



MERCHEM LIMITED

SAFETY DATA SHEET

MERCIDE SM 40%
MSDS No. 43/20.03.2015

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

1.1 Product Identifier

Product Name Merside SM 40%
Synonym Sodium Dimethyl dithio carbamate in water

1.2 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

R 22

R 36

R 50

N

EC Number: 204-876-7

Annex 1 Index Number: Nil

REGULATION (EC) No. 1272/2008

Classification of the substance or mixture Acute toxicity, oral Cat.4, Serious eye damage/eye irritation Cat.2A; Hazardous to the aquatic environment, acute hazard Cat1

2.2 Label elements

Product Name Mercide SM

Hazard pictograms





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Signal Word Warning

Hazard Statements

- H302 Harmful if swallowed
- H319 Causes serious eye irritation.
- H400 Very toxic to aquatic life

Precautionary Statements - Prevention

- P264:** Wash hands thoroughly after handling.
- P270:** Do not eat, drink or smoke when using this product.
- P280:** Wear protective gloves/protective clothing/eye protection/face protection
- P273** Avoid release to the environment

Precautionary Statements – Response

- P330:** Rinse mouth
- P301 + P312:** IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell
- P337 + P313;** IF eye irritation persists: Get medical advice/attention
- P305+P351+P338;** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P391:** Collect spillage. Hazardous to the aquatic environment

Precautionary Statements – Storage

- P402:** Store in a dry place.
- P404:** Store in a closed container.
- P403 + P235:** Store in a well-ventilated place. Keep cool.

Precautionary Statements - 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

Substance is a mixture.

3.2 Mixtures

Chemical description : sodium dimethy dithio carbamate in water



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Composition/Information on ingredients

Chemical Name	CAS No.	EC No.	Annex-1 Index No.	Weight %
Sodium dimethyl dithio carbamate	128-04-1	204-876-7	-	40(Approx.)
Water	7732-18-5	-	-	60(Approx.)

SECTION 4: FIRST AID MEASURES

4.1 Description of 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 if respiratory irritation or distress continues.
- Skin Contact** : In case of contact, immediately wash with plenty of soap and water. Seek medical attention.
- Eye Contact** : Rinse immediately as long as possible with plenty of water. Seek medical advice if irritation persists.
- Ingestion** : If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave victim unattended..

4.2 Most important symptoms and effects, both acute and delayed

5 Nausea, Vomiting, Diarrhea, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly 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.



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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.

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

Stop leakage if possible. Collect as much as possible in a clean container for (preferable) reuse or disposal. Cover the remainder with inert absorbent (e.g. vermiculite) for 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. The usual precautions for handling chemicals should be observed

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry and cool place (20-25 °C). Keep container tightly closed.

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

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 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

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



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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	: Amine like
d) pH	: 9.0-10.0
e) Melting point/range	: <0°C
f) Boiling point /boiling range	: >100°C
g) Flash point	: No data available
h) Explosive property	: 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	: 1.10 -1.20 @ RT
m) solubility	: Soluble in water
n) Partition coefficient	: No data available
o) Auto-ignition temperature	: No data available
p) Viscosity @25°C	: Not determined
q) Oxidizing properties	: No data available

9.2 Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

See Incompatible Materials

10.2 Chemical Stability

Stable under recommended storage and handling conditions (See section 7)

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to Avoid

Avoid temperature above 30°C

10.5 Incompatible materials to avoid

Oxidizing agents & strong Acids

10.6 Hazardous Decomposition Products

Thermal decomposition: Carbon di sulfide and Amine

10.7 Other information

During the vulcanization process, traces of carcinogenic nitrosamines may be formed.



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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity (LD50/oral/rat)	: 5150 mg/kg (Aqueous solution, 40 %)
Acute dermal toxicity (LD50/dermal/rat)	: > 5000 mg/kg (Aqueous solution, 40 %)
Inhalation	: No data available
Eye irritation	: Irritating to eyes
Skin irritation/Sensitization	: Slightly irritating to skin but not sufficient for classification .Not sensitizing
Mutagenic Effects	: No data available
Reproductive toxicity	: No data available
Carcinogenic effects	: No data available
Target Organ Effects	: No data available
Chronic Toxicity	: 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

Ecotoxicity

Fish	96h-LC50 (Oncorhynchus mykiss, OECD 203): 0.76 mg/l. 96h-LC50 (Poecilia reticulata): 2.6 mg/l (Lit.).
Daphnia	48h-EC50 (Daphnia magna, OECD 202): 0.67 mg/l
Algae	96h-IC50 (Raphidocelis subcapitata, OECD 201): 0.19 - 0.26 mg/l. 96h-IC50 (Chlorella pyrenoidosa): 0.8 mg/l (Lit.).
Bacteria	3h-EC50 (OECD 209): 3.65 mg/l.
Degradation Abiotic	Hydrolytically unstable at pH (Lit.): 3.8: t1/2 = 0.04 hours (20 °C) 5.7: t1/2 = 2.4 hours (20 °C) 7.0: t1/2 = 62 hours (20 °C) 8.0: t1/2 = 483 hours (20 °C) 9.0: t1/2 = 111 days (20 °C)
Bioaccumulation	Bio Concentration Factor (BCF) (calculated): 3.16 (EPIWIN v3.10)

12.2 Mobility in soil

No data available

12.3 Persistence and degradability

No data available.

12.4 Bioaccumulative Potential

No data available.



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12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

12.7 Other information

Do not allow product to reach ground water, water course or sewage system.

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	3082
Packing Group	III
"Hazard label"	Hazardous for the environment
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Sodium Dimethyl dithio carbamate)

14.2 Sea transport (IMDG)

ADR/RID Class	9
UN-No	3082
Packing Group	III
Marine pollutant	Yes
"Hazard label"	Hazardous for the environment
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Sodium Dimethyl dithio carbamate)

14.3 Air transport (ICAO-TI/IATA)

ADR/RID Class	9
UN-No	3082
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Sodium Dimethyl dithio carbamate)

14.4 Other information

No data available

14.5 Environmental hazards

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



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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

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

For this product a chemical safety assessment was not carried out

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 R(isk)-phrase(s)

R 22 Harmful if swallowed
R36 Irritating to eyes
R50 Very toxic to aquatic organisms

List of relevant S(afety)-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S61 Avoid release to the environment

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

N Substances or preparations those are dangerous for the environment

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