

## 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

Version: 4.0

Date of issue: 29/12/2010 Revision date: 11/05/2017 Supersedes: 29/11/2016

DLM-1129

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

#### 1.1. Product identifier

Product form : Substance

 Substance name
 : MALEIC ACID (2,3-D2, 98%)

 EC Index No
 : 607-095-00-3 (Unlabeled)

 EC No
 : 203-742-5 (Unlabeled)

CAS No : 24461-33-4
Product code : DLM-1129

Formula : HOOCCD=CDCOOH

Synonyms : Toxilic acid / cis-Butenedioic acid

#### 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 <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 mixture

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

Acute Tox. 4 (Oral) H302 Acute Tox. 4 (Dermal) H312 Skin Irrit. 2 H315 Eye Dam. 1 H318 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]

Xn; R21/22 Xi; R37/38 N; R51/53 Xi; R41

Full text of R-phrases: see section 16

#### **GHS-US** classification

Acute Tox. 4 (Oral) H302 Acute Tox. 4 (Dermal) H312 Skin Irrit. 2 H315 Eye Dam. 1 H318 STOT SE 3 H335 Aquatic Acute 2 H401

Full text of H statements : see section 16

12/05/2017 EN (English) 1/9

## 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

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

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)





Signal word (CLP) : Danger

Hazard statements (CLP) : H302+H312 - Harmful if swallowed or in contact with skin

H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation

Precautionary statements (CLP) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapours

P264 - Wash Both hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective clothing, protective gloves

P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell

P302+P352 - IF ON SKIN: Wash with plenty of water

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

#### **GHS-US** labelling

Hazard pictograms (GHS-US)



GHS05



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H302+H312 - Harmful if swallowed or in contact with skin

H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation

H401 - Toxic to aquatic life

Precautionary statements (GHS-US) : P261 - Avoid breathing fume, mist, spray, vapours

P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area

P273 - Avoid release to the environment

P280 - Wear eye protection, face protection, protective clothing, protective gloves

P301+P312 - If swallowed: Call a doctor if you feel unwell

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 P310 - Immediately call a doctor

P312 - Call a doctor if you feel unwell

P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P322 - Specific treatment (see Hazard pictograms (CLP) on this label)

P330 - Rinse mouth

P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to Comply with applicable regulations

## 2.3. Other hazards

No additional information available

12/05/2017 EN (English) 2/9

## 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
MALEIC ACID (2,3-D2, 98%)	(CAS No) 24461-33-4 (EC No) 203-742-5 (Unlabeled) (EC Index No) 607-095-00-3 (Unlabeled)	100	Xn; R21/22 Xi; R37/38 N; R51/53 Xi; R41
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
MALEIC ACID (2,3-D2, 98%)	(CAS No) 24461-33-4 (EC No) 203-742-5 (Unlabeled) (EC Index No) 607-095-00-3 (Unlabeled)	100	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

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

Name	Product identifier	%	GHS-US classification
MALEIC ACID (2,3-D2, 98%) (Main constituent)	(CAS No) 24461-33-4	100	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401

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 : 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 off with soap and plenty of water. Consult a physician.

First-aid measures after eye contact : Flush eye with water for 15 minutes. Get medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse

mouth with water. Consult a physician.

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

Symptoms/injuries after inhalation : May be fatal if inhaled. May cause respiratory irritation.

Symptoms/injuries after skin contact : Harmful if absorbed through skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : 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 : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

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

No additional information available

#### 5.3. Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.

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 : Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe area.

12/05/2017 EN (English) 3/9

## Safety Data Sheet

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

## 6.1.1. For non-emergency personnel

**Emergency procedures** 

: Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

For containment

 Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

#### 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

 Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Hygiene measures

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

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

Technical measures : Keep container tightly closed in a 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 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.









Hand protection : Wear suitable protective clothing and gloves.

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

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous

substance at the work place.

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

## **SECTION 9: Physical and chemical properties**

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

Physical state : Solid
Appearance : Powder.

Molecular mass : 118.08 g/mol (Labeled)

Colour : White.

Odour Codour threshold : No data available Codour Co

Melting point : 137 - 140 °C (279 - 284 °F) - lit.

Freezing point : No data available Boiling point : 160 °C (320 °F)

Flash point : 127 °C (261 °F) - closed cup

Auto-ignition temperature : No data available Decomposition temperature : No data available

12/05/2017 EN (English) 4/9

## 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

Flammability (solid, gas) : The product is not flammable. - Flammability (solids)

Vapour pressure : No data available Relative vapour density at 20 °C : No data available

Relative density : 1.59 g/cm3 at  $25 ^{\circ}\text{C}$  (77  $^{\circ}\text{F}$ ) Solubility : Water: 788 g/l at 20  $^{\circ}\text{C}$  (68  $^{\circ}\text{F}$ )

Log Pow : -1.3 at 20 °C (68 °F)
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 : 2.7 % (V);Lower explosion limit

#### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information 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

Oxidizing agents.

## 10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin.

MALEIC ACID (2,3-D2, 98%) (24461-33-4)	
LD50 oral rat	1090 mg/kg Remarks: Read-across (Analogy);(OECD Test Guideline 401)
LD50 dermal rabbit	1560 mg/kg Remarks: Behavioral:Tremor.
LC50 inhalation rat (mg/l)	> 720 mg/m³ -1 h
ATE CLP (oral)	1090.000 mg/kg bodyweight
ATE CLP (dermal)	1560.000 mg/kg bodyweight

Skin corrosion/irritation : Skin - Rabbit Result: Skin irritation. (OECD Test Guideline 404). Remarks: Read-across

(Analogy)

Serious eye damage/irritation : Eyes - Rabbit Result: Risk of serious damage to eyes. (OECD Test Guideline 405). Remarks:

Read-across (Analogy)

Respiratory or skin sensitisation : in vivo assay - Mouse. May cause sensitization by skin contact. (OECD Test Guideline 429)

No data available

Germ cell mutagenicity : Hamster Ovary Result: negative

Carcinogenicity : Not classified Reproductive toxicity : Not available

STOT-single exposure : May cause respiratory irritation.

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. Gastrointestinal disturbance.

Symptoms/injuries after inhalation : May be fatal if inhaled. May cause respiratory irritation. Symptoms/injuries after skin contact : Harmful if absorbed through skin. Causes skin irritation.

12/05/2017 EN (English) 5/9

## 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

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Harmful if swallowed.

## **SECTION 12: Ecological information**

#### **Toxicity**

MALEIC ACID (2,3-D2, 98%) (24461-33-4)	
LC50 fish 1	75 mg/l - Oncorhynchus mykiss (rainbow trout) - 96 h;Remarks: Read-across (Analogy)
EC50 Daphnia 1	42.81 (≥ 400) mg/l - Daphnia magna (Water flea) - 48 h;(OECD Test Guideline 202)
ErC50 (algae)	74.35 mg/l - Pseudokirchneriella subcapitata - 72 h;(OECD Test Guideline 201)
ErC50 (other aquatic plants)	12.5 mg/l - Photobacterium phosphoreum - 15 min

#### 12.2. Persistence and degradability

MALEIC ACID (2,3-D2, 98%) (24461-33-4)	
Persistence and degradability	Not available.
Biodegradation	97.08 % Result:- Readily biodegradable;aerobic - Exposure time 28 d;(OECD Test Guideline 301B)

#### 12.3. **Bioaccumulative potential**

MALEIC ACID (2,3-D2, 98%) (24461-33-4)	
Bioconcentration factor (BCF REACH)	< 10
Log Pow	-1.3 at 20 °C (68 °F)
Bioaccumulative potential	Leuciscus idus melanotus - 3 d - 31 μg/l.

#### 12.4. Mobility in soil

MALEIC ACID (2,3-D2, 98%) (24461-33-4)	
Ecology - soil	Not available.

#### Results of PBT and vPvB assessment 12.5.

No additional information available

#### Other adverse effects

Other adverse effects : Toxic to aquatic life with long lasting effects. Avoid release to the environment. Disposal must

be done according to official regulations.

## SECTION 13: Disposal considerations

## Waste treatment methods

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

environmental control regulations.

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed Product/Packaging disposal recommendations:

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

: 3077 UN-No.(DOT) DOT NA no. UN3077

## **UN** proper shipping name

Proper Shipping Name (DOT) : Environmentally hazardous substances, solid, n.o.s.

Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

: 9 - Class 9 (Miscellaneous dangerous materials) Hazard labels (DOT)



**DOT Symbols** : G - Identifies PSN requiring a technical name

Packing group (DOT) : III - Minor Danger

12/05/2017 EN (English) 6/9

## 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 Special Provisions (49 CFR 172.102)

- : 8 A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.
  - 146 This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.
  - 335 Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leakproof when used as bulk packaging.
  - A112 Notwithstanding the quantity limits shown in Column (9A) and (9B) for this entry, the following IBCs are authorized for transportation aboard passenger and cargo-only aircraft. Each IBC may not exceed a maximum net quantity of 1,000 kg:
  - a. Metal: 11A, 11B, 11N, 21A, 21B and 21N
  - b. Rigid plastics: 11H1, 11H2, 21H1 and 21H2
  - c. Composite with plastic inner receptacle: 11HZ1, 11HZ2, 21HZ1 and 21HZ2
  - d. Fiberboard: 11G
  - e. Wooden: 11C, 11D and 11F (with inner liners)
  - f. Flexible: 13H2, 13H3, 13H4, 13H5, 13L2, 13L3, 13L4, 13M1 and 13M2 (flexible IBCs must be sift-proof and water resistant or must be fitted with a sift-proof and water resistant liner). B54 Open-top, sift-proof rail cars are also authorized.
  - 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.
  - N20 A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle. 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) : 155

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

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

DOT RQ : 5000 lbs

Marine pollutant : No

## 14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : IMDG/IATA: Not dangerous goods.

## **Overland transport**

Packing group (ADR) : III

Class (ADR) : 9 - Miscellaneous dangerous substances and articles

Hazard identification number (Kemler No.) : 90
Classification code (ADR) : M7

Danger labels (ADR) : 9 - Miscellaneous dangerous substances and articles



12/05/2017 EN (English) 7/9

## 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

Orange plates :

90 3077

Tunnel restriction code (ADR) : E
Limited quantities (ADR) 5kg
EAC code : 2Z
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 : 171

Air transport

DOT Quantity Limitations Passenger aircraft/rail : No limit

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : No limit

CFR 175.75)

Civil Aeronautics Law : Miscellaneous dangerous substances & articles(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 : 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

l	MALEIC ACID (2,3-D2, 98%) (24461-33-4)	

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

## 15.2. International regulations

### CANADA

## MALEIC ACID (2,3-D2, 98%) (24461-33-4)

Listed on the Canadian DSL (Domestic Substances List)

## 15.2.1. National regulations

No additional information available

## 15.3. US State regulations

MALEIC ACID (2,3-D2, 98%)(24461-33-4)	
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 Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

12/05/2017 EN (English) 8/9

## 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 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. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H302	Harmful if swallowed	
H312	Harmful in contact with skin	
H315	Causes skin irritation	
H318	Causes serious eye damage	
H335	May cause respiratory irritation	
R21/22	Harmful in contact with skin and if swallowed	
R37/38	Irritating to respiratory system and skin	
R41	Risk of serious damage to eyes	
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment	
N	Dangerous for the environment	
Xi	Irritant	
Xn	Harmful	

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

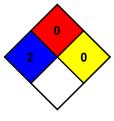
temporary incapacitation or residual injury.

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

12/05/2017 EN (English) 9/9