Safety Data Sheet

Date of Issue: 01.09.2020 Date of Expiry: 01.09.2025

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name: : **ECP Limited**
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Telephone: : +64 9 480 4386
Facsimile: : +64 9 480 4385
Emergency phone number: : 0800 243 622 (24 hours)

Product	**Sodium Dodecyl Sulfate**			**Code**	**46958, 48008**
CAS#	**HSNO#**	**UN #**	**DG Class/es**	**Packing group #**	
151-21-3	HSR003122	1325	4.1	III	

Recommended use : Laboratory Investigations

2: Hazards identification

2.1 GHS Classification

Flammable Solids (Category A), H228
Acute toxicity, Oral (Category D), H302
Acute toxicity, Dermal (Category C), H311
Skin irritation (Category A), H315
Eye irritation (Category A), H319
Aquatic toxicity (Acute or Chronic) (Category D), H401

2.2 GHS Label elements, including precautionary statements

Hazard Pictogram

Signal word **: Danger**

Hazard statement(s)

H228 : Flammable solid.
H302 : Harmful if swallowed.
H311 : Toxic in contact with skin.
H315 : Causes skin irritation.
H319 : Causes serious eye irritation.
H401 : Toxic to aquatic life.

Precautionary statement(s)

Prevention

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240 : Ground/bond container and receiving equipment.
P241 : Use explosion-proof electrical/ ventilating/ lighting equipment.
P264 : Wash skin thoroughly after handling.
P270 : Do not eat, drink or smoke when using this product.
P273 : Avoid release to the environment.
P280 : Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P312	: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302 + P352	: IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	: Call a POISON CENTER/doctor if you feel unwell.
P322	: Specific measures (see supplemental first aid instructions on this label).
P330	: Rinse mouth.
P332 + P313	: If skin irritation occurs: Get medical advice/ attention.
P337 + P313	: If eye irritation persists: Get medical advice/ attention.
P361	: Remove/Take off immediately all contaminated clothing.
P370 + P378	: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage

P405	: Store locked up.

Disposal

P501	: Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards - none

3: Composition/information on ingredients

Substance / Mixture : Substance

3.1 Substances

Synonyms : Lauryl sulfate sodium salt , Sodium dodecyl sulphate
Sodium dodecyl sulfate , Sodium lauryl sulfate , Dodecyl sodium sulfate
Dodecyl sulfate sodium salt

Molecular weight : 288.38 g/mol
CAS-No. : 151-21-3
EC-No. : 205-788-1

Hazardous components

Component	Classification	Concentration
Sodium dodecyl sulphate		
	4.1.1 A; 6.1 D; 6.1 C; 6.3 A; 6.4 A; 9.1 D; H228, H302, H311, H315, H319, H401 Concentration limits: 10 - < 20 %: Eye Irrit. 2, H319; >= 20 %: Eye Dam. 1, H318;	<= 100 %

4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.
Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Sulphur oxides, Sodium oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

6.4 Reference to other sections
For disposal see section 13.

7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
hygroscopic

8: Exposure controls/personal protection

8.1 Control parameters
We are not aware of any national exposure limit.

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment
Eye/face protection
Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	
Form	: Rods
Colour	: white
b) Odour	: odourless
c) Odour Threshold	: No data available
d) pH	: 9.1 at 10 g/l
e) Melting point/freezing point	
Melting point/range:	: 204 - 207 °C - lit.
f) Initial boiling point and boiling range	: No data available
g) Flash point	: 170 °C
h) Evaporation rate	: No data available
i) Flammability (solid, gas)	: The substance or mixture is a flammable solid with the category 2.
j) Upper/lower flammability or explosive limits	: No data available
k) Vapour pressure	: 0.002 hPa at 20 °C
l) Vapour density	: No data available
m) Relative density	: 0.370 g/cm3
n) Water solubility	: soluble
o) Partition coefficient: n-octanol/water	: log Pow: 0.83 at 22 °C
p) Auto-ignition temperature	: 310.5 °C
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
Solubility in other solvents : Ethanol - partly soluble
Surface tension : 25.2 mN/m at 23 °C
Dissociation constant : 1.31 at 20 °C

10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
Heat, flames and sparks.

10.5 Incompatible materials
Oxidizing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Sodium oxides
Other decomposition products - No data available
In the event of fire: see section 5

11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - female - 977 mg/kg
(OECD Test Guideline 401)
LD50 Dermal - Rabbit - > 2,000 mg/kg
(OECD Test Guideline 404)

Skin corrosion/irritation
Skin - Rabbit
Result: Irritations
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Irreversible effects on the eye
(OECD Test Guideline 405)

Respiratory or skin sensitisation
Maximisation Test
Result: negative
Remarks: (IUCLID)

Germ cell mutagenicity
Ames test
Salmonella typhimurium
Result: negative
Mutagenicity (mammal cell test):

Mouse lymphoma test
Result: negative

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
Inhalation - May cause respiratory irritation.
Acute oral toxicity - Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information
RTECS: WT1050000
sneezing, The sodium salt of dodecyl sulfate has been reported to cause pulmonary sensitization resulting in hyperactive airway dysfunction and pulmonary allergy accompanied by fatigue, malaise, and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes, and passive smoking.
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To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12: Ecological information

12.1 Toxicity
Toxicity to fish
flow-through test LC50 - Pimephales promelas (fathead minnow) - 29 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates
LC50 - Daphnia dubia (water flea) - 5.55 mg/l - 48 h
NOEC - Daphnia dubia (water flea) - 0.684 mg/l - 7 d

Toxicity to algae
Growth inhibition LOEC - Pseudokirchneriella subcapitata - 2.68 mg/l - 6 d
static test EC50 - Desmodesmus subspicatus (green algae) - > 120 mg/l - 72 h

12.2 Persistence and degradability
Biodegradability aerobic - Exposure time 28 d
Result: 95 % - Readily biodegradable.
(OECD Test Guideline 301B)
Ratio BOD/ThBOD 95.9 %

12.3 Bioaccumulative potential
Bioaccumulation Cyprinus carpio (Carp) - 72 h
(Sodium dodecyl sulphate)
Bioconcentration factor (BCF): 3.9 - 5.3

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
Toxic to aquatic life.

13: Disposal considerations

13.1 Waste treatment methods
Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	**UN Number**	1325	1325	1325
14.2	**UN Proper Shipping name**	FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodium dodecyl sulphate)	FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodium dodecyl sulphate)	Flammable solid, organic, n.o.s. (Sodium dodecyl sulphate)
14.3	**Transport Hazard Class**	4.1	4.1	4.1
14.4	**Packaging group**	III	III	III
14.5	**Environmental Hazards**	No	No	No
14.6	**Special precautions for user**	None		
14.7	**Incompatible materials**	Oxidizing agents		

15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulatory information
HSNO Approval Code: HSR003122
HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006
Tracking Required: not required
Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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