



MERCHEM LIMITED

SAFETY DATA SHEET

MERCIDE SEE 40%
MSDS No. 45/20.03.2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name Merside SEE 40%
Synonym Disodium ethylenebisdithiocarbamate in water

Use of the Substance/Mixture

Identified uses Biocide & water treatment chemical

1.3 Manufacturer or supplier's details

Company/Undertaking identification address Merchem Limited
Grove Centre,
44- Development Plot,
Kalamassery,
Cochin – 683 109, Kerala, India
Telephone + 91-484-4089300
Telefax + 91-484-4089310

1.4 Emergency Telephone Number

Emergency Telephone Number + 91-484-4089300

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to EU directives 67/548/EEC or 1999/45/EC

R22.
R37
R43
R50/53
Xn
Xi
N

EC Number: 205-547-0

Annex 1 Index Number: 006-014-00-3

REGULATION (EC) No. 1272/2008

Classification of the substance or mixture Acute toxicity, oral: cat 4; Sensitisation, Skin: cat 1; Hazardous to the aquatic environment, long-term hazard: cat 1

2.2 Label elements

Product Name Merside SEE 40%



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Hazard Pictogram



Signal word Warning

Hazard statement(s)

H302- Harmful if swallowed.
H317- May cause an allergic skin reaction.
H410-- Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)- Prevention

P264 - Wash skin thoroughly after handling
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) – Response

P363 - Wash contaminated clothing before reuse
P302 + P352 - IF ON SKIN: wash with plenty of soap and water.
P333 + P313 - IF SKIN irritation or rash occurs:
Get medical advice/attention.

Precautionary

P403 +P404 + P235-- Store in a dry place.
Store in a closed container. Keep cool.

Statement(s) - Storage

Precautionary statement(s) – Disposal

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

Supplemental Hazard Statements : None

2.3 Other hazards - none

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance is a mixture.

3.2 Mixtures

Chemical description : Disodium ethylenebisdithiocarbamate in water

Composition/Information on ingredients

Chemical Name	CAS No.	EC No.	Annex-1 Index No.	Weight %
Disodium ethylenebisdithiocarbamate	142-59-6	205-547-0	006-014-00-3	40 (approx.)
Water	7732-18-5	---	--	60(Approx.)



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SECTION 4: FIRST AID MEASURES

General Advice	If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Treat symptomatically. In case of allergic reaction after exposure, any future exposure must be avoided.
Inhalation	: If breathed in, move person into fresh air. If not breathing, give artificial Respiration. Consult a physician
Skin Contact	: In case of contact, immediately wash with plenty of soap and water Seek medical attention.
Eye Contact	: Rinse immediately as long as a possible with plenty of water. Seek medical advice if irritation persist
Ingestion	: 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

Harmful if swallowed. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects. Chemicals structurally related to tetraethylthiuram and other halogenated hydrocarbons properties have been previously investigated.

4.3 Indication of immediate medical attention and special treatment needed

No data available

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Specific hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Sodium oxides

5.3 Protective Equipment and Precautions for Firefighters

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- Use personal protective equipment.
- Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- Evacuate personnel to safe areas

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



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6.3 Methods and materials for containment and cleaning up

- Stop leakage if possible.
- Collect as much as possible in a clean container for (preferable) reuse or disposal.

6.4 Reference to other sections

See section 7,8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

- Avoid breathing vapors and mists.
- Avoid direct or prolonged contact with skin and eyes.
- Use personal protective equipment.
- The usual precautions for handling chemicals should be observed

7.2 Conditions for safe storage, including any incompatibilities

- Store in cool place.
- Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses

- A part from the uses mentioned in section 1.2 no further relevant information available

SECTION 8: EXPOSURE CONTROL/PERSONNEL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Engineering controls:
practice.

Handle in accordance with good industrial hygiene and safety

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 such as NIOSH (US) or EN 166(EU).

Skin Protection :

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing. 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 .



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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

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form	: Liquid
b) colour	: Light yellow
c) Odour	: Slight ammoniacal odor
d) pH	: 9.0-11.0
e) Melting point/range	: No data available
f) Boiling point /boiling range	: >100°C
g) Flash point	: No data available
h) Explosive propertive	: No data available
i) Flammability (solid, gas)	: No data available
j) Explosion Limits	: No data available
k) Vapour pressure	: approx. 2.2 kPa (20 °C)
l) Specific gravity	: 1.12 (approx.)
m) Vapour Density	: No data available
n) solubility	: Soluble in water
o) Partition coefficient	: No data available
p) Auto-ignitiontemperature	: No data available
q) Viscosity @25°C	: Not determined
r) Oxidizing properties	: No data available

9.2 Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

- See incompatible material

10.2 Chemical Stability

- Stable when stored at NTP in closed containers.
- Stable under normal conditions of handling, use & transportation

10.3 Possibility of hazardous reactions

- No data available



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10.4 Conditions to Avoid

- Keep away from heat, sparks and flame.. Avoid contact with strong oxidants.

10.5 Incompatible materials to avoid

- Oxidising agents, acids and alkalis.

10.6 Hazardous Decomposition Products

- Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Sodium oxides,Hydrogen sulphide

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity (LD50/oral/rat)	: 395 mg/kg
Inhalation	: Limited possibility of over-exposure.
Skin irritation	: May cause skin irritation./ Not sensitizing
Respiratory or skin sensitization	: May cause allergic skin reaction.
Eye Irritation	: May cause irritation or damage.
Ingestion	: Moderate oral Toxicity; may cause nausea, vomiting
Mutagenic Effects	: No data available
Reproductive toxicity	: No data available
Target Organ Effects	: No data available
Carcinogenicity	: 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.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Toxicity to fish LC50 - : Cyprinodon variegatus (sheepshead minnow) - 0,14 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates : EC50 - Daphnia magna (Water flea) - 0,14 - 5,60 mg/l - 48 h

Toxicity to algae Growth inhibition : EC50 - Chlorella pyrenoidosa - 2,4 mg/l - 96 h

12.2 Mobility in soil

No data available

12.3 Persistence and degradability

No data available.

12.4 Bioaccumulative Potential

No data available.

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Very toxic to aquatic life

12.7 Other information

Wastes are hazardous to environment and any disposal should be as per the local regulations .The components of this formulation are listed on Toxic Substances Control Act (TSCA).



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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method

Product

- Offer surplus and non-recyclable solutions to a licensed disposal company.
- Contact a licensed professional waste disposal service to dispose of this material.
- Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packing

- Clean and Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

14.1 Road transport (ADR/RID/ADN)

ADR/RID Class	9
UN-No	3077
Packing Group	III
"Hazard label"	Hazardous for the environment
Proper Shipping Name	Environmentally hazardous substance, liquid, N.O.S (Disodium ethylenebisdithiocarbamate)

14.2 Sea transport (IMDG)

Class	9
UN-No	3077
Packing Group	III
Marine pollutant	Yes
"Hazard label"	Hazardous for the environment
Proper Shipping Name	Environmentally hazardous substance, liquid, N.O.S (Disodium ethylenebisdithiocarbamate)

14.3 Air transport (ICAO-TI/IATA)

Class	9
UN-No	3077
Packing Group	III
Proper Shipping Name	Environmentally hazardous substance, liquid, N.O.S (Disodium ethylenebisdithiocarbamate)

14.4 Other information

No data available

14.5 Environmental hazards

Information on environmental hazards, if relevant, pls. see 14.1 - 14.3.

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant



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SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation 1907/2006 REGULATION (EC) No 1272/2008

Classification according to EU directives 67/548/EEC or 1999/45/EC

15.2 Chemical Safety Assessment

No data available

SECTION 16: OTHER INFORMATION

Issue No. 2
Issue date : 20.03.2015
Revision No. 0

Reason for revision Reviewed & revamped based on the guide lines of
Regulation (EC) No 1907/2006

Classification of dangerous substance directive (67/548/EEC)

List of relevant Risk-phrase(s)

- R22 Harmful if swallowed.
- R37 Irritating to respiratory system.
- R43 May cause sensitization by skin contact.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of relevant Safety phrase(s)

S8 Keep container dry.
S24/25 Avoid contact with skin and eyes.
S46 If swallowed, seek medical advice immediately and show this container or label.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets

Classification of dangerous substance directive (67/548/EEC)

- Xi - Irritants
- N - Substances or preparations those are dangerous for the environment
- Xn-Harmful

Training advice

Provide adequate information, instruction and training to operators

Further information for the material safety data sheet

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

End of Material Safety Data Sheet