www.himedialabs.com LIMEDIA Safety data sheet(SDS) According to Regulation (EC) No.1907/2006 Revision : 00003 Date of Revision : 09.03.2022 1 Identification of the substances/ mixture and of the company/ undertaking 1.1 **Product Identifiers** Product Number GM129 Product Name Wort Agar, Granulated REACH Registration Number This product is a mixture. Reach registration number is not available for this substance. Relevant identified uses of the substance or mixture and uses advised against 1.2 1.2.1 Relevant identified uses Laboratory Chemicals, Analytical Purpose, Biochemical Analysis Details of the supplier of the safety data sheet 1.3 Produced by HiMedia Laboratories Private Limited Address C - 40,Road No.21Y,MIDC, Wagle Industrial Area, Thane(W), - 400 604, India Tel. No. +91-22-6147 1919/6116 9797 Fax No. : +91-22-61471920 Mail Id info@himedialabs.com Website : www.himedialabs.com 1.4 **Emergency Tel. No.** Emergency Tel. No. Please contact the regional HiMedia representation in your country

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

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other Hazards

None

3 Composition/Information On Ingredients

3.2 Mixture

Component		Classification	Concentration
Ammonium chlo	oride		
CAS No. :	12125-02-9	As Per EC Regulation 1272/2008	>=1.0 - <=10.0%
EC No. :	235-186-4	Acute Tox.oral 4; Eye Irrit. 2A H302;	
Index-No :	017-014-00-8	H319	
		As Per EC Directive 67/548/EEC or	
		1999/45/EC	

Page 1 of 8

Xn; Xi R22; R36 Refer Section 16 for complete statement of H codes & classification. 4 **First Aid Measures** 4.1 **Description of first aid measures** General advice Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. *In case of eye contact* Rinse immediately with plenty of water for at least 15 minutes. Consult a physician. If swallowed 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 No data available. 4.3 Indication of immediate medical attention and special treatment needed No data available 5 **Fire Fighting Measures** 5.1 **Extinguishing media** Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

No data available.
5.2 Special hazards arising from the substance or mixture Carbon oxides, Hydrogen chloride gas

Unsuitable extinguishing media

5.3 Precautions for fire-fighters
 Wear self contained breathing apparatus for fire fighting if necessary
 5.4 Further information
 No data available

6 Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- 6.2 Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
 6.3 Methods and materials for containment and cleaning up
- Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections

For disposal see Section 13.

 Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection. Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. <i>Recommended Storage Temperature :</i> On receipt store between 10-30°C Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. Control parameters Components with workplace control parameters Components with workplace control parameters Components with workplace control parameters Appropriate engineering controls Aport on protection Appropriate engineering controls Appropriste engineering controls Appropr	7	Handling and Storage
 preventive fire protection. Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended Storage Temperature : On receipt store between 10-30°C Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. Exposure Controls/Personal Protection Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 derived rom it. Body protection Complete suit protecting against chemicals. The type of protective equipment must be selected according to the contentration and amount of the dangerous substance at the specific workplace. Respiratory protection Where risk assessment shows air-purifying respirators are appropriate u	7.1	Precautions for safe handling
 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. <i>Recommended Storage Temperature :</i> On receipt store between 10-30°C Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. Exposure Controls/Personal Protection S.1 Control parameters Components with workplace control parameters Aporopriate engineering controls Aporoducts. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. <i>Eye/face protection</i> Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). <i>Skin protection</i> 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. Body protection Complete suit protecting against chemicals. The type of protective requipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. <i>Respiratory protection</i> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (E		Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for
 Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended Storage Temperature : On receipt store between 10-30°C Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. Exposure Controls/Personal Protection Control parameters Components with workplace control parameters Exposure Controls Appropriate engineering controls Aport of the section of		preventive fire protection.
are opened must be carefully resealed and kept upright to prevent leakage. Recommended Storage Temperature : On receipt store between 10-30°C 7.3 Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. 8 Exposure Controls/Personal Protection 8.1 Control parameters Components with workplace control parameters 8.2 Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Skin protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Skin protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).	7.2	Conditions for safe storage, including any incompatibilities
 Recommended Storage Temperature : On receipt store between 10-30°C Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. Exposure Controls/Personal Protection Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face suppli		Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which
 7.3 Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. 8 Exposure Controls/Personal Protection 8.1 Control parameters Components with workplace control parameters 8.2 Exposure controls Appropriate engineering controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		are opened must be carefully resealed and kept upright to prevent leakage.
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. 8 Exposure Controls/Personal Protection 8.1 Components with workplace control parameters 8.2 Exposure controls Appropriate engineering controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 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 2016/425/EEC and the standard EN ISO 374-1/2016 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-		Recommended Storage Temperature : On receipt store between 10-30°C
 8 Exposure Controls/Personal Protection 8.1 Control parameters Components with workplace control parameters 8.2 Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 supplied air respirator. Use respirators is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 	7.3	Specific end uses
 8.1 Control parameters Components with workplace control parameters 8.2 Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey gogles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. US respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
 8.1 Control parameters Components with workplace control parameters 8.2 Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. US erespirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		
 Components with workplace control parameters 8.2 Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or CEN (EU). Environment exposure controls Do not empty into drains.	8	Exposure Controls/Personal Protection
 8.2 Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains.	8.1	Control parameters
 Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygien measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it. Body protection Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls 		Components with workplace control parameters
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls.	8.2	Exposure controls
 handling the products. Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		Appropriate engineering controls
 Personal protective equipment Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. <i>Eye/face protection</i> Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). <i>Skin protection</i> 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 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it. <i>Body protection</i> 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. <i>Respiratory protection</i> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains. 		Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after
 Hygiene measure Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains.		handling the products.
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product. <i>Eye/face protection</i> Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). <i>Skin protection</i> 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 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it. <i>Body protection</i> 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. <i>Respiratory protection</i> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		Personal protective equipment
after working with the product. <i>Eye/face protection</i> Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). <i>Skin protection</i> 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 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it. <i>Body protection</i> 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. <i>Respiratory protection</i> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		Hygiene measure
 Eye/face protection Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face
Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). <i>Skin protection</i> 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 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it. <i>Body protection</i> 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. <i>Respiratory protection</i> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		after working with the product.
 and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). <i>Skin protection</i> 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 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it. <i>Body protection</i> 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. <i>Respiratory protection</i> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains. 		Eye/face protection
 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		
 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
 (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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains.		Skin protection
 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique
 Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains. 		(without touching glove's outer surface) to avoid skin contact with this product. Dispose
 Directive 2016/425/EEC and the standard EN ISO 374-1/2016 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls. Do not empty into drains. 		contaminated gloves after use in accordance with applicable laws and good laboratory practices.
 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls. Do not empty into drains. 		Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU
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. <i>Respiratory protection</i> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		Directive 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it.
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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls Do not empty into drains.		Body protection
 Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Environment exposure controls. Do not empty into drains. 		Complete suit protecting against chemicals. The type of protective equipment must be selected
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> . Do not empty into drains.		according to the concentration and amount of the dangerous substance at the specific workplace.
multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		Respiratory protection
engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with
respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to
standards such as NIOSH (US) or CEN (EU). <i>Environment exposure controls</i> Do not empty into drains.		engineering controls. If the respirator is the sole means of protection, use a full-face supplied air
Environment exposure controls Do not empty into drains.		respirator. Use respirators and components tested and approved under appropriate government
Do not empty into drains.		standards such as NIOSH (US) or CEN (EU).
		Environment exposure controls
9 Physical and chemical properties		Do not empty into drains.
9 Physical and chemical properties		
	9	Physical and chemical properties

Page **3** of **8**

9.1 Information on basic physical and chemical properties

	Appearance	Light yellow to brownish yellow coloured
		granular medium
	Odour	No data available
	Odour Threshold	No data available
	рН	4.60 - 5.00
	Melting/freezing point	No data available
	Initial boiling point and boiling range	No data available
	Flash point	No data available
	Flammability (Solid, gas)	No data available
	Vapour pressure	No data available
	Relative density	No data available
	Water Solubility	No data available
	Partition coefficient: n-octanol/water	No data available
	Autoignition 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
9.2	Other safety information	
	No data available	

10	Stability	and	Reactivity	1
----	-----------	-----	------------	---

- 10.1 Reactivity No data available
- **10.2 Chemical stability** No data available
- **10.3 Possibility of hazardous reactions** No data available
- 10.4 Conditions to avoid No data available
- **10.5** Incompatible materials No data available
- **10.6 Hazardous decomposition products** Refer Section 5.2. Other Decomposition products not known.

11 Toxicological Information

11.1 Information on toxicological effects
 Acute toxicity
 No data available
 Skin corrosion/irritation
 No data available
 Serious eye damage/eye irritation
 No data available
 Serious available
 Serious available
 Serious available
 No data available
 No data available
 Serious avai

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- single exposure No data available

Aspiration hazard

No data available Potential Health Effects Inhalation REFER SECTION 2 Skin REFER SECTION 2 Eyes REFER SECTION 2 Ingestion REFER SECTION 2 Additional Information RTECS : Not available

11.2 Components

Ammonium Chloride Acute Oral toxicity Rat LD50:1,650 mg/kg Irritation and corrosion Skin: rabbit: No skin irritation Eyes: rabbit: Eye irritation Sensitisation: Non sensitizer Signs and Symptoms of Exposure: No data available Potential Health Effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Additional Information

RTECS : BP4550000

12 Ecological Information

12.1 Toxicity

Page 5 of 8

No data available for this mixture **Components** Ammonium chloride Toxicity to fish Oncorhynchus mykiss (rainbow trout)LC50: 42.91 mg/l; 96 h (AS per ECHA) Cyprinus carpio (Carp) LC50:209.00 mg/l;96 h Lepomis macrochirus (Bluegill sunfish) EC10:4.28 mg/l; 30 d (As per ECHA) Toxicity to daphnia and other aquatic invertebrates Daphnia magna (Water flea)EC50: > 100 mg/l; 48 h (As per ECHA) Daphnia magna (Water flea)LC50: 161 mg/l - 48 h Toxicity to algae Chlorella vulgaris (Fresh water algae)EC50: 1,300 mg/l; 5 d (As per ECHA) Toxicity to bacteria EC50 activated sludge: 1,310 mg/l; 0.5 h (OECD Test Guideline 209)

- **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 substance or mixture contains no components considered to be persistent, bioaccumulating nor toxic (PBT) at levels of 0.1% or higher.
- 12.6 Other adverse effects No data available

13 Disposal Considerations

13.1 Waste treatments methods Product

Offer surplus and non- recyclable solutions to a licenced company. Contact a licenced professional waste disposal service to dispose off this material.

13.2 Contaminated packaging

Dispose of as unused product.

14 Transport Information

- 14.1 UN-No
 - ADNR : ADR : IATA_C : IATA_P : IMDG : RID :
- 14.2 UN proper shipping name

	ADNR :	Not dangerous goods
	ADR :	Not dangerous goods
	IATA_C :	Not dangerous goods
	IATA_P :	Not dangerous goods
	IMDG :	Not dangerous goods
	RID :	Not dangerous goods
14.3	Transport hazard class(es)	
	ADNR : - ADR : -	IATA_C:-IATA_P:-IMDG:-RID:-
14.4	Packaging group	
		DR : IATA_C : IATA_P : IMDG : RID :
14.5	Environmental haz	ards
	ADNR : No ADR :	No IMDG : Marine Pollutant No IATA_C : No IATA_P : No RID : No
14.6	Special precautions	s for use
	No data available	
15	Regulatory Informa	
15.1	This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006	
15.1	Safety health and environment regulations/legislation specific for the substance or mixture	
	No data available	
15.2	Chemical Safety As	sessment
13.2	No data available	
<u>.</u>		
16	Other information	
	H302	Harmful if swallowed
	H319	Causes serious eye irritation
	Acute Tox.oral 4	Acute toxicity, oral, Category 4

Acute Tox.oral 4	Acute toxicity, oral, Category 4
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
R22	Harmful if swallowed.
R36	Irritating to eyes.
Xi	Irritant
Xn	Harmful

Further Information

Copyright 2016 HiMedia Laboratories Pvt. Ltd.

The information given in this safety data sheet is believed to be correct yet does not claim to be all inclusive. This document is intended only as a guide for appropriate precautionary handling of the material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper handling or contact with the above product. Unless explicitly stated on the product or in any of the

documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.

Page **8** of **8**