

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: 14/01/2011

CLM-682

Revision date: 28/01/2016

Supersedes: 30/01/2012

Version: 3.0

SECTION 1: Identification of the sub	ostance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: ETHYL ACETOACETATE (3,4-13C2, 99%)
EC No	: 205-516-1 (Unlabeled)
CAS No	: 89186-80-1
Product code	: CLM-682
Formula	: *CH3*COCH2COOCH2CH3
Synonyms	: Acetoacetic ester
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	
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 <u>cilsales@isotope.com</u> 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 r	nixture
Classification according to Regulation (EC)	No. 1272/2008 [CLP]
Skin Irrit. 2 H315	
Eye Irrit. 2 H319	
STOT SE 3 H335	

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Xi; R36/37/38 Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 4 H227 Skin Irrit. 2 H315 Eye Irrit. 2A H319 STOT SE 3 H335 Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2.	Label elements	
Labell	ing according to Regulation (EC) No.	1272/2008 [CLP]
Hazaro	l pictograms (CLP)	
Signal	word (CLP)	GHS07 : Warning
-	statements (CLP)	: H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
Precau	itionary statements (CLP)	 P261 - Avoid breathing dust, fume, gas, mist, spray, vapours P264 - Wash hands, forearms and face thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective clothing, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of soap and water P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a doctor if you feel unwell
GHS-U	IS labelling	
Hazaro	l pictograms (GHS-US)	
Signal	word (GHS-US)	GHS07 : Warning
-	l statements (GHS-US)	 H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
Precau	tionary statements (GHS-US)	 P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking P261 - Avoid breathing dust, fume, gas, mist, spray, vapours P264 - Wash hands, forearms and face thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective clothing, protective gloves P302+P352 - If on skin: Wash with plenty of water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a doctor if you feel unwell P321 - Specific treatment (see Hazardous component(s) for labelling on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder to extinguish P403+P233 - Store in a well-ventilated place. Keep container tightly closed P403+P235 - Store in a well-ventilated place. Keep cool 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

Other hazards 2.3.

No additional information available

SECTION 3: Composition/information on ing	gredients		
3.1. Substances			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
ETHYL ACETOACETATE (3,4-13C2, 99%)	(CAS No) 89186-80-1 (EC No) 205-516-1 (Unlabeled)	100	Xi; R36/37/38

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ETHYL ACETOACETATE (3,4-13C2, 99%)	(CAS No) 89186-80-1 (EC No) 205-516-1 (Unlabeled)	100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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

Name	Product identifier	%	GHS-US classification
ETHYL ACETOACETATE (3,4-13C2, 99%) (Main constituent)	(CAS No) 89186-80-1	100	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

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 ef	fects, both acute and delayed
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
4.3. Indication of any immediate medi	cal attention and special treatment needed
No additional information available	
SECTION 5: Fire-fighting measure	S
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
No additional information available	
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.
Other information	: Use water spray to cool exposed surfaces.
SECTION 6: Accidental release me	easures
	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Use personal protective equipment, and ensure adequate ventilation. Avoid breathing vapors, mist, gas. Remove ignition sources, and move personnel to safe area. Vapors accumulate especially in low areas to form explosive concentrations.
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	
Brovent entry to sowers and public waters. Do	a pat allow to optor drains or water courses. Avoid release to the environment

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

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6.3. Methods and material for cont	ainment and cleaning up
For containment	: Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe 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 stora	ge
7.1. Precautions for safe handling	
Additional hazards when processed	: Avoid all eye and skin contact and do not breathe vapour and mist. Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). Provide for appropriate exhaust ventilation at places of vapours accumulation.
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, in	cluding 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	
Personal protective equipment	: Gloves. Protective clothing. Self-contained breathing apparatus. Protective goggles.
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 chemi	
9.1. Information on basic physical	
Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 132.13 g/mol (Labeled)

Colour	: Colourless.
Odour	: No data available
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -43 °C (-45 °F) - lit
Freezing point	: No data available
Boiling point	: 181 °C (358 °F) - lit
Flash point	: 73.5 °C (164.3 °F) - closed cup
Auto-ignition temperature	: 304 °C (579 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0.26 hPa (.20 mmHg) at 20 °C (68 °F) - OECD Test Guideline 104
Vapour pressure at 50 °C	: 3.5 hPa (2.6 mmHg) at 50 °C (122 °F) - OECD Test Guideline 104
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Relative vapour density at 20 °C	: 4.49 (Air = 1.0)
Relative density	: No data available
Density	: 1.029 g/ml at 20 °C (68 °F) - lit.
Solubility	: Water: 130 g/l at 20 °C (68 °F) - OECD Test Guideline 105
Log Pow	: 0.8 at 20 °C (68 °F) - OECD Test Guideline 117
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	: 1.4 - 9.5 % (V)

9.2. **Other information**

No additional information available **SECTION 10: Stability and reactivity**

10.1. F	Reactivity
No additior	nal information available
10.2. (Chemical stability
Stable if st	ored under recommended conditions.
10.3. F	Possibility of hazardous reactions
No additior	nal information available
10.4.	Conditions to avoid
No addition	nal information available
10.5. I	ncompatible materials
Acids. Bas	es. Oxidizing agent. Reducing agents.
10.6. H	Hazardous decomposition products

Carbon oxidos (CO CO2)

Carbon oxides (CO, CO2).	
SECTION 11: Toxicological informa	tion
11.1. Information on toxicological effects	S
Acute toxicity	: Not classified
ETHYL ACETOACETATE (3,4-13C2, 99%) (8	39186-80-1)
LD50 oral rat	10800 mg/kg female
LD50 dermal rat	> 2000 male and female - OECD Guideline 402
ATE CLP (oral)	3980.000 mg/kg bodyweight
Skin corrosion/irritation	: Causes skin irritation.
	Skin - rabbit - Open irritation test
Serious eye damage/irritation	: Causes serious eye irritation.
	Eyes - rabbit - Moderate eye irritation - 24 h
Respiratory or skin sensitisation	: Not available
	No data available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not classified
Reproductive toxicity	: Not available
STOT-single exposure	: May cause respiratory irritation.
	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	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
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Symptoms/injuries after ingestion

: May be harmful if swallowed.

12.1. Toxicity Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Ecology - general :: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. ECOD Dayhing 1 >: 100 mg1 sem static test - Daphin arging Water Fleel 46 h ECOD Dayhing 1 >: 100 mg1 sem static test - Daphina arging Water Fleel 46 h ECOD Dayhing 1 >: 100 mg1 sem static test - Daphina arging Water Fleel 46 h ECOD Dayhing 1 >: 010 mg1 sem static test - Daphina arging Water Fleel 46 h ECOD Dayhing 1 >: 010 mg1 sem static test - Dayhing arging Water Fleel 46 h ECOD Dayhing 1 >: 010 mg1 sem static test - Dayhing arging Water Fleel 46 h ECOD Dayhing 1 >: 010 mg1 sem static test - Dayhing water Harming Mater Fleel 46 h ECOD Dayhing 1 >: 010 mg1 sem static test - Dayhing water Harming Mater Fleel 46 h ECOD Test Subscript 1 Ecology : sem static test - Dayhing Harming Mater Fleel 46 h ECOD Test Subscript 1 Not available. ECOD CON 133 Disposal considerations Not available. SECTON 133 Disposal considerations : Offer surphis and non-recyclable solutions to a leaves disposal erronmend long. Ecology - waste materials : Dispose of as unused pr	Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term effects in the environment. ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1) LC50 fish 1 > 100 mg/l semi static test - Danio rerio (zebra fish) - 96 h EC50 Daphnia 1 > 100 mg/l semi static test - Daphnia magna (Water flea) - 48 h EC50 other aquatic organisms 1 > 100 ml/l semi static test - Desmodesmus subspicatus (green algae) - 72 h	adverse
effects in the environment. LG50 figh 1 > 100 mg/l semi static test - Danio rerio (zebra figh) - 96 h EC50 dura rayadic organisms 1 > 100 mg/l semi static test - Danio rerio (zebra figh) - 96 h EC50 dura rayadic organisms 1 > 100 mg/l semi static test - Desmodesmus subspicatus (green algae) - 72 h I2.2. Persistence and degradability ETMYL ACETOACETATE (3,4-1322, 99%) (99166-80-1) Biddegradation 66 % Readity biodegradable I2.3. Bioaccumulative potential Not available. ETMYL ACETOACETATE (3,4-1322, 99%) (99166-80-1) Edgeradable I2.4. Mobility in soil ETMYL ACETOACETATE (3,4-1322, 99%) (99166-80-1) Edgeradurabile Not available. I2.4. Mobility in soil ETMYL ACETOACETATE (3,4-1322, 99%) (99166-80-1) Ecology - soil Not available. I2.5. Other adverse effects Not available. I3.1. Waste treatment methods Regional legislation (waste) Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local antivormental control regulations. Product/Packaging disposal recommendations : Differ surglue and non-recyclable solutions to a lecensed disposal company. Contact a licensed modescal service to despose of an unused product. SECTION	effects in the environment. ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1) LC50 fish 1 > 100 mg/l semi static test - Danio rerio (zebra fish) - 96 h EC50 Daphnia 1 > 100 mg/l semi static test - Daphnia magna (Water flea) - 48 h EC50 other aquatic organisms 1 > 100 ml/l semi static test - Desmodesmus subspicatus (green algae) - 72 h	adverse
LC50 Bish 1 > 100 mgl semi static test - Danio reiro (zebra Bin) - 96 h EC50 Daphna 1 > 100 mgl semi static test - Danio manga (Water Rea) - 48 h EC50 Daphna 1 > 100 mgl semi static test - Danio manga (Water Rea) - 48 h EC50 Daphna 1 > 100 mgl semi static test - Danio manga (Water Rea) - 48 h EC50 Daphna 2000 mgl semi static test - Danio manga (Water Rea) - 48 h EC50 Daphna 2000 mgl semi static test - Dasmodesmus subspicatus (green algae) - 72 h 12.2. Persistence and degradability ETMYL ACETOACETATE (3.4-13C2, 995) (89186-80-1) Log Pow 0.8 at 20 °C (80 °F) - OECD Test Guideline 117 Bioaccumulative potential Not available. 12.4. Mobility in soil ETMYL ACETOACETATE (3.4-13C2, 995) (89186-80-1) Ecology - soil Not available. 12.5. Genetics of PBT and vPvB assessment No additional information available 12.6. Other adverse effects : Not available. 12.1. Waste treatment methods : Waste materials should be disposed of under conditions which meet Federal, State, and Local control regulations. Product/Packaging disposal recommendations: : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste deposal environmental control regulations. Product/Packaging disposal recommendations: : Offer surplus and non-recycla	LC50 fish 1 > 100 mg/l semi static test - Danio rerio (zebra fish) - 96 h EC50 Daphnia 1 > 100 mg/l semi static test - Daphnia magna (Water flea) - 48 h EC50 other aquatic organisms 1 > 100 ml/l semi static test - Desmodesmus subspicatus (green algae) - 72 h	
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ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1) Bodegradation 66 %, Readily biodegradable 12.3. Bioaccumulative potential ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1) Log Pow 0.8 at 20 °C (68 °F) - OECD Test Guideline 117 Bioaccumulative potential Not available. 12.4. Mobility in soil ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1) Ecology - soil Not available. 12.5. Results of PBT and vPvB assessment No available. No additional information available ECOLO 152 (State 10, State	12.2. Persistence and degradability	
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2.3. Bioaccumulative potential Image: Constraint and the	ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1)	
ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1) Log Pow 0.8 at 20 °C (68 *P) - OECD Test Guideline 117 Bioaccumulative potential Not available. 12.4. Mobility in soil Employ a soil Not available. 12.5. Results of PBT and VPVB assessment Not available. 12.5. Cher adverse effects Other adverse effects Other adverse effects State 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 Disposed information In accordance with ADR / RID / IMDG / IATA / ADN 14.1 Value should be disposed of colspane of this material. Ecology - waste materials Ecology - waste materials Colspan="2">Contact a licensed professional waste disposal service to dispose of this material. Ecology - waste materials <td>Biodegradation 66 % Readily biodegradable</td> <td></td>	Biodegradation 66 % Readily biodegradable	
Log Pow 0.8 at 20 °C (68 °F) - OECD Test Guideline 117 Bioaccumulative potential Not available. 12.4. Mobility in soil ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1) Ecology - soil Not available. 12.6. Other adverse effects No additional information available 100 12.6. Other adverse effects SECTION 13: Disposal Considerations 13.1. Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations. Product/Packaging disposal recommendations: Offer surviconmental control regulations 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) : 1993 DOT NA no. NA1993 14.2. UN proper shipping name Proper Shipping Name (DOT) : Combustible liquid , n.o.s. Class (DOT) : Bi - Authorized Iachine admicrose discuss (JH and 31H2; Composite GitH2 and 31H2; 31HB2, 31H	12.3. Bioaccumulative potential	
Bioaccumulative potential Not available. 12.4. Mobility in soil ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-60-1) Ecology - soil Not available. 12.5. Results of PBT and vPvB assessment No additional information available Other adverse effects 12.6. Other adverse effects Cher adverse effects : Not available. 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) : 1993 DOT NA no. NA1993 14.2. UN proper shipping name Proper Shipping Name (DOT) : Combustible liquid, n.o.s. Class (DOT) : 3 - Class 3 - Flammabla and combustible liquid 49 CFR 173.120 <td>ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1)</td> <td></td>	ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1)	
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	environmental control regulations. Product/Packaging disposal recommendations: : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact 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) : 1993 DOT NA no. NA1993 14.2. UN proper shipping name Proper Shipping Name (DOT) : Combustible liquid, n.o.s. Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada,G - Identific requiring a technical name Packing group (DOT) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); (31H21 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 1: C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision 2 for UN2672). T1 - 1.5 TR3.274(d)(2) Normal	es PSN Composite Only liquid 30 kPa at 5 IP8 in Tabl ed by the

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

DOT Packaging Bulk (49 CFR 173.xxx)	: 241		
Marine pollutant	: No		

14.3. Additional information	
Emergency Response Guide (ERG) Number	: 128
Other information	: No supplementary information available.
Special transport precautions	: IMDG/IATA: Not dangerous goods.
Overland transport	
No additional information available	
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.
Air transport	
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: IMDG/IATA: Not dangerous goods.

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		
ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Fire hazard 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

ETHYL ACETOACETATE (3,4-13C2, 99%) (89186-80-1)	
Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

No additional information available

15.3. US State regulations

ETHYL ACETOACETATE (3,4-13C2, 99%)(89186-80-1)	
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	No

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Other information

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

ETHYL ACETOACETATE (3,4-13C2, 99%)(89186-80-1)	
Toxicity - Male	
State or local regulations	U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: 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:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant

NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
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	: 2 Moderate 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