



















## MATERIAL SAFETY DATA SHEET

Section 1. Company Identification and Product Information			
<b>Product Name or Identity:</b> DM528 B12 Assay Agar using <i>E. coli</i> Mutant Culture			
<b>Manufacturer's Name &amp; Address</b>	Micromaster Laboratories Private Limited Unit 38/39, Kalpataru Industrial Estate, Off Ghodbunder Road, Nr. 'R-Mall' Thane (W)-400607. M.S. INDIA.	<b>Emergency Phone No.:</b>	+91 22 25895505/ 25894681 /25894760
<b>Reference:</b>	According to Regulation (EC) No.1907/2006	<b>Email:</b>	micromaster@micromasterlab.com
Section 2. Composition / Information on Hazardous Ingredients			
Ingredients	Grams/Litre	Ingredients	Grams/Litre
*Ammonium chloride	5.00	*Ammonium nitrate	2.0
*Ammonium sulphate	0.10	Sodium chloride	1.00
Monopotassium phosphate	6.0	Dipotassium phosphate	14.00
Magnesium sulphate	0.20	DL-Asparagine	3.00
L-Arginine hydrochloride	0.20	Glucose	5.00
*Calcium chloride	0.001	*Borax	0.00001
*Copper sulphate	0.000025	*Ferrous sulphate	0.000054
*Zinc sulphate	0.00009	*Manganese chloride	0.000046
*Ammonium molybdate	0.00001	Agar	15.00
Final pH (at 25°C) 7.2 ±0.2			
* Irritant / Harmful / Dangerous to the Environment material			
	Ammonium chloride CAS No. : 12125-02-9 R : 22-36 RTECS : BP 4550000	S : 22	
 	Ammonium nitrate CAS No. : 6484-52-2 R : 8-36/37/38 RTECS : BR 9050000	S : 15-17-26-36	
	Ammonium sulphate CAS No. : 7783-20-2 R : 36/37/38 RTECS : BS 4500000	S : 26-36	
	Calcium chloride CAS No. : 10043-52-4 R : 36 RTECS : EV 9800000	S : 22-24	
Borax CAS No. : 1330-43-4			

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	R : 36/37/38 RTECS : ED 4588000	S : 36/37/39-45
 	Copper sulphate CAS No. : 7758-98-7 R : 22-36/35-50/53 RTECS : GL 8800000	S : 22-60-61
	Ferrous sulphate CAS No. : 7720-78-7 R : 22 RTECS : NO 8500000	S : 36/37/39
	Zinc sulphate CAS No. : 7446-20-0 R : 36/38-50/53 RTECS : ZH 5300000	S : 22-25-60-61
	Manganese chloride CAS No. : 7773-01-5 R : 22-40 RTECS : OO 9625000	S : 26-36
	Ammonium molybdate CAS No. : 13106-76-8 R : 36/37/38-52/53 RTECS : QA 4900000	S : 26-36-61
<b>Section 3. Health Hazard Identification</b>		
	Hazard : This symbol designates substances which may have an irritant effect on skin, eyes and respiratory organs. Caution : Do not breathe vapours and avoid contact with skin and eyes.	
	Hazard : Inhalation and ingestion of, or skin penetration by these substances is harmful to one's health. Non-recurring, recurring or lengthy exposure to these substances may result in irreversible damage. Caution : Avoid contact with the human body, including inhalation of the vapours and in cases of malaise consult a doctor.	
	Hazard : Substances which are harmful to the aquatic (aquatic organisms, waters), as well as the non-aquatic environment (fauna, flora, atmosphere) or which have a detrimental effect at longer term. Caution : Avoid release to the environment.	
	Hazard : Oxidizing substances can ignite combustible material or worsen existing fires and thus make fire-fighting more difficult. Caution : Keep away from combustible material.	
<b>Section 4. First Aid Measures</b>		
<b>Description of first aid measures</b>		
<b>General advice</b> Consult a physician. Show this safety data sheet to the doctor in attendance.		
<b>If inhaled</b> In case of swallowing, wash out mouth with water provided person is conscious.		



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### **In case of skin contact**

flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes

### **In case of eye contact**

Wash with copious amounts of water for at least 15 minutes. Assure adequate washing by separating the eyelids with fingers. In serious conditions, call a physician, show the container or label.

### **Section 5. Fire and Explosion Hazard Data**

#### **Extinguishing media**

##### **Suitable extinguishing media**

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

Special fire-fighting procedures. Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

##### **Advice for firefighters**

Special fire-fighting procedures. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### **Section 6. Accidental Release Measures**

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### **Section 7. Handling and Storage**

**Handling** - Refer to Section 8

**Storage** - Store below 8°C

### **Section 8. Exposure Controls / Personal Protection**

Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Mechanical exhaust required.

### **Section 9. Physical and Chemical Properties**

Appearance : Homogeneous powder

Colour : Cream to yellow

### **Section 10. Stability and Reactivity**

**Stability** : Product is stable if stored as per the conditions specified under storage of Section No. 7.

Product loses its potency/performance above 45°C.

**Conditions to avoid** : Heat and light.

**Decomposition products** : if product is decomposed toxic fumes of carbon monoxide and carbon dioxide may evolve.

Hazardous polymerization will not occur.

### **Section 11. Toxicological Information**

**Acute Effects** : May be harmful if swallowed.

**Exposure can cause** : Stomach pains, vomiting, diarrhea. Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.




**RTECS No.** : BP 4550000 BR 9050000 BS 4500000 EV 9800000 ED 4588000

GL 8800000 NO 8500000 ZH 5300000

For complete information RTECS may be referred.



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<b>Section 12. Ecological Information</b>	
Data not available	
<b>Section 13. Disposal Considerations</b>	
On completion of work all used or unusable preparations of this product and derivatives thereof are to be disposed off by autoclaving and/or by incineration. Dispose off waste in accordance with all applicable Federal, State and local laws.	
<b>Section 14. Transport Information</b>	
UN No. : Not applicable.	
<b>Section 15. Regulatory Information</b>	
Risk Phrases : Harmful if swallowed Risk Phrases : Irritating to eyes Risk Phrases : Contact with combustible material may cause fire Risk Phrases : Irritating to eyes, respiratory system and skin Risk Phrases : Harmful by inhalation, in contact with skin and if swallowed Risk Phrases : Contact with acids liberates very toxic gas Risk Phrases : Possible risk of impaired fertility Risk Phrases : Possible risk of harm to the unborn child Risk Phrases : Irritating to eyes and skin Risk Phrases : Possible risk of irreversible effect Risk Phrases : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment Safety Phrases : Do not breathe dust Safety Phrases : Keep away from heat Safety Phrases: Keep away from combustible material Safety Phrases : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice Safety Phrases : Wear suitable protective clothing Safety Phrases: Keep away from food, drink and animal feeding stuffs Safety Phrases: Avoid contact with skin Safety Phrases: Wear suitable protective clothing, gloves and eye/face protection Safety Phrases: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) Safety Phrases: Avoid contact with eyes Safety Phrases: Take off immediately all contaminated clothing Safety Phrases: Avoid release to the environment. Refer to special	
	Significance of signs : This symbol designates substances which may have an irritant effect on skin, eyes and respiratory organs.
	Significance of signs : Inhalation and ingestion of, or skin penetration by these substances is harmful to one's health. Non-recurring, recurring or lengthy exposure to these substances may result in irreversible damage.
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### Section 16. Other Information

**WARRANTY :**

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Micromaster Laboratories shall not be held liable for any damage resulting from handling or from contact with the above Product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute no warranty.

**DISCLAIMER:**

For Laboratory use only. Not for drug, household or other uses.

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