be avoided.

Components

paraffin oils

Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h
------------------	--

2-ethylhexanoic acid

No data available

m-xylene

Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 2.60 mg/l - 96 h (OECD Test Guideline 203)
------------------	--

Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata - 4.36 mg/l - 73 h (OECD Test Guideline 201)
-------------------	--

Toxicity to bacteria	Remarks: (ECHA)
----------------------	-----------------

p-xylene

Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 2.60 mg/l - 96 h (OECD Test Guideline 203)
------------------	--

Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 35.50 - 63.10 mg/l - 48 h Remarks: (ECOTOX Database)
---	---

Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata - 4.36 mg/l - 73 h
-------------------	---

(OECD Test Guideline 201)

Toxicity to bacteria static test NOEC - activated sludge - 16.2 mg/l - 28 h
Remarks: (ECHA)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

TDG

Not regulated as a dangerous good

IMDG

Not dangerous goods

IATA

Not dangerous goods

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Version: 8.1

Revision Date: 29.04.2021

Print Date: 30.04.2021