

Name of the Product Murashige & Skoog Medium Code No. PT 1011 Section 1 : Chemical Identification Code No. : PT 1011 Name of the Product : Murashige & Skoog Medium Produced by : Central Drug House Pvt. Ltd. Address : 7/28 Vardaan House, Darya Ganj, New Delhi (INDIA) Tel. No. : 00 91 11 49404040	
Section 2	Hazards Identification 2.1 Classification of the substance or mixture CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP] Oxidising solids, (Category 3), H272 Acute toxicity, Oral, (Category 4), H302 Skin corrosion or irritation, (Category 2), H315 Serious eye damage or eye irritation, (Category 2A), H319 Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335 Hazardous to the aquatic environment, long term hazard, (Category 2), H411 For the full text of the H-Statements mentioned in this Section, See Section 16 2.2 Label elements Labeling according to Regulation (EC) No.1272/2008  GHS07  GHS03 Pictogram Signal word Hazard Statement(s) H272 H302 H315 H319 H335 H411 Precautionary Statement(s) P210 P273 P280 P301+P330+P331+P310 P305+P351+P338 P370 + P378 P391 Warning May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye irritation May cause respiratory irritation Toxic to aquatic life with long lasting effects Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of fire: Use suitable extinguishing media for extinction. Collect spillage. Hazardous to the aquatic environment 2.3 Other Hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



Material Safety Data Sheet

Section 3	Composition/Information On Ingredients		
	3.1	Mixture	



Material Safety Data Sheet

		CAS No. : 7758-98-7 EC No. : 231-847-6	As Per EC Regulation 1272/2008 Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A; Aquatic Chronic 1 H302; H315; H319; H410 As Per EC Directive 67/548/EEC or 1999/45/EC Xn; Xi; N R22; R36/38; R50/53	>=0.0001 - <=0.0002%									
		<table><tr><th>Component</th><th>Classification</th><th>Concentration</th></tr><tr><td colspan="3">Iron (II) sulphate,7H2O</td></tr><tr><td>CAS No. : 7782-63-0 EC No. : 231-753-5 Index-No.: 026-003-01-4</td><td>As Per EC Regulation 1272/2008 Acute Tox.oral 4; Skin Irrit. 2 H302;H315</td><td>>=0.05 - <=0.1%</td></tr></table>			Component	Classification	Concentration	Iron (II) sulphate,7H2O			CAS No. : 7782-63-0 EC No. : 231-753-5 Index-No.: 026-003-01-4	As Per EC Regulation 1272/2008 Acute Tox.oral 4; Skin Irrit. 2 H302;H315	>=0.05 - <=0.1%
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Section 4	First - Aid Measures												
	4.1	Description of first aid measures <i>General advice</i> Consult a physician. Show this safety data sheet to the doctor in attendance. <i>If inhaled</i> If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. <i>In case of skin contact</i> Wash off with soap and plenty of water. Consult a physician. <i>In case of eye contact</i> Rinse immediately with plenty of water for at least 15 minutes. Consult a physician. <i>If swallowed</i> 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 labeling (see section 2.2) and/or in section 11.											
	4.3	Indication of immediate medical attention and special treatment needed No data available											
Section 5	Fire Fighting Measures												
	5.1	Extinguishing media <i>Suitable extinguishing media</i> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. <i>Unsuitable extinguishing media</i> No data available.											
	5.2	Special hazards arising from the substance or mixture Magnesium oxides, Sulphur oxides, Sodium oxides, Iron oxides, Calcium Oxide, Cobalt oxides, Copper oxides, Manganese oxides, Molybdenum oxides, Oxides of Phosphorus, Potassium oxides, Zinc oxides											
	5.3	Precautions for fire-fighters											



Material Safety Data Sheet

	Cool closed containers exposed to fire with water spray. 5.4 Further information Wear self-contained breathing apparatus for firefighting if necessary.
Section 6	Accidental Release Measures
	6.1 Personal precautions, protective equipment and emergency procedures Use personnel protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. 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 environment must be avoided. 6.3 Methods and materials for containment and cleaning up Keep in suitable, closed containers for disposal. 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. 6.4 Reference to other sections For disposal see Section 13.
Section 7	Handling and Storage
	7.1 Precautions for safe handling Avoid formation of dust and aerosols. Avoid exposure Obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from heat and source of ignition 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Oxidizing Solids Recommended Storage Temperature : 2-8°C 7.3 Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
Section 8	Exposure Controls / Personal Protection



Section 9	8.1 Control parameters 8.2 Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaks, immediately after handling the products and at the end of workday. Personal protective equipment Eye/face protection Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Have eye washing facilities readily available where eye contact can occur. 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 contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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 N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment 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.																																								
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	9.1 Information on basic physical and chemical properties <table><tr><td>Appearance</td><td>White to off-white, homogenous powder</td></tr><tr><td>Odour</td><td>No data available</td></tr><tr><td>Odour Threshold</td><td>No data available</td></tr><tr><td>pH</td><td>5.00 – 6.00</td></tr><tr><td>Melting/freezing point</td><td>No data available</td></tr><tr><td>Initial boiling point and boiling range</td><td>No data available</td></tr><tr><td>Flash point</td><td>No data available</td></tr><tr><td>Upper/lower flammability or explosive limits</td><td>No data available</td></tr><tr><td>Evaporation rate</td><td>No data available</td></tr><tr><td>Flammability (Solid, gas)</td><td>No data available</td></tr><tr><td>Vapour pressure</td><td>No data available</td></tr><tr><td>Relative density</td><td>No data available</td></tr><tr><td>Water Solubility</td><td>Soluble after boiling in distilled water</td></tr><tr><td>Autoignition Temperature</td><td>No data available</td></tr><tr><td>Decomposition Temperature</td><td>No data available</td></tr><tr><td>Viscosity</td><td>No data available</td></tr><tr><td>Explosive properties</td><td>No data available</td></tr><tr><td>Oxidizing properties</td><td>No data available</td></tr><tr><td>Vapour density</td><td>No data available</td></tr><tr><td>Thermal decomposition</td><td>No data available</td></tr></table> 9.2 Other safety information No data available	Appearance	White to off-white, homogenous powder	Odour	No data available	Odour Threshold	No data available	pH	5.00 – 6.00	Melting/freezing point	No data available	Initial boiling point and boiling range	No data available	Flash point	No data available	Upper/lower flammability or explosive limits	No data available	Evaporation rate	No data available	Flammability (Solid, gas)	No data available	Vapour pressure	No data available	Relative density	No data available	Water Solubility	Soluble after boiling in distilled water	Autoignition Temperature	No data available	Decomposition Temperature	No data available	Viscosity	No data available	Explosive properties	No data available	Oxidizing properties	No data available	Vapour density	No data available	Thermal decomposition	No data available
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Material Safety Data Sheet

Section 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 No data available 10.5 Incompatible materials Strong reducing agents, Strong acids, Powdered metals 10.6 Hazardous decomposition products Hazardous decomposition products formed under fire conditions - Nitrogen oxides(NOx), Sulphur oxides, Oxides of phosphorus,. Potassium oxides, Magnesium oxide, Cobalt/cobalt oxides, Calcium oxide, Copper oxides. Other Decomposition products. No Data Available. In event of fire - refer section 5
Section 11	Toxicological Information
	11.1 Information on toxicological effects Acute toxicity No data available Remarks : No data available No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available 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- repeated exposure No data available Aspiration hazard No data available Additional Information RTECS : Not Applicable
Section 12	Ecological Information
	12.1 Toxicity No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 PBT and vPvB assessment This preparation contains no substance considered to be persistent,bioaccumulating or toxic (PBT) or very persistent



Material Safety Data Sheet

	and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Other adverse effects
Section 13	Disposal Considerations
	13.1 Waste treatments methods Product Dispose of as unused product. 13.2 Contaminated packaging Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licenced professional waste disposal service to dispose off this material.
Section 14	Transport Information
	14.1 UN-No ADN R : 1477 ADR : 1477 IATA_C : 1477 IATA_P : 1477 IMDG : 1477 RID : 1477 14.2 UN proper shipping name ADN R : Nitrates, inorganic, n.o.s. ADR : Nitrates, inorganic, n.o.s. IATA_C : Nitrates, inorganic, n.o.s. IATA_P : Nitrates, inorganic, n.o.s. IMDG : Nitrates, inorganic, n.o.s. RID : Nitrates, inorganic, n.o.s. 14.3 Transport hazard class (es) ADN R : 5.1 ADR : 5.1 IATA_C : 5.1 IATA_P : 5.1 IMDG : 5.1 RID : 5.1 14.4 Packaging group ADN R : II ADR : II IATA_C : II IATA_P : II IMDG : II RID : II 14.5 Environmental hazards ADN R : No ADR : No IMDG : Marine pollutant No IATA_C : No 14.6 Special precautions for use No data available
Section 15	Regulatory Information
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. 15.1 Safety health and environment regulations/legislation specific for the substance or mixture 15.2 Chemical Safety Assessment For this product a chemical safety assessment was not carried out.
Section 16	Other Information



Material Safety Data Sheet

H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
Acute Tox.oral 4	Acute toxicity, oral, Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment, long term hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, long term hazard, Category 2
Eye Dam. 1	Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Ox. Sol. 3	Oxidising solids, Category 3
Repr.Tox. 1A, 1B	Reproductive toxicity, Category 1A, 1B
Skin Irrit. 2	Skin corrosion or irritation, Category 2
STOT RE 2	Specific target organ toxicity, repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse. Effects in the aquatic environment.
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful
Further Information	
The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.	