



Name of the Product Code No. Section 1 : Chemical Identification Code No. : PT 1011C 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		Murashige & Skoog Medium PT 1011C														
Section 2	Hazards Identification															
	2.1 Classification of the substance or mixture CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP] Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008.															
	2.2 Label elements Labeling according to Regulation (EC) No.1272/2008 Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008.															
	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.															
Section 3	Composition/Information On Ingredients															
	3.1 Mixture															
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Potassium iodide		
CAS No. : 7681-11-0 EC No. : 231-659-4	As Per EC Regulation 1272/2008 Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319	>=0.001 - <=0.003%
Zinc sulphate, heptahydrate		
CAS No. : 7446-20-0 EC No. : 231-793-3 Index-No.: 030-006-00-9	As Per EC Regulation 1272/2008 Acute Tox.oral 4; Eye Dam. 1; Aquatic Chronic 1 H302; H318; H410	>=0.01 - <=0.03%
Copper sulphate		
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%
Ferrous sulphate, heptahydrate		
CAS No. : 7782-63-0 EC No. : 231-753-5	As Per EC Regulation 1272/2008 Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319	>=0.05 - <=0.1%
Nicotinic acid		
CAS No. : 59-67-6 EC No. : 200-441-0	As Per EC Regulation 1272/2008 Eye Irrit. 2A H319	>=0.001 - <=0.005%
Section 4	First - Aid Measures	
4.1	<p>Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance.</p> <p>If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.</p> <p>In case of skin contact Wash off with soap and plenty of water. Consult a physician.</p> <p>In case of eye contact Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.</p> <p>If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.</p>	



	<p>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.</p> <p>4.3 Indication of immediate medical attention and special treatment needed No data available</p>
Section 5	Fire Fighting Measures
	<p>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.</p> <p>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</p> <p>5.3 Precautions for fire-fighters Cool closed containers exposed to fire with water spray.</p> <p>5.4 Further information Wear self-contained breathing apparatus for firefighting if necessary.</p>
Section 6	Accidental Release Measures
	<p>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.</p> <p>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.</p> <p>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.</p> <p>6.4 Reference to other sections For disposal see Section 13.</p>
Section 7	Handling and Storage
	<p>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</p> <p>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 <i>Recommended Storage Temperature</i> : 2-8°C</p> <p>7.3 Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.</p>
Section 8	Exposure Controls / Personal Protection
	<p>8.1 Control parameters</p> <p>8.2 Exposure controls <i>Appropriate engineering controls</i> 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. <i>Personal protective equipment</i> <i>Eye/face protection</i> 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</p>



	<p>where eye contact can occur.</p> <p>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.</p> <p>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.</p> <p>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).</p> <p>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.</p>																																								
Section 9	Physical and Chemical Properties																																								
	<p>9.1 Information on basic physical and chemical properties</p> <table border="0"> <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>5.2 – 6.2</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> <p>9.2 Other safety information No data available</p>	Appearance	White to off-white, homogenous powder	Odour	No data available	Odour Threshold	No data available	pH	5.2 – 6.2	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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Section 10	Stability and Reactivity																																								
	<p>10.1 Reactivity No data available</p> <p>10.2 Chemical stability Stable under recommended storage conditions.</p> <p>10.3 Possibility of hazardous reactions No data available</p>																																								



	<p>10.4 Conditions to avoid No data available</p> <p>10.5 Incompatible materials Strong reducing agents, Strong acids, Powdered metals</p> <p>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</p>
Section 11	Toxicological Information
	<p>11.1 Information on toxicological effects</p> <p>Acute toxicity No data available Remarks : No data available No data available</p> <p>Skin corrosion/irritation No data available</p> <p>Serious eye damage/eye irritation No data available</p> <p>Respiratory or skin sensitisation No data available</p> <p>Germ cell mutagenicity No data available</p> <p>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.</p> <p>Reproductive toxicity No data available</p> <p>Specific target organ toxicity- repeated exposure No data available</p> <p>Aspiration hazard No data available</p> <p>Additional Information RTECS : Not Applicable</p>
Section 12	Ecological Information
	<p>12.1 Toxicity No data available</p> <p>12.2 Persistence and degradability No data available</p> <p>12.3 Bioaccumulative potential No data available</p> <p>12.4 Mobility in soil No data available</p> <p>12.5 PBT and vPvB assessment This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.</p> <p>12.6 Other adverse effects</p>
Section 13	Disposal Considerations
	<p>13.1 Waste treatments methods Product</p>



	<p>Dispose of as unused product.</p> <p>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.</p>																																
Section 14	Transport Information																																
	<p>14.1 UN-No ADNR: ADR: IATA_C: IATA_P: IMDG: RID:</p> <p>14.2 UN proper shipping name ADNR : Not dangerous good ADR : Not dangerous good IATA_C : Not dangerous good IATA_P : Not dangerous good IMDG : Not dangerous good RID : Not dangerous good</p> <p>14.3 Transport hazard class (es) ADNR: ADR: IATA_C: IATA_P: IMDG: RID:</p> <p>14.4 Packaging group ADNR: ADR: IATA_C: IATA_P: IMDG: RID:</p> <p>14.5 Environmental hazards ADNR : No ADR : No IMDG : Marine pollutant No IATA_C : No</p> <p>14.6 Special precautions for use No data available</p>																																
Section 15	Regulatory Information																																
	<p>This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.</p> <p>15.1 Safety health and environment regulations/legislation specific for the substance or mixture</p> <p>15.2 Chemical Safety Assessment For this product a chemical safety assessment was not carried out.</p>																																
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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.