## SAFETY DATA SHEET



**PASTE FLUX Water Soluble** 

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

1.1 Product identifier

Product name : PASTE FLUX Water Soluble

Product code : Not available.

Product description : Not available.

Product type : Solid.Gel

Other means of : Paste Flux, FluxPlus, WS

identification

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

**Identified uses** 

Soldering

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

Nordson EFD LLC 40 Catamore Blvd East Providence, RI, 02914 USA

efdproduct compliance @nordsone fd.com

+1-401-431-7000

e-mail address of person : efdproductcompliance@nordsonefd.com

responsible for this SDS

#### **National contact**

ZN Nordson EFD Deutschland Feldkirchen

Kapellenstraße 12

85622 Feldkirchen, Germany

+49 89 540465666

solderpaste.europe@nordsonefd.com

#### 1.4 Emergency telephone number

#### **National advisory body/Poison Center**

**Telephone number**: ChemTel: Outside of the US, Canada, Puerto Rico and the U.S. Virgin Islands:

+01-813-248-0585

**Supplier** 

**Telephone number** : +49 89 540465666

Hours of operation : 24/7 Information limitations : -

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

**Product definition**: Mixture

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

Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

 Date of issue/Date of revision
 : 5/20/2021
 Date of previous issue
 : No previous validation
 Version
 : 0.01
 1/14

#### SECTION 2: Hazards identification

Ingredients of unknown toxicity

: 55.7 percent of the mixture consists of component(s) of unknown acute oral toxicity 95.7 percent of the mixture consists of component(s) of unknown acute dermal toxicity

95.7 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

Ingredients of unknown ecotoxicity

: Contains 8.4% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

**Hazard pictograms** 



Signal word : Warning

**Hazard statements** : Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

**Precautionary statements** 

**Prevention** : Wear protective gloves. Wear eye or face protection. Do not eat, drink or smoke

when using this product. Wash thoroughly after handling.

: Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with Response

plenty of water. IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice or attention.

Not applicable. **Storage** 

**Disposal** Dispose of contents and container in accordance with all local, regional, national

and international regulations.

**Hazardous ingredients** 

Supplemental label

elements

: ethanediol

Not applicable.

**Annex XVII - Restrictions** on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant

: Not applicable.

fastenings

Tactile warning of danger : Not applicable.

Biocidal products regulation

#### **Active substances**

Ingredient name		%
citric acid	-	6.3

#### 2.3 Other hazards

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 2/14

#### SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII  This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: None known.

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

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	EC: 500-038-2 CAS: 25322-68-3	≥25 - ≤50	Eye Irrit. 2, H319	[1]
Propane-1,2-diol, propoxylated	EC: 500-039-8 CAS: 25322-69-4	≥25 - ≤50	Eye Irrit. 2, H319	[1]
ethanediol	EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	≥25 - ≤50	Acute Tox. 4, H302 Eye Irrit. 2, H319	[1] [2]
malic acid	EC: 230-022-8 CAS: 6915-15-7	≤10	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
citric acid	EC: 201-069-1 CAS: 77-92-9	≤10	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### **Type**

Inhalation

Skin contact

Ingestion

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

#### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General : In

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

**Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 3/14

#### SECTION 4: First aid measures

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatique, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

: No specific treatment. **Specific treatments** 

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing

media

: Recommended: alcohol-resistant foam, CO2, powders, water spray.

Unsuitable extinguishing

media

: Do not use water jet.

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

Hazards from the substance or mixture

**Hazardous combustion** products

: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

#### 5.3 Advice for firefighters

**Special protective actions** for fire-fighters

Special protective equipment for fire-fighters : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

: Appropriate breathing apparatus may be required.

#### SECTION 6: Accidental release measures

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

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 4/14

#### SECTION 6: Accidental release measures

## 6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

# 6.3 Methods and materials for containment and cleaning up

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

## 6.4 Reference to other sections

See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

## **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## 7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses. **Information on fire and explosion protection** 

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

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

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 5/14

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
	EU OEL (Europe, 10/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values  TWA: 20 ppm 8 hours.  TWA: 52 mg/m³ 8 hours.  STEL: 40 ppm 15 minutes.  STEL: 104 mg/m³ 15 minutes.

## Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	DNEL	Long term Oral	0.059291667 mg/kg bw/ day	General population	Systemic
	DNEL	Long term Inhalation	0.103115942 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0.118583333 mg/kg bw/ day	General population	Systemic
	DNEL	Long term Dermal	0.237166667 mg/kg bw/ day	Workers	Systemic
	DNEL	Long term Inhalation	0.418162281 mg/m³	Workers	Systemic
Propane-1,2-diol, propoxylated	DNEL	Long term Oral	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	10 mg/m³	General population	Local
	DNEL	Long term Inhalation	10 mg/m³	Workers	Local
	DNEL	Long term Dermal	13.9 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	29 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
ethanediol	DNEL	Long term Inhalation	7 mg/m³	General population	Local
	DNEL	Long term Inhalation	35 mg/m³	Workers	Local
	DNEL	Long term Dermal	53 mg/kg	General	Systemic

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 6/14

## **SECTION 8: Exposure controls/personal protection**

	DAIEI		bw/day	population	
	DNEL	Long term Dermal	106 mg/kg bw/day	Workers	Systemic
malic acid	DNEL	Long term Oral	2.6 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	2.6 mg/kg	General	Systemic
			bw/day	population	-
	DNEL	Long term Dermal	5.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	9 mg/m³	General	Systemic
		Inhalation	Ü	population	•
	DNEL	Long term Inhalation	36.6 mg/m <sup>3</sup>		Systemic

#### **PNECs**

No PNECs available.

#### 8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

#### Individual protection measures

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** 

**Skin protection** 

: Use safety eyewear designed to protect against splash of liquids.

Body protection :

: Personnel should wear antistatic clothing made of natural fibers or of high-

temperature-resistant synthetic fibers.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

**Environmental exposure** 

controls

: Do not allow to enter drains or watercourses.

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

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

**Appearance** 

Physical state : Solid. [Gel]

Color : White to yellowish. [Light]

Odor : Not available.
Odor threshold : Not available.
pH : Not available.
Melting point/freezing point : Not available.
Initial boiling point and : Not available.

boiling range

Flash point : Open cup: >76°C [Cleveland.]

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 7/14

### SECTION 9: Physical and chemical properties

Upper/lower flammability or

explosive limits

: Not available.

: Not available. Vapor pressure : Not available. Vapor density **Relative density** : Not available.

Solubility(ies) : Easily soluble in the following materials: hot water.

Partially soluble in the following materials: cold water.

Partition coefficient: n-octanol/ : Not available.

**Auto-ignition temperature** : Not available. **Decomposition temperature** : Not available. : Not available. **Viscosity Explosive properties** : Not available. **Oxidizing properties** : Not available.

9.2 Other information

Solubility in water : Not available.

## SECTION 10: Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

10.2 Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide,

carbon dioxide, smoke, oxides of nitrogen.

## SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version: 0.01 8/14

## **SECTION 11: Toxicological information**

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
ethanediol malic acid citric acid	LD50 Oral LD50 Oral LD50 Oral	Rat Rat Rat	4700 mg/kg 1600 mg/kg 3 g/kg	- -

Conclusion/Summary

: Not available.

#### **Acute toxicity estimates**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Paste Flux Water Soluble (WS)	793.2	N/A	N/A	N/A	N/A
ethanediol	500	N/A	N/A	N/A	N/A
malic acid	1600	N/A	N/A	N/A	N/A
citric acid	3000	N/A	N/A	N/A	N/A

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	_	500 mg	_
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
	China Mild imitant	Dabbit		mg	
	Skin - Mild irritant	Rabbit	-	500 mg	-
Propane-1,2-diol,	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
propoxylated				mg	
	Eyes - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
ath are adial	Free Mildimitent	Dalahit		mg	
ethanediol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Free Milelimiterat	Dalahit		mg	
	Eyes - Mild irritant	Rabbit	-	1 hours 100	-
	Eves Moderate irritant	Dobbit		mg	
	Eyes - Moderate irritant	Rabbit	-	6 hours 1440	-
	Skin - Mild irritant	Rabbit		mg 555 mg	
malic acid	Eyes - Severe irritant	Rabbit	-	24 hours 750	_
Thanc acid	Lyes - Severe imiant	Nabbit	-		_
	Skin - Moderate irritant	Rabbit		ug 24 hours 20	
	Skiii - Moderate iiritarit	Ναυυπ	-	mg	_
citric acid	Eyes - Severe irritant	Rabbit	_	24 hours 750	
	Lyes - Severe initalit	TADDIL	[ -	ug	
	Skin - Mild irritant	Rabbit	_	24 hours 500	_
	OMIT WING ITHIAIR	I KUDDIK		mg	
	Skin - Moderate irritant	Rabbit	_	0.5 MI	_
	OKIT - MOGETALE ITHLATIL	TADDIL		U.U IVII	

**Conclusion/Summary** 

: Not available.

**Sensitization** 

**Conclusion/Summary** 

: Not available.

**Mutagenicity** 

**Conclusion/Summary** 

: Not available.

**Carcinogenicity** 

**Conclusion/Summary**: Not available.

**Reproductive toxicity** 

**Conclusion/Summary**: Not available.

**Teratogenicity** 

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 9/14

## **SECTION 11: Toxicological information**

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

**Aspiration hazard** 

Not available.

Other information : Not available.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment.

Product/ingredient name	Result	Species	Exposure
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Acute LC50 >1000000 μg/l Fresh water	Fish - Salmo salar - Parr	96 hours
Propane-1,2-diol, propoxylated	Acute LC50 650000 μg/l Marine water	Fish - Menidia beryllina	96 hours
ethanediol	Acute LC50 6900000 μg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 41000 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
citric acid	Acute LC50 8050000 μg/l Fresh water Acute LC50 160000 μg/l Marine water	Fish - Pimephales promelas Crustaceans - Carcinus maenas - Adult	96 hours 48 hours

**Conclusion/Summary**: Not available.

#### 12.2 Persistence and degradability

**Conclusion/Summary**: Not available.

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	-	3.2	low
Propane-1,2-diol, propoxylated	-0.68 to 0.01	-	low
ethanediol	-1.36	-	low
malic acid	-1.26	-	low
citric acid	-1.8	-	low

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Date of issue/Date of revision: 5/20/2021Date of previous issue: No previous validationVersion: 0.0110/14

### **SECTION 12: Ecological information**

**12.6 Other adverse effects** : No known significant effects or critical hazards.

### **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** 

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

## Hazardous waste Disposal considerations

: The classification of the product may meet the criteria for a hazardous waste.

Do not allow to enter drains or watercourses.
 Dispose of according to all federal, state and local applicable regulations.
 If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

#### **Packaging**

**Methods of disposal** 

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

#### **Disposal considerations**

: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging	European waste catalogue (EWC)		
CEPE Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances	

For further information, contact your local waste authority.

#### **Special precautions**

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not available.	Not available.	Not available.	Not available.
14.2 UN proper shipping name	Not available.	Not available.	Not available.	Not available.
14.3 Transport hazard class(es)	Not available.	Not available.	Not available.	Not available.
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

## SECTION 14: Transport information

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

: Not available.

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

**Annex XIV** 

None of the components are listed.

**Substances of very high concern** 

None of the components are listed.

**Annex XVII - Restrictions** 

: Not applicable.

on the manufacture. placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

VOC

: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the

product label and/or technical data sheet for further information.

**VOC for Ready-for-Use** 

**Mixture** 

: Not applicable.

**Industrial emissions** (integrated pollution prevention and control) - : Not listed

Air

**Industrial emissions** (integrated pollution prevention and control) - : Not listed

Water

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

**Seveso Directive** 

This product is not controlled under the Seveso Directive.

**National regulations** 

Industrial use

: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply

to the use of this product at work.

**Biocidal products regulation** 

**Product type** : Solid. [Gel]

Avoid exposure. After accidental exposure, seek immediate medical attention. Do not induce vomiting.

Product waste and emptied containers should be disposed of in accordance with local waste regulations. Do not reuse container.

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 12/14

## **SECTION 15: Regulatory information**

**Expiry date** : Not available. Do not allow to enter drains or watercourses.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

**Montreal Protocol** 

Not listed.

**Stockholm Convention on Persistent Organic Pollutants** 

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

Not listed.

**Inventory list** 

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): Not determined.

New Zealand: All components are listed or exempted.Philippines: All components are listed or exempted.Republic of Korea: All components are listed or exempted.Taiwan: All components are listed or exempted.

Thailand : Not determined.

Turkey : All components are listed or exempted.
United States : All components are active or exempted.
Viet Nam : All components are listed or exempted.

15.2 Chemical Safety

Assessment

acronyms

: No Chemical Safety Assessment has been carried out.

#### **SECTION 16: Other information**

CEPE code : 1

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 13/14

#### **SECTION 16: Other information**

Classification	Justification
Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319	Calculation method Calculation method Calculation method

#### Full text of abbreviated H statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

#### Full text of classifications [CLP/GHS]

Acute Tox. 4 ACUTE TOXICITY - Category 4

Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

Date of printing : 5/27/2021

Date of issue/ Date of : 5/20/2021

revision

Date of previous issue : No previous validation

Version : 0.01

#### **Notice to reader**

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

Date of issue/Date of revision : 5/20/2021 Date of previous issue : No previous validation Version : 0.01 14/14