

## Monoethylene Glycol (MEG)

Issuing Date 18-May-2017

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Version 2.2

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

#### 1.1. Product identifier

**Product Code** NDF00270

**Product Name** Monoethylene Glycol (MEG)

**Pure substance/mixture** Substance  
 Contains Ethylene glycol

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** hydrate-control additive

**Uses advised against** No information available

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

##### Supplier

Newpark Drilling Fluids S.r.l.  
 Via Salaria 1313/C  
 00138 ROMA (Italy)  
 For further information, please contact

**Contact Point** Telephone: + 39 06 8856111  
 Fax: +39 06 8889363  
 Website: www.newpark.com

**E-mail address** hse-hqit@newpark.com

#### 1.4. Emergency telephone number

Emergency Telephone - §45 - (EC)1272/2008	
Europe	112
Croatia	+385 1 7776 920 ; +385 01 2348 342 (Centar za kontrolu otrovanja, 24 sata)
Cyprus	1401
France	+(33)-975181407
Germany	0800-181-7059; +(49)- 69643508409
Hungary	+(36)-18088425
Italy	800-789-767; +(39)-0245557031 Milano 24/24 Ospedale Niguarda Ca'grande Piazza ospedale maggiore 3 +39 0266101029  Roma 24/24 Policlinico Gemelli Largo Agostino Gemelli 8 +39 063054343

Netherlands	+(31)-858880596
Romania	+40213183606, Institutul Național de Sănătate Publică (L-V între 08.00-15.00)
Spain	900-868538; +(34)-931768545
Switzerland	145, (+41) 435082011
United Kingdom	+(44)-870-8200418

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)

### 2.2. Label elements

203-473-3

Contains Ethylene glycol



#### Signal word

Warning

#### Hazard statements

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure

#### Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

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

P314 - Get medical advice/attention if you feel unwell

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Additional information

This product requires tactile warnings if supplied to the general public.

### 2.3. Other hazards

Harmful to aquatic life.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Ethylene glycol 107-21-1	100	01-2119456816-28-XX XX	203-473-3	Acute Tox. 4 (H302) STOT RE 2 (H373)	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate  
No information available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Ethylene glycol 107-21-1	4700	10600	3.75	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	In the case of skin irritation or allergic reactions see a physician. Wash skin with soap and water.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician. Clean mouth with water and drink afterwards plenty of water.

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

<b>Symptoms</b>	No information available.
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### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable Extinguishing Media</b>	Dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.

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

<b>Specific hazards arising from the chemical</b>	No information available.
<b>Hazardous combustion products</b>	Carbon oxides.

### 5.3. Advice for firefighters

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

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

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.
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### 7.3. Specific end use(s)

<b>Risk Management Methods (RMM)</b>	The information required is contained in this Safety Data Sheet.
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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Ethylene glycol 107-21-1	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> *	TWA: 10 ppm TWA: 26 mg/m <sup>3</sup> STEL 20 ppm STEL 52 mg/m <sup>3</sup> H*	D*	STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> TWA: 52 mg/m <sup>3</sup> TWA: 20 ppm K*	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> *
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland

Ethylene glycol 107-21-1	* STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> TWA: 20 ppm TWA: 52 mg/m <sup>3</sup>	TWA: 50 mg/m <sup>3</sup> Ceiling: 100 mg/m <sup>3</sup> D*	TWA: 10 ppm TWA: 26 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> H*	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> A*	TWA: 20 ppm TWA: 50 mg/m <sup>3</sup> STEL: 40 ppm STEL: 100 mg/m <sup>3</sup> iho*
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Ethylene glycol 107-21-1	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> *	TWA: 10 ppm TWA: 26 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 26 mg/m <sup>3</sup> Peak: 20 ppm Peak: 52 mg/m <sup>3</sup> *	TWA: 50 ppm TWA: 125 mg/m <sup>3</sup> STEL: 50 ppm STEL: 125 mg/m <sup>3</sup>	TWA: 52 mg/m <sup>3</sup> STEL: 104 mg/m <sup>3</sup> b*
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Ethylene glycol 107-21-1	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> Sk*	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> cute*	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> Ada*	O* TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 20 ppm STEL: 50 mg/m <sup>3</sup>
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Ethylene glycol 107-21-1	Peau* STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> TWA: 20 ppm TWA: 52 mg/m <sup>3</sup>	skin* STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> TWA: 20 ppm TWA: 52 mg/m <sup>3</sup>	TWA: 52 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> STEL: 104 mg/m <sup>3</sup> H*	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 104 mg/m <sup>3</sup> STEL: 40 ppm H*	STEL: 50 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup> skóra*
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Ethylene glycol 107-21-1	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> Ceiling: 100 mg/m <sup>3</sup> Cutânea*	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> P*	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> K* Ceiling: 104 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> K*	TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> via dérmica*
Chemical name	Sweden		Switzerland		United Kingdom
Ethylene glycol 107-21-1	NGV: 10 ppm NGV: 25 mg/m <sup>3</sup> Bindande KGV: 40 ppm Bindande KGV: 104 mg/m <sup>3</sup> H*		TWA: 10 ppm TWA: 26 mg/m <sup>3</sup> STEL: 20 ppm STEL: 52 mg/m <sup>3</sup> H*		TWA: 10 mg/m <sup>3</sup> TWA: 20 ppm TWA: 52 mg/m <sup>3</sup> STEL: 40 ppm STEL: 104 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup> Sk*

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

<b>Derived No Effect Level (DNEL)</b>	Long term.
<b>Dermal</b>	106 mg/kg bw/day
<b>Predicted No Effect Concentration (PNEC)</b>	No information available.
<b>Freshwater</b>	10 mg/L
<b>Freshwater sediment</b>	37 mg/kg dw
<b>Marine water</b>	1 mg/L
<b>Marine sediment</b>	3.7 mg/kg dw
<b>Soil</b>	1.53 mg/kg dw
<b>Impact on Sewage Treatment</b>	199.5 mg/L

**8.2. Exposure controls**

**Engineering controls** No information available.

**Personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166, designed to protect against spray mists.

<b>Hand protection</b>	Nitrile rubber. Polyvinyl alcohol. Gloves must conform to standard EN 374.
<b>Skin and body protection</b>	(EN 340). Lightweight protective clothing.
<b>Respiratory protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. (EN 136, EN 140, EN 141, EN 143, EN 149, EN 405).
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Environmental exposure controls</b>	No information available.

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	Liquid	
<b>Appearance</b>	liquid	
<b>Color</b>	colorless	
<b>Odor</b>	sweet.	
<b>Odor threshold</b>	No information available	
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>Melting point / freezing point</b>	-13 °C	
<b>Boiling point / boiling range</b>	196 °C	
<b>Flammability (solid, gas)</b>		Not applicable
<b>Flammability Limit in Air</b>		No information available
Upper flammability limit:		
Lower flammability limit:		
<b>Flash point</b>	111 °C	
<b>Autoignition temperature</b>	400 °C	
<b>Decomposition temperature</b>		No information available
<b>pH</b>		No information available
pH (as aqueous solution)		No information available
<b>Kinematic viscosity</b>		No information available
Dynamic viscosity		No information available
<b>Water solubility</b>	Miscible in water	
<b>Solubility(ies)</b>		No information available
<b>Partition coefficient</b>		No information available
<b>Vapor pressure</b>		No information available
<b>Relative density</b>	1.11	
Bulk density		
Liquid Density		
<b>Vapor density</b>		No information available
<b>Particle characteristics</b>		No information available
Particle Size		
Particle Size Distribution		

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Not applicable

Explosive properties	Not an explosive
<b>Oxidizing properties</b>	Not applicable

#### 9.2.2. Other safety characteristics

No information available 1

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** Not reactive under normal conditions.

#### 10.2. Chemical stability

**Stability** Stable under normal conditions.

#### **Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

#### 10.4. Conditions to avoid

**Conditions to avoid** Excessive heat. To avoid thermal decomposition, do not overheat.

#### 10.5. Incompatible materials

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

**Hazardous Decomposition Products** Aldehydes. Alcohols.

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

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### Information on likely routes of exposure

##### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

##### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

##### Numerical measures of toxicity

##### **Acute toxicity**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene glycol	= 4700 mg/kg ( Rat )	= 10600 mg/kg ( Rat )	> 2.5 mg/L ( Rat ) 6 h

##### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** May cause damage to organs.

**Aspiration hazard** No information available.

## **11.2. Information on other hazards**

### **11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

### **11.2.2. Other information**

**Other adverse effects** No information available.

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

#### **Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene glycol	EC50: 6500 - 13000mg/L (96h, <i>Pseudokirchneriella subcapitata</i> )	LC50: 14 - 18mL/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: 40000 - 60000mg/L (96h, <i>Pimephales promelas</i> ) LC50: =16000mg/L (96h, <i>Poecilia reticulata</i> ) LC50: =27540mg/L (96h, <i>Lepomis macrochirus</i> ) LC50: =40761mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: =41000mg/L (96h, <i>Oncorhynchus mykiss</i> )	EC50 = 10000 mg/L 16 h EC50 = 620 mg/L 30 min EC50 = 620.0 mg/L 30 min	EC50: =46300mg/L (48h, <i>Daphnia magna</i> )

### **12.2. Persistence and degradability**

**Persistence and degradability** Readily biodegradable.



**12.3. Bioaccumulative potential**

Bioaccumulation No information available.

**Component Information**

Chemical name	Partition coefficient
Ethylene glycol	-1.36

**12.4. Mobility in soil**

Mobility in soil No information available.

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

Chemical name	PBT and vPvB assessment
Ethylene glycol	The substance is not PBT / vPvB PBT assessment does not apply

**12.6. Endocrine disrupting properties**

Endocrine disrupting properties No information available.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Do not reuse empty containers.
<b>Waste codes / waste designations according to EWC / AVV</b>	Waste codes should be assigned by the user based on the application for which the product was used.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: Transport information****IATA**

<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 Proper shipping name</b>	Not Regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special precautions for user</b>	
<b>Special Provisions</b>	None

**IMDG**

<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 Proper shipping name</b>	Not Regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing Group</b>	Not Regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special precautions for user</b>	

<b>Special Provisions</b>	None
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	No information available

**RID**

<b>14.1 UN/ID no</b>	Not Regulated
<b>14.2 Proper shipping name</b>	Not Regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing Group</b>	Not Regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special precautions for user</b>	
<b>Special Provisions</b>	None

**ADR**

<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 Proper shipping name</b>	Not Regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing Group</b>	Not Regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special precautions for user</b>	
<b>Special Provisions</b>	None

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number
Ethylene glycol 107-21-1	RG 84

**Germany**

**Water hazard class (WGK)** slightly hazardous to water (WGK 1)

**Italy**

-D. LGs. 81/2008 (single text on the protection of health and safety in the workplace) and subsequent amendments and Directive 2009/161/EU-assessment of chemical risk under title IX

-Legislative Decree 3 April 2006, no 152 (environmental standards)

-"Seveso III Directive" – Legislative Decree of 26 June 2015, n° 105 (Implementation of the Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances)

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies
<b>NZIoC</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment**

**Chemical Safety Report** With reference to the components mentioned in Section 3, a chemical risk assessment was performed which is available consulting the REACH registration on the ECHA database.

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure

**Legend**

SVHC: Substances of Very High Concern for Authorization:

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification

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Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Issuing Date** 18-May-2017

**Revision date** 09-Aug-2023

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)**

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**End of Safety Data Sheet**