# SAFETY DATA SHEET

# M-M-R Formulation

| Version | Revision Date: | SDS Number: | Date of last issue: 30.09.2023 |
|---|---|---|---|
| 5.0 | 28.09.2024 | 81069-00024 | Date of first issue: 26.03.2015 |

## SECTION 1. IDENTIFICATION

Product identifier : M-M-R Formulation

**Manufacturer or supplier's details**

Company : MSD

Address : Avenue Comendador Antônio Loureiro Ramos,
nº 1500 – Distrito Industrial
Montes Claros – MG, Brazil 39404-620

Telephone : +55 (38) 3229 7000

Emergency telephone : +55 (38) 3201 5670

E-mail address : EHSDATASTEWARD@msd.com

**Recommended use of the chemical and restrictions on use**

Recommended use : Pharmaceutical
Restrictions on use : Not applicable

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification in accordance with ABNT NBR 14725 Standard**

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 3

**GHS label elements in accordance with ABNT NBR 14725 Standard**

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements :

**Prevention:**

P273 Avoid release to the environment.

**Response:**

P391 Collect spillage.

**Other hazards which do not result in classification**

Dust contact with the eyes can lead to mechanical irritation.
Contact with dust can cause mechanical irritation or drying of the skin.
May form explosive dust-air mixture during processing, handling or other means.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name | CAS-No. | Classification | Concentration (% w/w) |
|---|---|---|---|
| Sodium chloride | 7647-14-5 | Acute Tox. (Oral), 5 | >= 5 -< 10 |
| Sucrose | 57-50-1 | | >= 1 -< 5 |
| Neomycin, sulfate (salt) | 1405-10-3 | Acute Tox. (Oral), 5<br>Skin Sens., 1B<br>Repr., 2<br>STOT RE, (Kidney, inner ear) , 2<br>Aquatic Acute, 1<br>Aquatic Chronic, 1 | >= 0,025 -< 0,1 |

## SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap.
Get medical attention if symptoms occur.

In case of eye contact : If in eyes, rinse well with water.
Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed : Contact with dust can cause mechanical irritation or drying of the skin.
Dust contact with the eyes can lead to mechanical irritation.

Protection of first-aiders : No special precautions are necessary for first aid responders.

Notes to physician : Treat symptomatically and supportively.

## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media : None known.

| | | |
|---|---|---|
| Specific hazards during fire fighting | : | Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.<br>Exposure to combustion products may be a hazard to health. |
| Hazardous combustion products | : | Carbon oxides<br>Metal oxides<br>Chlorine compounds<br>Oxides of phosphorus<br>Phosphorus compounds<br>Nitrogen oxides (NOx) |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers.<br>Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area. |
| Special protective equipment for fire-fighters | : | Wear self-contained breathing apparatus for firefighting if necessary.<br>Use personal protective equipment. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8). |
| Environmental precautions | : | Avoid release to the environment.<br>Prevent further leakage or spillage if safe to do so.<br>Retain and dispose of contaminated wash water.<br>Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : | Sweep up or vacuum up spillage and collect in suitable container for disposal.<br>Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).<br>Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.<br>Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.<br>Sections 13 and 15 of this SDS provide information regarding certain local or national requirements. |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Technical measures | : | Static electricity may accumulate and ignite suspended dust |

causing an explosion.
Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Do not breathe dust.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Minimize dust generation and accumulation.
Keep container closed when not in use.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.

Conditions for safe storage : Keep in properly labeled containers.
Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:
Strong oxidizing agents

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| Sucrose | 57-50-1 | TWA | 10 mg/m³ | ACGIH |
| Neomycin, sulfate (salt) | 1405-10-3 | TWA | 1 mg/m3 (OEB 1) | Internal |
| | Further information: DSEN, OTO | | | |
| | | Wipe limit | 0.1 mg/100 cm² | Internal |

**Engineering measures** : Ensure adequate ventilation, especially in confined areas.
Minimize workplace exposure concentrations.
Apply measures to prevent dust explosions.
Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

**Personal protective equipment**

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Particulates type

Hand protection

Material : Chemical-resistant gloves

Remarks : For prolonged or repeated contact use protective gloves.

| | | |
|---|---|---|
| | | Wash hands before breaks and at the end of workday. |
| Eye protection | : | Wear the following personal protective equipment: Safety goggles |
| Skin and body protection | : | Skin should be washed after contact. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Physical state | : | lyophilized cake |
| Color | : | light yellow |
| Odor | : | No data available |
| Odor Threshold | : | No data available |
| pH | : | No data available |
| Melting point/freezing point | : | Not applicable |
| Initial boiling point and boiling range | : | Not applicable |
| Flash point | : | Not applicable |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | May form explosive dust-air mixture during processing, handling or other means. |
| Flammability (liquids) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Density | : | No data available |
| Solubility(ies) | | |
| Water solubility | : | soluble |
| Partition coefficient: n-octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, kinematic | : | No data available |

| | | |
|---|---|---|
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |
| Molecular weight | : | Not applicable |
| Particle characteristics | | |
| Particle size | : | No data available |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | Not classified as a reactivity hazard. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | May form explosive dust-air mixture during processing, handling or other means.<br>Can react with strong oxidizing agents. |
| Conditions to avoid | : | Heat, flames and sparks.<br>Avoid dust formation. |
| Incompatible materials | : | Oxidizing agents |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

| | | |
|---|---|---|
| Information on likely routes of exposure | : | Inhalation<br>Skin contact<br>Ingestion<br>Eye contact |

**Acute toxicity**

Not classified based on available information.

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | Acute toxicity estimate: > 5.000 mg/kg<br>Method: Calculation method |

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): 3.550 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): > 42 mg/l<br>Exposure time: 1 h<br>Test atmosphere: dust/mist |
| Acute dermal toxicity | : | LD50 (Rabbit): > 5.000 mg/kg |

**Sucrose:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): 29.700 mg/kg |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Mouse): 2.880 mg/kg<br><br>LD50 (Rat): 2.750 mg/kg |
| Acute toxicity (other routes of administration) | : | LD50 (Rat): 633 mg/kg<br>Application Route: Subcutaneous<br><br>LD50 (Mouse): 116 mg/kg<br>Application Route: Intraperitoneal<br><br>LD50 (Mouse): 27,6 mg/kg<br>Application Route: Intravenous<br><br>LD50 (Mouse): 275 mg/kg<br>Application Route: Subcutaneous |

**Skin corrosion/irritation**

Not classified based on available information.

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No skin irritation |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | Mild skin irritation |

**Serious eye damage/eye irritation**

Not classified based on available information.

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No eye irritation |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No eye irritation |

**Respiratory or skin sensitization**

**Skin sensitization**

Not classified based on available information.

**Respiratory sensitization**

Not classified based on available information.

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Test Type | : | Local lymph node assay (LLNA) |
| Routes of exposure | : | Skin contact |
| Species | : | Mouse |
| Result | : | negative |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Routes of exposure | : | Dermal |
| Species | : | Humans |
| Result | : | positive |

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test<br>Result: positive<br><br>Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative<br><br>Test Type: Saccharomyces cerevisiae, gene mutation assay (in vitro)<br>Result: positive<br><br>Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)<br>Result: positive<br><br>Test Type: Chromosome aberration test in vitro<br>Result: positive<br><br>Test Type: Chromosome aberration test in vitro<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: In vivo micronucleus test<br>Species: Mouse<br>Application Route: Intraperitoneal injection<br>Result: negative<br><br>Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)<br>Species: Rat<br>Application Route: Intraperitoneal injection<br>Result: positive |
| Germ cell mutagenicity - Assessment | : | Weight of evidence does not support classification as a germ cell mutagen. |

**Sucrose:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative<br><br>Test Type: In vitro mammalian cell gene mutation test<br>Test system: Chinese hamster ovary cells<br>Result: negative<br><br>Test Type: Chromosomal aberration<br>Test system: Human lymphocytes<br>Result: positive<br><br>Test Type: in vitro micronucleus test<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Cytogenetic assay<br>Species: Mouse<br>Cell type: Bone marrow<br>Application Route: Intravenous injection<br>Result: negative |

**Carcinogenicity**

Not classified based on available information.

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Species | : | Rat |
| Application Route | : | Ingestion |
| Exposure time | : | 2 Years |
| Result | : | negative |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Species | : | Rat |
| Exposure time | : | 2 Years |
| Result | : | negative |

**Reproductive toxicity**

Not classified based on available information.

**Components:**

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Effects on fertility | : | Test Type: Three-generation reproduction toxicity study<br>Species: Rat<br>Application Route: Oral<br>General Toxicity Parent: NOAEL: 25 mg/kg body weight<br>Result: No effects on fertility and early embryonic development were detected. |

| | | |
|---|---|---|
| Effects on fetal development | : | Test Type: Embryo-fetal development<br>Species: Rat<br>Application Route: Oral<br>Embryo-fetal toxicity.: NOAEL: 275 mg/kg body weight<br>Result: No adverse effects., No teratogenic effects.<br><br>Test Type: Development<br>Species: Rat<br>Application Route: Subcutaneous<br>Developmental Toxicity: LOAEL: 6 mg/kg body weight<br>Result: positive |
| Reproductive toxicity - Assessment | : | Some evidence of adverse effects on development, based on animal experiments. |

**STOT-single exposure**

Not classified based on available information.

**STOT-repeated exposure**

Not classified based on available information.

**Components:**

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Target Organs | : | Kidney, inner ear |
| Assessment | : | May cause damage to organs through prolonged or repeated exposure. |
| Remarks | : | Based on human experience. |

**Repeated dose toxicity**

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Species | : | Rat |
| LOAEL | : | 2.533 mg/kg |
| Application Route | : | Ingestion |
| Exposure time | : | 2 y |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Species | : | Mouse |
| LOAEL | : | 30 mg/kg |
| Application Route | : | Subcutaneous |
| Exposure time | : | 14 d |
| Target Organs | : | Kidney |

| | | |
|---|---|---|
| Species | : | Guinea pig |
| NOAEL | : | 50 mg/kg |
| LOAEL | : | 100 mg/kg |
| Application Route | : | Intramuscular |
| Exposure time | : | 30 - 60 Weeks |
| Target Organs | : | ear |

| | | |
|---|---|---|
| Species | : | Guinea pig |
| NOAEL | : | 10 mg/kg |
| Application Route | : | Oral |
| Exposure time | : | 90 d |
| Remarks | : | No significant adverse effects were reported |

| | | |
|---|---|---|
| Species | : | Guinea pig |
| LOAEL | : | 100 mg/kg |
| Application Route | : | Subcutaneous |
| Exposure time | : | 34 d |

| | | |
|---|---|---|
| Species | : | Dog |
| LOAEL | : | 24 mg/kg |
| Application Route | : | Intramuscular |
| Exposure time | : | 30 d |
| Target Organs | : | Kidney |

| | | |
|---|---|---|
| Species | : | Rat |
| LOAEL | : | 25 mg/kg |
| Application Route | : | oral (feed) |
| Exposure time | : | 84 Weeks |
| Target Organs | : | ear |
| Symptoms | : | hearing loss |
| Remarks | : | mortality observed |

| | | |
|---|---|---|
| Species | : | Dog |
| LOAEL | : | 20 mg/kg |
| Application Route | : | Subcutaneous |
| Exposure time | : | 90 d |
| Target Organs | : | Kidney |

**Aspiration toxicity**

Not classified based on available information.

**Experience with human exposure**

**Components:**

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Skin contact | : | Symptoms: Sensitization<br>Remarks: May irritate skin. |
| Eye contact | : | Remarks: May cause eye irritation. |
| Ingestion | : | Symptoms: Nausea, Vomiting, Diarrhea, tinnitus, hearing loss, Loss of balance |

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**Sodium chloride:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Lepomis macrochirus (Bluegill sunfish)): 5.840 mg/l<br>Exposure time: 96 h |

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 4.136 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50: > 2.000 mg/l<br>Exposure time: 96 h |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Pimephales promelas (fathead minnow)): 252 mg/l<br>Exposure time: 33 d |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia pulex (Water flea)): 314 mg/l<br>Exposure time: 21 d |
| Toxicity to microorganisms | : | EC10: > 1.000 mg/l |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 72 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202<br><br>LC50 (Americamysis): 39 mg/l<br>Exposure time: 96 h<br>Method: US-EPA OPPTS 850.1035 |
| Toxicity to algae/aquatic plants | : | EC50 (Anabaena flos-aquae (cyanobacterium)): 0,00075 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br><br>NOEC (Anabaena flos-aquae (cyanobacterium)): 0,0003 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br><br>EC50 (Pseudokirchneriella subcapitata (green algae)): 0,0099 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br><br>NOEC (Pseudokirchneriella subcapitata (green algae)): 0,0022 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| M-Factor (Acute aquatic toxicity) | : | 1.000 |
| M-Factor (Chronic aquatic toxicity) | : | 10 |
| Toxicity to microorganisms | : | EC50 (Natural microorganism): 107,6 mg/l<br>Exposure time: 3 h<br>Test Type: Respiration inhibition<br>Method: OECD Test Guideline 209<br><br>EC10 (Natural microorganism): 2,8 mg/l<br>Exposure time: 3 h<br>Test Type: Respiration inhibition<br>Method: OECD Test Guideline 209 |

**Persistence and degradability**

**Components:**

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Biodegradability | : | Result: rapidly degradable<br>Biodegradation: 50 %<br>Exposure time: 1,2 d<br>Method: OECD Test Guideline 314 |

**Bioaccumulative potential**

**Components:**

**Sucrose:**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | Pow: < 1 |

**Neomycin, sulfate (salt):**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: < -2 |

**Mobility in soil**

No data available

**Other adverse effects**

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| Waste from residues | : | Do not dispose of waste into sewer.<br>Dispose of in accordance with local regulations. |
| Contaminated packaging | : | Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>If not otherwise specified: Dispose of as unused product. |

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**

**UNRTDG**

| | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.<br>(Neomycin, sulfate (salt)) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| Environmentally hazardous | : | yes |

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 3077 |
| Proper shipping name | : | Environmentally hazardous substance, solid, n.o.s. |

(Neomycin, sulfate (salt))

| | | |
|---|---|---|
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | Miscellaneous |
| Packing instruction (cargo aircraft) | : | 956 |
| Packing instruction (passenger aircraft) | : | 956 |
| Environmentally hazardous | : | yes |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.<br>(Neomycin, sulfate (salt)) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| EmS Code | : | F-A, S-F |
| Marine pollutant | : | yes |

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

Not applicable for product as supplied.

**Domestic regulation**

**ANTT**

| | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.<br>(Neomycin, sulfate (salt)) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| Hazard Identification Number | : | 90 |

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

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

| | | |
|---|---|---|
| National List of Carcinogenic Agents for Humans - (LINACH) | : | Not applicable |
| Brazil. List of chemicals controlled by the Federal Police | : | Not applicable |

**The ingredients of this product are reported in the following inventories:**

| | | |
|---|---|---|
| AICS | : | not determined |

| | | |
|---|---|---|
| DSL | : | not determined |
| IECSC | : | not determined |

## SECTION 16. OTHER INFORMATION

| | | |
|---|---|---|
| Revision Date | : | 28.09.2024 |
| Date format | : | dd.mm.yyyy |

**Further information**

| | | |
|---|---|---|
| Sources of key data used to compile the Material Safety Data Sheet | : | Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/ |

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| ACGIH / TWA | : | 8-hour, time-weighted average |

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

BR / Z8