

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 Revision date: 21/07/2016 Supersedes: 31/07/2012 Date of issue: 13/12/2010

DLM-1556

Version: 3.0

<b>SECTION 1: Identification of the sub</b>	stance/mixture and of the company/undertaking	
1.1. Product identifier		
Product form	: Substance	
Substance name	: ACETIC ACID-D (D, 98%)	
EC Index No	: 607-002-00-6 (Unlabeled)	
EC No	: 200-580-7 (Unlabeled)	
CAS No	: 758-12-3	
Product code	: DLM-1556	
Formula	: CH3COOD	
Synonyms	: Glacial acetic acid	
1.2. Relevant identified uses of the subst	tance 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 of	data sheet	
Cambridge Isotope Laboratories Inc.		
50 Frontage Road		
Andover, MA 01810		
USA LISA: 1-800-322-1174 Int: 1-078-740-8000		
<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 m	ixture	
Classification according to Regulation (EC) N	o. 1272/2008 [CLP]	
Flam. Liq. 3	H226	
Skin Corr. 1A	H314	
Eye Dam. 1	H318	
Full text of hazard classes and H-statements : see section 16		
Classification according to Directive 67/548/E	EC [DSD] or 1999/45/EC [DPD]	
R10		
C; R35		
XI; K41		
Full text of R-phrases: see section 16		
GHS-US classification		
Flam. Liq. 3	H226	
Skin Corr. 1A Eve Dam, 1	H314 H318	

Adverse physicochemical, human health and environmental effects

No additional information available

Full text of H statements : see section 16

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2.2. Label elements	
Labelling according to Regulation (EC) No. Hazard pictograms (CLP)	1272/2008 [CLP]
	GHS02 GHS05
Signal word (CLP)	: Danger
Hazard statements (CLP)	<ul> <li>H226 - Flammable liquid and vapour</li> <li>H314 - Causes severe skin burns and eye damage</li> <li>H318 - Causes serious eye damage</li> </ul>
Precautionary statements (CLP)	<ul> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking</li> <li>P233 - Keep container tightly closed</li> <li>P240 - Ground/bond container and receiving equipment</li> <li>P241 - Use explosion-proof electrical, lighting, ventilating equipment</li> <li>P260 - Do not breathe dust, fume, gas, mist, spray, vapours</li> <li>P264 - Wash Both hands thoroughly after handling</li> <li>P280 - Wear protective clothing, protective gloves</li> <li>P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting</li> </ul>
GHS-US labelling	
Hazard pictograms (GHS-US)	: GHS02 GHS05
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	<ul> <li>H226 - Flammable liquid and vapour</li> <li>H314 - Causes severe skin burns and eye damage</li> <li>H318 - Causes serious eye damage</li> </ul>
Precautionary statements (GHS-US)	<ul> <li>P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking P233 - Keep container tightly closed P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P260 - Do not breathe dust, fume, gas, mist, spray, vapours P264 - Wash Both hands thoroughly after handling P280 - Wear protective clothing, protective gloves P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower 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 P310 - Immediately call a poison center/doctor/ P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P363 - Wash contaminated clothing before reuse P370+P378 - In case of fire: Use Alcohol resistant foam, Dry chemical, Dry powder. to extinguish P403+P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up P501 - Dispose of contents/container to Comply with applicable regulations</li> </ul>

2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

3.1. Substances

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
ACETIC ACID-D (D, 98%)	(CAS No) 758-12-3 (EC No) 200-580-7 (Unlabeled) (EC Index No) 607-002-00-6 (Unlabeled)	100	R10 C; R35 Xi; R41
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ACETIC ACID-D (D, 98%)	(CAS No) 758-12-3 (EC No) 200-580-7 (Unlabeled) (EC Index No) 607-002-00-6 (Unlabeled)	100	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Eye Dam. 1, H318

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

Name	Product identifier	%	GHS-US classification
ACETIC ACID-D (D, 98%) (Main constituent)	(CAS No) 758-12-3	100	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Eye Dam. 1, H318

Full text of H-statements: see section 16

3.2.	Mixtures	
Not appl	icable	
SECTI	ON 4: First aid measures	
4.1.	Description of first aid measures	
First-aid	measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
First-aid	measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid	measures after skin contact	: Wash with soap and plenty of water. Consult a physician.
First-aid	measures after eye contact	: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
First-aid	measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2.	Most important symptoms and effect	ts, both acute and delayed
Sympton	ns/injuries after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Sympton	ns/injuries after skin contact	: Harmful if absorbed through skin. Causes skin burns.
Sympton	ns/injuries after eye contact	: Causes serious eye damage.
Sympton	ns/injuries after ingestion	: May be harmful if swallowed.
4.3.	Indication of any immediate medical	attention and special treatment needed
No addit	ional information available	
SECTI	ON 5: Fire-fighting measures	
5.1.	Extinguishing media	
Suitable	extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Suitable	extinguishing media Special hazards arising from the sub	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Suitable 5.2. Reactivit	extinguishing media Special hazards arising from the sub y	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.     stance or mixture     Not available.
Suitable 5.2. Reactivit 5.3.	extinguishing media Special hazards arising from the sub y Advice for firefighters	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>stance or mixture</li> <li>Not available.</li> </ul>
Suitable 5.2. Reactivit 5.3. Firefighti	extinguishing media Special hazards arising from the sub y Advice for firefighters ng instructions	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>stance or mixture         <ul> <li>Not available.</li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> </ul> </li> </ul>
Suitable 5.2. Reactivit 5.3. Firefighti Protectio	extinguishing media Special hazards arising from the sub y Advice for firefighters ng instructions n during firefighting	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>stance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul>
Suitable 5.2. Reactivit 5.3. Firefighti Protectio Other inf	extinguishing media Special hazards arising from the sub y Advice for firefighters ng instructions n during firefighting formation	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>stance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul>
Suitable 5.2. Reactivit 5.3. Firefighti Protectic Other inf	extinguishing media Special hazards arising from the sub y Advice for firefighters ng instructions on during firefighting formation ON 6: Accidental release meas	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>stance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul>
Suitable 5.2. Reactivit 5.3. Firefighti Protectic Other inf SECTI 6.1.	extinguishing media Special hazards arising from the sub y Advice for firefighters ng instructions in during firefighting ormation ON 6: Accidental release meas Personal precautions, protective equ	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>Destance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul> <li>Sures</li>
Suitable 5.2. Reactivit 5.3. Firefighti Protectic Other inf SECTIO 6.1. 6.1.1.	extinguishing media Special hazards arising from the sub y Advice for firefighters ng instructions on during firefighting formation ON 6: Accidental release meas Personal precautions, protective equ For non-emergency personnel	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>Destance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul> <li>Bures</li>
Suitable 5.2. Reactivit 5.3. Firefighti Protectic Other inf SECTI 6.1. 6.1.1. Emerger	extinguishing media Special hazards arising from the sub Y Advice for firefighters ng instructions in during firefighting formation ON 6: Accidental release meas Personal precautions, protective equ For non-emergency personnel ncy procedures	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>Destance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul> <li>Ures <ul> <li>Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.</li> </ul></li>
Suitable 5.2. Reactivit 5.3. Firefighti Protectic Other inf 6.1. 6.1.1. Emerger 6.1.2.	extinguishing media Special hazards arising from the sub Y Advice for firefighters ng instructions on during firefighting formation ON 6: Accidental release meas Personal precautions, protective equ For non-emergency personnel ncy procedures For emergency responders	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>Instance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul> <li>Cures <ul> <li>Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.</li> </ul></li>
Suitable 5.2. Reactivit 5.3. Firefighti Protectio Other inf SECTI 6.1. 6.1.1. Emerger 6.1.2. No addit	extinguishing media Special hazards arising from the sub Y Advice for firefighters ng instructions n during firefighting formation ON 6: Accidental release meas Personal precautions, protective equ For non-emergency personnel ncy procedures For emergency responders ional information available	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>Destance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul> <li>Sures <ul> <li>Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.</li> </ul></li>
Suitable 5.2. Reactivit 5.3. Firefighti Protectic Other inf SECTI 6.1. 6.1.1. Emerger 6.1.2. No addit 6.2.	extinguishing media Special hazards arising from the sub Y Advice for firefighters ng instructions in during firefighting ormation ON 6: Accidental release meas Personal precautions, protective equ For non-emergency personnel ncy procedures For emergency responders ional information available Environmental precautions	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.</li> <li>Instance or mixture <ul> <li>Not available.</li> </ul> </li> <li>Wear self contained breathing apparatus for fire fighting if necessary.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Use water spray to cool unopened containers.</li> </ul> <li>Surres <ul> <li>Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.</li> </ul></li>

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3.3. Methods and material for containment and cleaning up				
For containment :		Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet- brushing and place in container for disposal according to local regulations.		
6.4. Reference to other sections				
No additional information available				
<b>SECTION 7: Handling a</b>	nd storage			
7.1. Precautions for safe	handling			
Precautions for safe handling	:	Avoid inhalation of vapour or mist. Ke measures to prevent the build up of e	ep away from sources of ignition - No smoking. Take lectrostatic charge.	
Hygiene measures	:	Handle in accordance with good industrian breaks and at the end of workday.	strial hygiene and safety practice. Wash hands before	
7.2. Conditions for safe	storage, including	any incompatibilities		
Technical measures	:	Keep container tightly closed in a coo	I, dry and well-ventilated place.	
Storage conditions	:	Store at room temperature away from	light and moisture.	
7.3. Specific end use(s)				
No additional information availa	ble			
SECTION 8: Exposure of	controls/persor	al protection		
8.1. Control parameters				
ACETIC ACID-D (D. 98%) (75	58-12-3)			
Italy - Portugal - USA ACGIH	ACGIH TWA (ppr	n)	10.00000000 ppm Pulmonary function. Upper Respiratory Tract irritation. Eye irritation. USA ACGIH Threshold Limit Values (TLV)	
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)		15 ppm Pulmonary function. Upper Respiratory Tract irritation. Eye irritation. USA ACGIH Threshold Limit Values (TLV)	
USA NIOSH	NIOSH REL (TWA) (mg/m³)		25 mg/m <sup>3</sup> Can be found in concentrations of 5-8% in vinegar. USA NIOSH Recommended Exposure Limits	
USA NIOSH	NIOSH REL (TWA) (ppm)		10 ppm Can be found in concentrations of 5-8% in vinegar. USA NIOSH Recommended Exposure Limits	
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )		37 mg/m <sup>3</sup> Can be found in concentrations of 5-8% in vinegar. USA NIOSH Recommended Exposure Limits	
USA NIOSH	NIOSH REL (STEL) (ppm)		15 ppm Can be found in concentrations of 5-8% in vinegar. USA NIOSH Recommended Exposure Limits	
USA OSHA	OSHA PEL (TWA	.) (mg/m³)	25 mg/m <sup>3</sup> The value in mg/m3 is approximate. USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	
USA OSHA	OSHA PEL (TWA	.) (ppm)	10 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	
USA OSHA	OSHA PEL (STEI	_) (ppm)	10 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
USA OSHA	OSHA PEL (Ceilin	ng) (mg/m³)	25 mg/m <sup>3</sup> California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
USA OSHA	OSHA PEL (Ceiling) (ppm)		40 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)	

## 8.2. Exposure controls

Appropriate engineering controls

: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

- Personal protective equipment
- Breaks and at the end of workday.Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Wear safety glasses with side shields (or goggles) and a face shield.

: Wear suitable protective clothing and gloves.

: Wear suitable protective clothing and gloves.

Materials for protective clothing Hand protection Eye protection Skin and body protection

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: When appropriate, use NIOSH/CEN approved respirator. Respiratory protection Environmental exposure controls

: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Appearance	: Liquid.	
Molecular mass	: 61.06 g/mol (Labeled)	
Colour	: Colourless.	
Odour	: Pungent.	
Odour threshold	: No data available	
рН	: 2.4 at 60.05 g/l	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: 16.2 °C (61.2 °F) - lit	
Freezing point	: No data available	
Boiling point	: 117 - 118 °C (243 - 244 °F) - lit	
Flash point	: 40 °C (104 °F) - closed cup	
Auto-ignition temperature	: 485 °C (905 °F)	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapour pressure	: 15.2 hPa (11.4 mmHg) at 20 °C (68 °F)	
Vapour pressure at 50 °C	: 73.3 hPa (55 mmHg) at 50 °C (122 °F)	
Relative vapour density at 20 °C	: No data available	
Relative density	: No data available	
Density	: 1.049 g/ml at 25 °C (77 °F)	
Solubility	: Water: Completely miscible	
Log Pow	: -0.17	
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	: 4 - 19.9 % (V)	
9.2. Other information		
No additional information available		
<b>SECTION 10: Stability and reactivity</b>		
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 **Conditions to avoid** 10.4. Heat, flames and sparks. Incompatible materials 10.5. Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Metals. Peroxides, permanganates, e.g. potassium permanganate, Amines, Alcohols. Nitric acid. 10.6. Hazardous decomposition products No data available. **SECTION 11: Toxicological information** 11.1. Information on toxicological effects : Not classified Acute toxicity ACETIC ACID-D (D, 98%) (758-12-3) LD50 oral rat 3310 mg/kg

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ACETIC ACID-D (D, 98%) (758-12-3)		
LD50 dermal rabbit		1112 mg/kg
LC50 Inhalation - Mouse - 1 h - 5620 ppm Remarks		Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Conjunctive irritation. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Other. Blood: Other changes.
Skin corrosion/irritation	:	Skin - Rabbit Result: Causes severe burns.
		pH: 2.4 at 60.05 g/l
Serious eye damage/irritation	:	Eyes - Rabbit Result: Corrosive to eyes
		pH: 2.4 at 60.05 g/l
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	:	Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Spasm, inflammation and edema of the larynx, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting. Ingestion or inhalation of concentrated acetic acid causes damage to tissues of the respiratory and digestive tracts. Symptoms include: hematemesis, bloody diarrhea, edema and/or perforation of the esophagus and pylorus, pancreatitis, hematuria, anuria, uremia, albuminuria, hemolysis, convulsions, bronchitis, pulmonary edema, pneumonia, cardiovascular collapse, shock, and death. Direct contact or exposure to high concentrations of vapor with skin or eyes can cause: erythema, blisters, tissue destruction with slow healing, skin blackening, hyperkeratosis, fissures, corneal erosion, opacification, iritis, conjunctivitis, and possible blindness. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence.
Symptoms/injuries after inhalation	:	May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	:	Harmful if absorbed through skin. Causes skin burns.
Symptoms/injuries after eye contact	:	Causes serious eye damage.
Symptoms/injuries after ingestion	:	May be harmful if swallowed.

SECTION 12: Ecological information	
12.1. Toxicity	
ACETIC ACID-D (D, 98%) (758-12-3)	
LC50 fish 1	> 1000 mg/l semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - 96 h (OECD Test Guideline 203)
EC50 Daphnia 1	> 300.82 Daphnia magna (Water flea) - 48 h (OECD Test Guideline 202)

12.2. Persistence and degradability	Persistence and degradability	
ACETIC ACID-D (D, 98%) (758-12-3)		
Persistence and degradability	Aerobic - Exposure time 30 d.	
Biochemical oxygen demand (BOD)	880 mg/g	
Biodegradation	99 % Readily biodegradable Remarks: Expected to be biodegradable	
12.3. Bioaccumulative potential		
ACETIC ACID-D (D, 98%) (758-12-3)		
Log Pow	-0.17	
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Other adverse effects		
No additional information available		

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SECTION 13: Disposal consideration	IS
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.
<b>SECTION 14: Transport information</b>	
In accordance with ADR / RID / IMDG / IATA / AI	DN
14.1. UN number	
UN-No.(DOT)	: 2789
DOT NA no.	UN2789
14.2. UN proper shipping name	
Proper Shipping Name (DOT)	: Acetic acid, glacial
	with more than 80 percent acid, by mass
Class (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard labels (DOT)	: 8 - Corrosive
	8 3
Packing group (DOT)	
DOT Special Provisions (49 CER 172 102)	· A3 - For combination packagings, if glass inner packagings (including approved) are used, they
	<ul> <li>a viol for combination packaginge, if glace inner packaginge (including ampedies) are dece, viely must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings.</li> <li>A6 - For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.</li> </ul>
	A1 - Steel packagings must be conosion-resistant of have protection against conosion. A10 - When aluminum or aluminum alloy construction materials are used, they must be resistant to corrosion. B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.
	IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal
	following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image)
	Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C
	(59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Packaging Non Bulk (49 CFR 1/3.xxx)	: 202
DOT Packaging Buik (49 CFR 173.xxx)	. 245
44.2 Additional information	
14.3. Additional information	· No supplementary information available
	. Not depressue acada
Special transport precautions	: Not dangerous goods.
Overland transport	
Packing group (ADR)	: 11
Class (ADR)	: 8 - Corrosive substances
Hazard identification number (Kemler No.)	: 83
Classification code (ADR)	: CF1

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

Danger labels (ADR)	:	8 - Corrosive substances 3 - Flammable liquids
Orange plates	:	83 2789
Tunnel restriction code (ADR)	:	D/E
Limited quantities (ADR)		11
EAC code	:	•2P
APP code	:	A(fl)
Excepted quantities (ADR)	:	E2
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	:	132
Air transport		
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	1L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	30 L
Civil Aeronautics Law	:	Corrosive 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		
Special transport precautions	:	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	
ACETIC ACID-D (D, 98%) (758-12-3)	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

## 15.2. International regulations

CANADA	
ACETIC ACID-D (D, 98%) (758-12-3)	
Listed on the Canadian DSL (Domestic Substances List)	

## 15.2.1. National regulations

No additional information available

## 15.3. US State regulations

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ACETIC ACID-D (D, 98%)(758-12-3)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental	No	

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

ACETIC ACID-D (D, 98%)(758-12-3)	
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 Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **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:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H226	Flammable liquid and vapour
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
R10	Flammable
R35	Causes severe burns
R41	Risk of serious damage to eyes
С	Corrosive
Xi	Irritant

NFPA health hazard	: 3 - Materials that, under emergency conditions, can cause serious or permanent 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	: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
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