



# CAMBRIDGE ISOTOPE LABORATORIES

## PRODUCT AND COMPANY IDENTIFICATION

Product Name: INLIGHT™ Glycan Tagging Kit

Catalog No: GTK-1000

Company: Cambridge Isotope Laboratories Inc.  
50 Frontage Road  
Andover, MA. 01810  
USA

Telephone: 1-800-322-1174 International information 1-978-749-8000  
Emergency: 1-800-424-9300 International Emergency 1-202-483-7616

## HAZARDS IDENTIFICATION

### Emergency Overview

### OSHA Hazards

Toxic by ingestion

### GHS Classification(s)

Acute toxicity, oral, category 3

### GHS Label elements, including precautionary statements



Pictograms

Signal word Danger

Hazard statement(s)

See individual Safety Data Sheets

## COMPOSITION

Each kit contains fifteen vials:

INLIGHT™ - HEAVY REAGENT [2-(4-PHENETHYLPHENYL)	(5)
INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)	(5)
MALTOHEPTAOSE	(5)



# INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)

## 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: 04/11/2014

Revision date: 17/05/2017

Supersedes: 04/11/2014

Version: 2.0

CLM-9359

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form	: Substance
Substance name	: INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)
EC No	: 213-328-6 (Unlabeled)
CAS No	: 1323987-25-2
Product code	: CLM-9359
Formula	: C10*C6H18N2O

### 1.2. Relevant identified uses of the substance 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

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 3 (Oral) H301

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R25

Full text of R-phrases: see section 16

#### GHS-US classification

Acute Tox. 3 (Oral) H301

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

# INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)

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## 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

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

Signal word (CLP) :

: Danger

Hazard statements (CLP) :

: H301 - Toxic if swallowed

Precautionary statements (CLP) :

: P264 - Wash hands, forearms and face thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER  
P330 - Rinse mouth  
P405 - Store locked up  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

#### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS06

Signal word (GHS-US) :

: Danger

Hazard statements (GHS-US) :

: H301 - Toxic if swallowed

Precautionary statements (GHS-US) :

: P264 - Wash hands, forearms and face thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P301+P310 - If swallowed: Immediately call a POISON CENTER  
P321 - Specific treatment (see Hazardous component(s) for labelling on this label)  
P330 - Rinse mouth  
P405 - Store locked up  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)	(CAS No) 1323987-25-2 (EC No) 213-328-6 (Unlabeled)	100	T; R25
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)	(CAS No) 1323987-25-2 (EC No) 213-328-6 (Unlabeled)	100	Acute Tox. 3 (Oral), H301

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

Name	Product identifier	%	GHS-US classification
INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%) (Main constituent)	(CAS No) 1323987-25-2	100	Acute Tox. 3 (Oral), H301

Full text of H-statements: see section 16

# INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)

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### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Get immediate medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see Hazard pictograms (CLP) on this label).

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray, dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).

### 5.2. Special hazards arising from the substance or mixture

Reactivity : Not available.

### 5.3. Advice for firefighters

Firefighting instructions	: Wear a self contained breathing apparatus. Fight fire with normal precautions from a reasonable distance.
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

General measures : Not flammable or combustible.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist, gas, dust. Ensure adequate air ventilation. Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not discharge the product into the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Provide for appropriate exhaust ventilation at places of vapours accumulation.

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Precautions for safe handling	: Avoid contact with skin and eyes. Avoid breathing dust, gas, mist, vapours. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Store tightly closed in a dry and cool place.
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/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Respiratory protection of the dependent type.



Materials for protective clothing	: Wear suitable protective clothing and gloves.
Hand protection	: Protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline.
Molecular mass	: 260.29 g/mol (Labeled)
Colour	: Off-white.
Odour	: No data available.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 115 - 116 °C (239 - 241 °F) - lit.
Freezing point	: No data available
Boiling point	: No data available
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	: No data available
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

# INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)

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Explosive limits : No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Not available.

### 10.2. Chemical stability

Stable if stored under recommended conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Not available.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Oral: Toxic if swallowed.
Skin corrosion/irritation	: Not classified No data available
Serious eye damage/irritation	: Not classified No data available
Respiratory or skin sensitisation	: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. No data available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not classified
Reproductive toxicity	: Not available
STOT-single exposure	: Not classified No data available
STOT-repeated exposure	: Not classified No data available
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. Toxic if swallowed.
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

#### INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%) (1323987-25-2)

Persistence and degradability	Not available.
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# INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)

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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

### 12.3. Bioaccumulative potential

#### INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%) (1323987-25-2)

Bioaccumulative potential : Not available.

### 12.4. Mobility in soil

#### INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%) (1323987-25-2)

Ecology - soil : Not available.

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects : Disposal must be done according to official regulations. May cause long lasting harmful effects to aquatic life. Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Product/Packaging disposal recommendations: : 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.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No.(DOT) : 2811  
DOT NA no. : UN2811

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Toxic solids, organic, n.o.s.  
Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132  
Hazard labels (DOT) : 6.1 - Poison



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).  
IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.  
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)  
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : 153

DOT Packaging Non Bulk (49 CFR 173.xxx) : 213

DOT Packaging Bulk (49 CFR 173.xxx) : 240

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Marine pollutant : No

### 14.3. Additional information

Emergency Response Guide (ERG) Number : 154

Other information : No supplementary information available.

### Overland transport

Packing group (ADR) : III  
Class (ADR) : 6.1 - Toxic substances  
Hazard identification number (Kemler No.) : 60  
Classification code (ADR) : T2  
Danger labels (ADR) : 6.1 - Toxic substances



Orange plates :



Tunnel restriction code (ADR) : E  
Limited quantities (ADR) : 5kg  
EAC code : 2X  
Excepted quantities (ADR) : E1

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

MFAG-No : 154

### Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 100 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 200 kg

Civil Aeronautics Law : Toxic and infectious substances/Toxic substances(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%) (1323987-25-2)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313



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### 15.2. International regulations

#### CANADA

**INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%) (1323987-25-2)**

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

**INLIGHT™- HEAVY REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] (4-PHENETHYL-RING-13C6, 99%)(1323987-25-2)**

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	U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) 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.

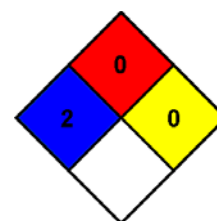
Full text of R-, H- and EUH-statements:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
H301	Toxic if swallowed
R25	Toxic if swallowed
T	Toxic

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical dire 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 : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

CIL Multi-Solvent Mixture 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*



# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

## 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

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ULM-9358

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form	: Substance
Substance name	: INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED
EC No	: 213-328-6
CAS No	: 1323987-25-2
Product code	: ULM-9358
Formula	: C16H18N2O

### 1.2. Relevant identified uses of the substance 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

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 3 (Oral) H301

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R25

Full text of R-phrases: see section 16

#### GHS-US classification

Acute Tox. 3 (Oral) H301

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

ULM-9358

## 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

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

Signal word (CLP) : Danger

Hazard statements (CLP) : H301 - Toxic if swallowed

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER  
P330 - Rinse mouth  
P405 - Store locked up  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

#### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS06

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H301 - Toxic if swallowed

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P321 - Specific treatment (see Hazardous component(s) for labelling on this label)  
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### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED	(CAS No) 1323987-25-2 (EC No) 213-328-6	100	T; R25
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED	(CAS No) 1323987-25-2 (EC No) 213-328-6	100	Acute Tox. 3 (Oral), H301

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

Name	Product identifier	%	GHS-US classification
INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED (Main constituent)	(CAS No) 1323987-25-2	100	Acute Tox. 3 (Oral), H301

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

ULM-9358

## 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 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Evacuate danger area.
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Get immediate medical advice/attention.
- First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see Hazard pictograms (CLP) on this label).

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory irritation.
- Symptoms/injuries after skin contact : May be harmful in contact with skin. May cause skin irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.
- Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray, dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).

#### 5.2. Special hazards arising from the substance or mixture

- Reactivity : Not available.

#### 5.3. Advice for firefighters

- Firefighting instructions : Wear a self contained breathing apparatus. Fight fire with normal precautions from a reasonable distance.
- 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

- General measures : Not flammable or combustible.

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist, gas, dust. Ensure adequate air ventilation. Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not discharge the product into the environment.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Additional hazards when processed : Provide for appropriate exhaust ventilation at places of vapours accumulation.
- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust, gas, mist, vapours. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Store tightly closed in a dry and cool place.

# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

ULM-9358

## 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

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/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Respiratory protection of the dependent type.



Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline.
Molecular mass	: 254.33 g/mol
Colour	: Off-white.
Odour	: No data available.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 115 - 116 °C (239 - 241 °F) - lit.
Freezing point	: No data available
Boiling point	: No data available
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	: No data available
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

Not available.

# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

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## 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

### 10.2. Chemical stability

Stable if stored under recommended conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Not available.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Oral: Toxic if swallowed.
Skin corrosion/irritation	: Not classified No data available
Serious eye damage/irritation	: Not classified No data available
Respiratory or skin sensitisation	: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. No data available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not classified
Reproductive toxicity	: Not available
STOT-single exposure	: Not classified No data available
STOT-repeated exposure	: Not classified No data available
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. Toxic if swallowed.
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

#### INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED (1323987-25-2)

Persistence and degradability	Not available.
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### 12.3. Bioaccumulative potential

#### INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED (1323987-25-2)

Bioaccumulative potential	Not available.
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### 12.4. Mobility in soil

#### INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED (1323987-25-2)

Ecology - soil	Not available.
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### 12.5. Results of PBT and vPvB assessment

No additional information available

# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

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## 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

### 12.6. Other adverse effects

Other adverse effects : Disposal must be done according to official regulations. May cause long lasting harmful effects to aquatic life. Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Product/Packaging disposal recommendations: : 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.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No.(DOT) : 2811

DOT NA no. UN2811

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Toxic solids, organic, n.o.s.

Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

Hazard labels (DOT) : 6.1 - Poison



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).  
IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.  
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)  
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : 153

DOT Packaging Non Bulk (49 CFR 173.xxx) : 213

DOT Packaging Bulk (49 CFR 173.xxx) : 240

Marine pollutant : No

### 14.3. Additional information

Emergency Response Guide (ERG) Number : 154

Other information : No supplementary information available.

### Overland transport

Packing group (ADR) : III

Class (ADR) : 6.1 - Toxic substances

Hazard identification number (Kemler No.) : 60

# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

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## 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

Classification code (ADR) : T2  
Danger labels (ADR) : 6.1 - Toxic substances



Orange plates :



Tunnel restriction code (ADR) : E  
Limited quantities (ADR) : 5kg  
EAC code : 2X  
Excepted quantities (ADR) : E1

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.  
MFAG-No : 154

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 100 kg  
(49 CFR 173.27)  
DOT Quantity Limitations Cargo aircraft only (49 : 200 kg  
CFR 175.75)  
Civil Aeronautics Law : Toxic and infectious substances/Toxic substances(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED (1323987-25-2)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

### 15.2. International regulations

#### CANADA

INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED (1323987-25-2)
Listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED(1323987-25-2)	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental	No



# INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED

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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

INLIGHT™ - LIGHT REAGENT [2-(4-PHENETHYLPHENYL)ACETOHYDRAZIDE] UNLABELED(1323987-25-2)	
Toxicity	
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) 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.

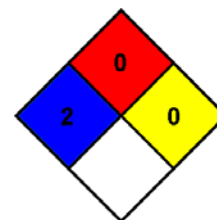
Full text of R-, H- and EUH-statements:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
H301	Toxic if swallowed
R25	Toxic if swallowed
T	Toxic

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical dire 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 : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

CIL Multi-Solvent Mixture 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*



# MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED

## 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: 08/11/2013

Revision date: 17/05/2017

Supersedes: 01/07/2015

Version: 2.0

ULM-9398

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Substance  
Substance name : MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED  
EC No : 252-119-4  
CAS No : 34620-78-5  
Product code : ULM-9398  
Formula : C42H72O36

### 1.2. Relevant identified uses of the substance 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

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### 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

### 2.3. Other hazards

No additional information available

# MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED

ULM-9398

## 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 3: Composition/information on ingredients

#### 3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED	(CAS No) 34620-78-5 (EC No) 252-119-4	100	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED	(CAS No) 34620-78-5 (EC No) 252-119-4	100	Not classified

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

Name	Product identifier	%	GHS-US classification
MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED (Main constituent)	(CAS No) 34620-78-5	100	Not classified

Full text of H-statements: see section 16

#### 3.2. Mixtures

Not applicable

### SECTION 4: First aid measures

#### 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 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 soap and 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/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries 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: Fire-fighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray, dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).

#### 5.2. Special hazards arising from the substance or mixture

Reactivity : Not available.

#### 5.3. Advice for firefighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus.
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

##### 6.1.1. For non-emergency personnel

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

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

# MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED

ULM-9398

## 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

### 6.3. Methods and material for containment 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

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- 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, including 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/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

- Appropriate engineering controls : Contains no substances with occupational exposure limits.  
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.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Solid  
Appearance : Powder.  
Molecular mass : 1153 g/mol  
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 : No data available  
Freezing point : No data available  
Boiling point : No data available  
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 : No data available  
Log Pow : No data available  
Log Kow : No data available

# MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED

ULM-9398

## 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

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

Not available.

### 10.2. Chemical stability

Stable if stored under recommended conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Not available.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified No data available
Serious eye damage/irritation	: Not classified No data available
Respiratory or skin sensitisation	: Not available No data available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not classified
Reproductive toxicity	: Not available
STOT-single exposure	: Not classified No data available
STOT-repeated exposure	: Not classified No data available
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/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

#### MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED (34620-78-5)

Persistence and degradability	Not available.
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# MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED

ULM-9398

## 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

### 12.3. Bioaccumulative potential

#### MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED (34620-78-5)

Bioaccumulative potential	Not available.
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### 12.4. Mobility in soil

#### MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED (34620-78-5)

Ecology - soil	Not available.
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### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects : Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Product/Packaging disposal recommendations: : 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.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

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.

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED (34620-78-5)

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.

# MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED

ULM-9398

## 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

### 15.2. International regulations

#### CANADA

##### MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED (34620-78-5)

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

##### MALTOHEPTAOSE (90%+ CHEMICAL PURITY) UNLABELED(34620-78-5)

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	U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

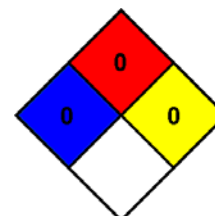
## SECTION 16: Other information

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 dire 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 Multi-Solvent Mixture 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*