

#### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 09/08/2022 Revision date: : Version: 1.0 CLM-504-MPT

SECTION 1. Identification of the out	action of the company/undertaking	
	ostance/mixture and of the company/undertaking	
	: Substance	
Product form Substance name	Substance     D-GLUCOSE (1,2-13C2, 99%) MICROBIOLOGICAL/PYROGEN TESTED	
EC-No.	: 200-075-1 (Unlabeled)	
CAS-No.	: 138079-87-5	
Product code	: CLM-504-MPT	
Formula	: HOCH2(CHOH)3(*CHOH)*CHO	
Synonyms	: Dextrose	
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against	
1.2.1. Relevant identified uses		
Main use category	: Professional use	
Industrial/Professional use spec	: For professional use only	
1.2.2. Uses advised against		
No additional information available		
	dete chect	
1.3. Details of the supplier of the safety	uata sneet	
Cambridge Isotope Laboratories, Inc. 50 Frontage Road		
Andover, MA 01810		
USA		
USA: 1-800-322-1174 Int: 1-978-749-8000		
cilsales@isotope.com www.isotope.com		
Emergency telephone number		
Emergency numbers:		
Chemtrec: 1-800-424-9300 (24 hours)		
International: 1-703-741-5970 (24 hours)		
<b>SECTION 2: Hazards identification</b>		
2.1. Classification of the substance or r	nixture	
Classification according to Regulation (EC)	No. 1272/2008 [CLP]	
Not classified		
Classification according to Directive 67/548/	EEC [DSD] or 1999/45/EC [DPD]	
Not classified		
GHS-US classification		
Not classified		
Adverse physicochemical, human health and environmental effects		
No additional information available		
2.2. Label elements		
Labelling according to Regulation (EC) No. 1272/2008 [CLP]		

No labelling applicable

**GHS-US** labelling

No labelling applicable

CLM-504-MPT

#### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 2.3. Other hazards

#### No additional information available

on ingredients		
Product identifier	%	Classification according to Directive 67/548/EEC
(CAS-No.) 138079-87-5 (EC-No.) 200-075-1 (Unlabeled)	100	Not classified
Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
(CAS-No.) 138079-87-5 (EC-No.) 200-075-1 (Unlabeled)	100	Not classified
	Product identifier           (CAS-No.) 138079-87-5 (EC-No.) 200-075-1 (Unlabeled)           Product identifier           (CAS-No.) 138079-87-5	Product identifier         %           (CAS-No.) 138079-87-5 (EC-No.) 200-075-1 (Unlabeled)         100           Product identifier         %           (CAS-No.) 138079-87-5         100

Full text of R- and H-statements: see section 16

Name	Product identifier	%	GHS-US classification
D-GLUCOSE (1,2-13C2, 99%) MICROBIOLOGICAL/PYROGEN TESTED (Main constituent)	(CAS-No.) 138079-87-5	100	Not classified

Full text of H-statements: see section 16

#### 3.2. Mixtures

Not applicable

4.1.       Description of first aid measures         First-aid measures general       : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.         First-aid measures after inhalation       : When symptoms occu:: go into open air and ventilate suspected area. If not breathing, give aritficial respirate advice/attention.         First-aid measures after skin contact       : Wash with plenty of water/ Get immediate medical advice/attention.         First-aid measures after eye contact       : Rinse cautiously with water for several minutes.         First-aid measures after ingestion       : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.         4.2.       Most important symptoms and effects, both acute and delayed         Symptoms/effects after inhalation       : May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after ingestion       : May be harmful if oxallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.1.       Extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture       Set Tiop product is non-reactive under normal conditions of use, storage and transport.		
First-aid measures general       : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.         First-aid measures after inhalation       : When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.         First-aid measures after skin contact       : Wash with plenty of water/Get immediate medical advice/attention.         First-aid measures after eye contact       : Rinse cautiously with water for several minutes.         First-aid measures after ingestion       : Meyer give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.         4.2.       Most important symptoms and effects, both acute and delayed         Symptoms/effects after inhalation       : May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after eye contact       : May be harmful if swallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.1.       Extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3. <td< td=""><td>SECTION 4: First aid measures</td><td></td></td<>	SECTION 4: First aid measures	
First-aid measures after inhalation       : When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.         First-aid measures after skin contact       : Wash with plenty of water/ Get immedicate medical advice/attention.         First-aid measures after eye contact       : Rinse cautiously with water for several minutes.         First-aid measures after ingestion       : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.         4.2.       Most important symptoms and effects, both acute and delayed         Symptoms/effects after inhalation       : May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after skin contact       : May be harmful if inhaled. May cause moderate irritation.         Symptoms/effects after eye contact       : May be harmful if swallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.1.       Extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture       Image: advice/attention.         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3. <td>4.1. Description of first aid measures</td> <td></td>	4.1. Description of first aid measures	
artificial respiration. Get medical advice/attention.         First-aid measures after skin contact       : Wash with plenty of water/ Get immediate medical advice/attention.         First-aid measures after eye contact       : Rinse cautiously with water for several minutes.         First-aid measures after ingestion       :: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention. <b>4.2.</b> Most important symptoms and effects, both acute and delayed         Symptoms/effects after inhalation       :: May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after eye contact       :: May be harmful in contact with skin. May cause moderate irritation.         Symptoms/effects after ingestion       :: May be harmful if swallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.1.       Extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable dist	First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area
First-aid measures after eye contact       : Rinse cautiously with water for several minutes.         First-aid measures after ingestion       : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.         4.2.       Most important symptoms and effects, both acute and delayed         Symptoms/effects after inhalation       : May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after skin contact       : May be harmful in contact with skin. May cause moderate irritation.         Symptoms/effects after ingestion       : May be harmful if swallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.1.       Extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area witho	First-aid measures after inhalation	
First-aid measures after ingestion       : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.         4.2.       Most important symptoms and effects, both acute and delayed         Symptoms/effects after inhalation       : May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after skin contact       : May be harmful in contact with skin. May cause moderate irritation.         Symptoms/effects after eye contact       : May cause eye irritation.         Symptoms/effects after eye contact       : May cause eye irritation.         Symptoms/effects after eye contact       : May cause eye irritation.         Symptoms/effects after ingestion       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         S.1.       Extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (	First-aid measures after skin contact	: Wash with plenty of water/ Get immediate medical advice/attention.
4.2. Most important symptoms and effects, both acute and delayed         Symptoms/effects after inhalation       : May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after skin contact       : May be harmful in contact with skin. May cause moderate irritation.         Symptoms/effects after skin contact       : May be harmful if swallowed.         4.3. Indication of any immediate medical attention and special treatment needed       No additional information available         SECTION 5: Firefighting measures         5.1. Extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2. Special hazards arising from the substance or mixture       Reactivity         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3. Advice for firefighters       Firefight fire with normal precautions from a reasonable distance. Wear a self contained breathing aparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1. Personal precautions, protective equipment and emergency procedures	First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
Symptoms/effects after inhalation       : May be harmful if inhaled. May cause respiratory irritation.         Symptoms/effects after skin contact       : May be harmful in contact with skin. May cause moderate irritation.         Symptoms/effects after eye contact       : May cause eye irritation.         Symptoms/effects after eye contact       : May cause eye irritation.         Symptoms/effects after ingestion       : May be harmful if swallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available       SECTION 5: Firefighting measures         51.       Extinguishing media         Suitable extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         52.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         53.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         Wear recommended personal protective equipment.       Section 4: Accidental release measures <td>First-aid measures after ingestion</td> <td></td>	First-aid measures after ingestion	
Symptoms/effects after skin contact : May be harmful in contact with skin. May cause moderate irritation. Symptoms/effects after eye contact : May cause eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed. 4.3. Indication of any immediate medical attention and special treatment needed No additional information available SECTION 5: Firefighting measures 5.1. Extinguishing media : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). 5.2. Special hazards arising from the substance or mixture Reactivity : The product is non-reactive under normal conditions of use, storage and transport. 5.3. Advice for firefighters Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection. Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment. SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures	4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/effects after eye contact       : May cause eye irritation.         Symptoms/effects after ingestion       : May be harmful if swallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available         SECTION 5: Firefighting measures         5.1.       Extinguishing media         Suitable extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1.	Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after ingestion       : May be harmful if swallowed.         4.3.       Indication of any immediate medical attention and special treatment needed         No additional information available         SECTION 5: Firefighting measures         5.1. Extinguishing media         Symptoms/effects after ingestion         Site of prefighting measures         Site of prefighting measures         Site of prefighting media         Suitable extinguishing media         Symptoms/effects after ingestion         Site of prefighting measures         Site of prefighting measures         Symptoms/effects artsing from the substance or mixture         Reactivity         Site of firefighters         Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures         6.1. Personal precautions, protective equipment and emergency procedures	Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
<ul> <li>4.3. Indication of any immediate medical attention and special treatment needed</li> <li>No additional information available</li> <li>SECTION 5: Firefighting measures</li> <li>5.1. Extinguishing media</li> <li>Suitable extinguishing media</li> <li>Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).</li> <li>5.2. Special hazards arising from the substance or mixture</li> <li>Reactivity</li> <li>The product is non-reactive under normal conditions of use, storage and transport.</li> <li>5.3. Advice for firefighters</li> <li>Firefighting instructions</li> <li>Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Protection during firefighting</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>SECTION 6: Accidental release measures</li> <li>6.1. Personal precautions, protective equipment and emergency procedures</li> </ul>	Symptoms/effects after eye contact	: May cause eye irritation.
No additional information available          SECTION 5: Firefighting measures         5.1.       Extinguishing media         Suitable extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1.	Symptoms/effects after ingestion	: May be harmful if swallowed.
No additional information available         SECTION 5: Firefighting measures         5.1.       Extinguishing media         Suitable extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1.	4.3. Indication of any immediate medi	cal attention and special treatment needed
5.1.       Extinguishing media         Suitable extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1.		•
5.1.       Extinguishing media         Suitable extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1.	SECTION 5: Firefighting measures	
Suitable extinguishing media       : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).         5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1.         Personal precautions, protective equipment and emergency procedures		
5.2.       Special hazards arising from the substance or mixture         Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3.       Advice for firefighters         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1.         Personal precautions, protective equipment and emergency procedures		: Water spray, Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2)
Reactivity       : The product is non-reactive under normal conditions of use, storage and transport.         5.3. Advice for firefighters       Firefighting instructions         Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1. Personal precautions, protective equipment and emergency procedures	0 0	
5.3. Advice for firefighters         Firefighting instructions       Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1. Personal precautions, protective equipment and emergency procedures		
Firefighting instructions       : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures       6.1. Personal precautions, protective equipment and emergency procedures	Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.         Protection during firefighting       : Do not enter fire area without proper protective equipment, including respiratory protection.         SECTION 6: Accidental release measures         6.1.       Personal precautions, protective equipment and emergency procedures	5.3. Advice for firefighters	
Wear recommended personal protective equipment.         SECTION 6: Accidental release measures         6.1.       Personal precautions, protective equipment and emergency procedures	Firefighting instructions	apparatus. Do not enter fire area without proper protective equipment, including respiratory
6.1. Personal precautions, protective equipment and emergency procedures	Protection during firefighting	
	SECTION 6: Accidental release me	easures
6.1.1. For non-emergency personnel	6.1. Personal precautions, protective	equipment and emergency procedures
	6.1.1. For non-emergency personnel	

### Emergency procedures

: Avoid breathing vapours, mist, gas. Avoid dust formation.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Do no	t allow to enter drains or water courses. Avoid release to the environment.
6.3. Methods and material for containment	nt and cleaning up
For containment	: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Avoid all eye and skin contact and do not breathe vapour and mist. Keep away from sources of ignition - No smoking. Caution. Combustible Dust. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Precautions for safe handling	: Provide adequate ventilation to minimize dust and/or vapour concentrations.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, includin	g any incompatibilities
Technical measures	: Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	: Store at room temperature away from light and moisture.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/perso	nal protection
8.1. Control parameters	
Additional information	: Contains no substances with occupational exposure limits
8.2. Exposure controls	
Appropriate engineering controls	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Personal protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
Materials for protective clothing	: Wear suitable protective clothing and gloves.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Wear eye protection. Chemical goggles or face shield with safety glasses.
Skin and body protection	: Wear suitable protective clothing, gloves and eye/face protection.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.
Environmental exposure controls	: Avoid release to the environment.
SECTION 9: Physical and chemical p	roperties

9.1. Information on basic physical a	nd chemical properties
Physical state	: Solid
Appearance	: Crystalline powder
Molecular mass	: 182.14 g/mol (Labeled)
Colour	: White
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 150 - 152 °C (302 - 306 °F)
Freezing point	: No data available
Boiling point	: No data available
00/00/0000	

EN (English)

## CLM-504-MPT

#### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water. Water: 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

#### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable if stored under recommended conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

No additional information available

#### 10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

### D-GLUCOSE (1,2-13C2, 99%) MICROBIOLOGICAL/PYROGEN TESTED (138079-87-5)

LD50 oral rat	25800 mg/kg Remarks: Behavioral: Coma. Cyanosis. Diarrhea.
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>SECTION 12: Ecological inform</b>	nation
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
12.2. Persistence and degradabilit	iy
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
<b>12.5. Results of PBT and vPvB as</b> No additional information available	sessment
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal conside	erations
13.1. Waste treatment methods	
Regional legislation (waste)	<ul> <li>Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.</li> </ul>
Product/Packaging disposal recommend	ations: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.
<b>SECTION 14: Transport inform</b>	ation
In accordance with ADR / RID / IMDG / I 14.1. UN number	ATA / ADN
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Not classified as dangerous in the meaning of transport regulations.
Overland transport No additional information available	
Transport by sea No additional information available	
Air transport	
No additional information available	
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: Not classified as dangerous in the meaning of transport regulations.
	to Annex II of MARPOL 73/78 and the IBC Code
Not applicable	

CLM-504-MPT

#### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information	
15.1. US Federal regulations	
D-GLUCOSE (1,2-13C2, 99%) MICROBIOLOGI	CAL/PYROGEN TESTED (138079-87-5)
Not listed on the United States TSCA (Toxic Sub	stances Control Act) inventory
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

#### 15.2. International regulations

#### **CANADA**

No additional information available

#### 15.2.1. **National regulations**

#### D-GLUCOSE (1,2-13C2, 99%) MICROBIOLOGICAL/PYROGEN TESTED (138079-87-5) Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

15.3. US State regulations		
D-GLUCOSE (1,2-13C2, 99%) MICROBIOLOGICAL/PYROGEN TESTED(138079-87-5)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
State or local regulations	RTK - U.S Pennsylvania - RTK (Right to Know) List RTK - U.S New Jersey - Right to Know Hazardous Substance List	

SECTION 16: Other information	
Other information	: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.
NFPA health hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
HMIS III Rating	
Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

#### CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product