



Name of the Product Code No. Section 1 :	Murashige & Skoog Medium (Modification No. 3) w/ ½ NH₄NO₃, ½ KNO₃ & Vitamins; W/o Sucrose & Agar PT 1048 Chemical Identification Code No. : PT 1048 Name of the Product : Murashige & Skoog Medium (Modification No. 3) w/ ½ NH ₄ NO ₃ , ½ KNO ₃ & Vitamins; W/o Sucrose & Agar 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 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 3), H412 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 <div style="text-align: center;">   </div> <p style="text-align: center;">Pictogram Signal word Warning Hazard Statement(s) H272 May intensify fire; oxidizer H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause respiratory irritation H412 Harmful to aquatic life with long lasting effects Precautionary Statement(s) P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if Present and easy to do. Continue rinsing. P370 + P378 In case of fire: Use suitable extinguishing media for extinction.</p> 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 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Component</th> <th style="width: 30%;">Classification</th> <th style="width: 30%;">Concentration</th> </tr> </thead> <tbody> <tr> <td>Potassium nitrate</td> <td></td> <td></td> </tr> </tbody> </table>	Component	Classification	Concentration	Potassium nitrate		
Component	Classification	Concentration					
Potassium nitrate							



Material Safety Data Sheet

CAS No. : EC No. :	7757-79-1 231-818-8	As Per EC Regulation 1272/2008 Ox. Sol. 3 H272	>=30 - <=40%
Component			
Ammonium nitrate			
CAS No. : EC No. :	6484-52-2 229-347-8	As Per EC Regulation 1272/2008 Ox. Sol. 2; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H272; H315; H319; H335 As Per EC Directive 67/548/EEC or 1999/45/EC O (gas); Xi R8; R36/37/38	>=25 - <=35%
Component			
Calcium chloride, anhydrous			
CAS No. : EC No. :	10043-52-4 233-140-8	As Per EC Regulation 1272/2008 Eye Irrit. 2A H319	>=10 - <=15%
Component			
Manganese sulphate			
CAS No. : EC No. : Index-No :	10034-96-5 232-089-9 025-003-00-4	As Per EC Regulation 1272/2008 STOT RE 2; Aquatic Chronic 2 H373; H411	>=0.5 - <=0.7%
Component			
Boric acid			
CAS No. : EC No. : Index-No :	10043-35-3 233-139-2 005-007-00-2	As Per EC Regulation 1272/2008 Repr.Tox. 1A, 1B H360	>=0.1 - <=0.3%
Component			
Potassium iodide			
CAS No. : EC No. :	7681-11-0 231-659-4	As Per EC Regulation 1272/2008 Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319	>=0.01 - <=0.05%
Component			
Zinc sulphate, heptahydrate			
CAS No. : EC No. : Index-No :	7446-20-0 231-793-3 030-006-00-9	As Per EC Regulation 1272/2008 Acute Tox.oral 4; Eye Dam. 1; Aquatic Chronic 1 H302; H318; H410	>=0.2 - <=0.4%
Component			
Copper sulphate pentahydrate			



		CAS No. : 7758-99-8	As Per EC Regulation 1272/2008 H302; H315; H319; H410	>=0.0005 - <=0.001%
		Component	Classification	Concentration
		Cobalt chloride, 6H2O		
		CAS No. : 7791-13-1	As Per EC Regulation 1272/2008	>=0.0005 - <=0.001%
		EC No. : 231-589-4	Acute Tox.oral 4; Skin Sens. 1; Resp.	
		Index-No : 027-004-00-5	Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; Aquatic Chronic 1 H302; H317; H334; H341; H350i; H360F; H410	
		Component	Classification	Concentration
		Nicotinic acid		
		CAS No. : 59-67-6	As Per EC Regulation 1272/2008	>=0.01 - <=0.03%
		EC No. : 200-441-0	Eye Irrit. 2A H319	
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> Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 Cool closed containers exposed to fire with water spray.		
	5.4	Further information Wear self-contained breathing apparatus for firefighting if necessary.		



	<p>Odour No data available</p> <p>Odour Threshold No data available</p> <p>pH 3.5 - 4.5</p> <p>Melting/freezing point No data available</p> <p>Initial boiling point and boiling range No data available</p> <p>Flash point No data available</p> <p>Upper/lower flammability or explosive limits No data available</p> <p>Evaporation rate No data available</p> <p>Flammability (Solid, gas) No data available</p> <p>Vapour pressure No data available</p> <p>Relative density No data available</p> <p>Water Solubility Soluble in water</p> <p>Autoignition Temperature No data available</p> <p>Decomposition Temperature No data available</p> <p>Viscosity No data available</p> <p>Explosive properties No data available</p> <p>Oxidizing properties No data available</p> <p>Vapour density No data available</p> <p>Thermal decomposition No data available</p> <p>9.2 Other safety information No data available</p>
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 No data available</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</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</p>



	<p>No data available Specific target organ toxicity- repeated exposure No data available Aspiration hazard No data available 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 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 : 1477 ADR : 1477 IATA_C : 1477 IATA_P : 1477 IMDG : 1477 RID : 1477</p> <p>14.2 UN proper shipping name ADNR : 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.</p> <p>14.3 Transport hazard class (es) ADNR : 5.1 ADR : 5.1 IATA_C : 5.1 IATA_P : 5.1 IMDG : 5.1 RID : 5.1</p> <p>14.4 Packaging group ADNR : II ADR : II IATA_C : II IATA_P : II IMDG : II RID : II</p> <p>14.5 Environmental hazards 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</p> <p>For this product a chemical safety assessment was not carried out.</p>
Section 16	<p>Other Information</p> <p>H272 May intensify fire; oxidizer</p> <p>H302 Harmful if swallowed</p> <p>H315 Causes skin irritation</p> <p>H317 May cause an allergic skin reaction</p> <p>H318 Causes serious eye damage</p> <p>H319 Causes serious eye irritation</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled</p> <p>H335 May cause respiratory irritation</p> <p>H341 Suspected of causing genetic defects</p> <p>H350i May cause cancer by inhalation</p> <p>H360 May damage fertility or the unborn child</p> <p>H360F May damage fertility</p> <p>H373 May cause damage to organs through prolonged or repeated exposure</p> <p>H410 Very toxic to aquatic life with long lasting effects</p> <p>H411 Toxic to aquatic life with long lasting effects</p> <p>Acute Tox. oral 4 Acute toxicity, oral, Category 4</p> <p>Aquatic Chronic 1 Hazardous to the aquatic environment, long term hazard, Category 1</p> <p>Aquatic Chronic 2 Hazardous to the aquatic environment, long term hazard, Category 2</p> <p>Carc. 1B Carcinogenicity, Category 1B</p> <p>Eye Dam. 1 Serious eye damage or eye irritation, Category 1</p> <p>Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A</p> <p>Muta. 2 Germ cell mutagenicity, Category 2</p> <p>Ox. Sol. 3 Oxidising solids, Category 3</p> <p>Repr. 1B Reproductive toxicity, Category 1B</p> <p>Repr.Tox. 1A, 1B Reproductive toxicity, Category 1A, 1B</p> <p>Resp. Sens. 1 Skin Sensitisation, respiratory, Category 1</p> <p>Irrit. 2 Skin corrosion or irritation, Category 2</p> <p>Skin Sens. 1 STOT Sensitisation, Skin, Category 1</p> <p>RE 2 Specific target organ toxicity, repeated exposure, Category 2</p> <p>STOT SE 3 Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3</p> <p>R36/37/38 Irritating to eyes, respiratory system and skin.</p> <p>R8 Contact with combustible material may cause fire.</p> <p>O (gas) Oxidising (gas)</p> <p>Xi Irritant</p> <p>Further Information</p> <p>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.</p>