MATERIAL SAFETY DATA SHEET

SODIUM DIMETHYL DITHIO CARBAMATE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SDMDC 40% Solution
Company Identification: 237/2, Vellivoyal Chavadi
Chennai – 600 103. Tamilnadu
Office Telephone No: 044 64606747

2. COMPOSITION / INFORMATION OF INGREDIENTS

Chemical description: Sodium Dimethyl Dithio Carbamate

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NO.</th>
<th>EINECS NO.</th>
<th>WT%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Dimethyl Dithio Carbamate</td>
<td>128-04-1</td>
<td>204-876-7</td>
<td>39-41</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>-</td>
<td>59-61</td>
</tr>
</tbody>
</table>

3. HAZARD IDENTIFICATION

Classification according to EU directives 67/548/EEC or 1999/45/EC REGULATION (EC) No. 1272/2008

Classification of the substance or mixture:
Acute toxicity, oral Cat.4, Serious eye damage / eye irritation Cat.2 A; Hazardous to the aquatic environment, acute hazard Cat 1

Label elements:

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
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 in to 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.

Most important symptoms and effects, both acute and delayed
Nausea, Vomiting, Diarrhea. To the best of our knowledge, the chemical, physical, and toxicological Properties have not been thoroughly investigated.

5. FIRE FIGHTING MEASURES

Extinguishing Media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture:
Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Sodium oxides

Protective Equipment and Precautions for Firefighters
Fire fighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective Clothing.

6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

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.

Methods and material 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.

7. **HANDLING AND STORAGE**

Precautions for safe handling:
Avoid breathing vapors and mists. Avoid director prolonged contact with skin and eyes. The usual precautions for handling chemicals should be observed.

Conditions for safe storage, including any incompatibilities & Storage:
Store in a dry and cool place (20-25°C). Keep container tightly closed.

8. **EXPOSURE CONTROL / PERSONAL PROTECTION**

Control parameters
Components with work place control parameters

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

Engineering Controls:

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)orEN166(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.

Environmental exposure controls:
Prevent further leakage or spillage if safe to do so. Do not let Product enter drains. Discharge in to the environment must be avoided.
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid
Colour: Light yellow
Odour: Amine like
pH-value: 9.0-10.0
Flash point: No data available
Explosive propertive: No data available
Flammability (solid, gas): No data available
Explosion Limits: No data available
Vapour pressure: approx. 2.2 kPa (20 °C)
Specific gravity: 1.10 -1.20 @ RT
Solubility: Soluble in water
Partition coefficient: No data available
Auto-ignition temperature: No data available
Viscosity @25°C: No data available
Oxidizing properties: No data available

10. STABILITY AND REACTIVITY

Reactivity See In compatible Materials
Chemical stability Stable under recommended storage and handling conditions
Possibility of hazardous reactions No data available
Conditions to avoid Avoid temperature above 30°C
Incompatible materials: Oxidizing agents & strong Acids
Hazardous decomposition products: Carbon disulfide and Amine

11. TOXICOLOGICAL INFORMATION

Acute toxicity:
(LD50/oral/rat) 5150 mg/ kg (Aqueous solution, 40%)
Acute dermal toxicity(LD50/dermal/rat) >5000mg/ kg (Aqueous solution, 40%)
Inhalation: No data available
Skin irritation / sensitisation Slightly irritating to skin but not sufficient for classification.
Not sensitizing
Reproductive toxicity: No data available
Eye irritation Irritating to eye
Germ cell mutagenicity: No data available
Carcinogenicity: No data available

12. ECOLOGICAL INFORMATION
Eco toxicity:

Fish
- 96h-LC50 (On corhynchusmykiss, OECD203): 0.76 mg/l.
- 96h-LC50 (Poeciliareticulata): 2.6 mg/l (Lit.)

Daphnia
- 48h-EC50 (Daphniamagna, OECD202): 0.67 mg/l

Algae
- 96 h-IC50 (Raphidocelissubcapitata, OECD201): 0.19 - 0.26 mg/l.
- 96h-IC50 (Chlorelapyrenoidosa): 0.8 mg/l (Lit.).

Mobility in soil
- No data available

Persistence and degradability:
- No data available

Bio accumulative potential:
- No data available

Results of PBT and vPvB assessment:
- No data available

13. **DISPOSAL CONSIDERATIONS**

Waste Disposal methods

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 after burner and scrubber.

Contaminated Packing
- Clean and Dispose of as unused product

14. **TRANSPORT INFORMATION**

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.

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.

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.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
Classification according to EU directives 67/548/ EEC or 1999/45/EC
Chemical safety assessment: For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

Emergency seek Medical Aid