

Version #: 03
Issue date: 12-May-2022
Revision date: 29-March-2024
Supersedes date: 27-April-2023

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

1.1. Product identifier

Trade name or designation of the mixture D-300 CONCENTRATE

Registration number -

UFI:
Belgium: AF23-506X-F00A-N76A
France: AF23-506X-F00A-N76A
Germany: AF23-506X-F00A-N76A
Italy: AF23-506X-F00A-N76A
Netherlands: AF23-506X-F00A-N76A

Synonyms None.

Product code 815000

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

Identified uses Electrolytic bath additive

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name Pilot Chemical Company
Address 9075 Centre Pointe Dr, Suite 400
West Chester, OH 45069
United States of America
Telephone (513) 326-0600 (8AM to 5PM Eastern) or 1-800-707-4568
E-mail sdsinfo@pilotchemical.com

EU Only Representative

Company name Yordas GmbH
Address Äußere Nürnberger Straße 62
91301 Forchheim
Germany
Telephone +49 (0)9191 3454997
E-mail info@yordasgroup.com

1.4. Emergency telephone number

CHEMTREC International: 1-703-527-3887
CHEMTREC Austria: +(43)-13649237
CHEMTREC Belgium: +(32)-28083237
CHEMTREC Bulgaria: +(359)-32570104
CHEMTREC Croatia: +(385)-17776920
CHEMTREC Czech Republic: +(420)-228880039
CHEMTREC Denmark: +(45)-69918573
CHEMTREC Finland: +(358)-942419014
CHEMTREC France: +(33)-975181407
CHEMTREC Germany: 0800-181-7059
CHEMTREC Hungary: +(36)-18088425
CHEMTREC Ireland: +(353)-19014670
CHEMTREC Italy: 800-789-767

1.4. Emergency telephone number

CHEMTREC Luxembourg:	+ (352)-20202416
CHEMTREC Netherlands:	+ (31)-858880596
CHEMTREC Norway:	+ (47)-21930678
CHEMTREC Poland:	+ (48)-223988029
CHEMTREC Portugal:	+ (351)-308801773
CHEMTREC Slovakia:	+ (421)-233057972
CHEMTREC Slovenia:	+ (38)-618888016
CHEMTREC Spain:	900-868538
CHEMTREC Sweden:	+ (46)-852503403
Switzerland Tox Info Suisse	145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
CHEMTREC UK:	+ (44)-870-8200418 & 1 703-527-3887
CHEMTREC Ukraine:	+ (380)-947101374

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Skin corrosion/irritation	Category 1B	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Reaction Mass of 4-sulphophthalic acid and 3-sulphophthalic acid

Hazard pictograms



Signal word Danger

Hazard statements

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary statements

Prevention

P260 Do not breathe dust or mists.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

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.
P363 Wash contaminated clothing before reuse.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTRE/doctor.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information None.

2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. This product does not contain any substances present in concentrations greater than 0,1% which are included in the Candidate List for Authorisation for having endocrine disrupting properties or are identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Reaction Mass of 4-sulphophthalic acid and 3-sulphophthalic acid	50 - < 60	N/A 946-046-3	01-2120739691-49-XXXX	-	
Classification: Skin Corr. 1B;H314, Eye Dam. 1;H318					

Other components below reportable levels 40 - < 50

Impurities

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Phthalic acid	0 - 2	88-99-3 201-873-2	-	-	
Sulphuric acid	0 - 2	7664-93-9 231-639-5	-	016-020-00-8	#

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

Occupational Exposure Limits for impurities are listed in Section 8. The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion

Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

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

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

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

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards

No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media

Not applicable, non-combustible.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire. Not applicable, non-combustible.

5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters None (non-combustible).

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Industrial Formulation with Substance
Industrial Use in Metal Finishing Applications Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	Ceiling	0,2 mg/m ³	Inhalable fraction.
	MAK	0,1 mg/m ³	Inhalable fraction.

Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,2 mg/m ³	Mist.

Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m ³	Aerosol, inhalable.

Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended

Impurities	Type	Value
Sulphuric acid (CAS 7664-93-9)	MAC	0,05 mg/m ³

Cyprus. OELs. Occupational Exposure Limit Values of Chemicals at Work (Safety and Health at Work (Chem. Agents) Reg., Ann. 1, R.A.A. 268/2001, as amended)

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m ³	Thoracic fraction.

Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	Ceiling	2 mg/m ³	Thoracic fraction.
	TWA	1 mg/m ³	Thoracic fraction.
		0,05 mg/m ³	mist, thoracic fraction

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2

Impurities	Type	Value	Form
Phthalic acid (CAS 88-99-3)	STEL	6 mg/m ³	
	TLV	3 mg/m ³	
Sulphuric acid (CAS 7664-93-9)	STEL	0,1 mg/m ³	mist, thoracic fraction
	TLV	0,05 mg/m ³	mist, thoracic fraction

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Impurities	Type	Value	Form
Phthalic acid (CAS 88-99-3)	STEL	5 mg/m ³	
	TWA	3 mg/m ³	
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m ³	Mist.

Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	STEL	0,1 mg/m ³	Thoracic fraction.
	TWA	0,05 mg/m ³	Thoracic fraction.

France. OELs. Indicative Occupational Exposure Limits as Prescribed by Order of 30 June 2004, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	VME	0,05 mg/m ³	Thoracic fraction.

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	VLE	3 mg/m ³	
	VME	0,05 mg/m ³	Thoracic fraction.

Regulatory status: Indicative limit (VL)

Regulatory status: Regulatory indicative (VRI)

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,1 mg/m ³	Inhalable fraction.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	AGW	0,1 mg/m ³	Inhalable fraction.

Greece. OELs, Presidential Decree No. 307/1986, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m ³	mist, thoracic fraction

Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended

Impurities	Type	Value
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3

Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Mist.

Ireland. OELVs, Schedules 1 & 2, Code of Practice for Chemical Agents and Carcinogens Regulations

Impurities	Type	Value
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3

Italy. OELs (Legislative Decree n.81, 9 April 2008), as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Mist.

Latvia. OELs. Occupational Exposure Limits of Chemical Substances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex 1), as amended

Impurities	Type	Value
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3

Lithuania. OELs. Occupational Exposure Limit Values for Chemical Substances (Hygiene Norm HN 23:2011; Order No. V-824/A1-389), as amended

Impurities	Type	Value	Form
Phthalic acid (CAS 88-99-3)	STEL	5 mg/m3	
	TWA	3 mg/m3	
Sulphuric acid (CAS 7664-93-9)	STEL	3 mg/m3	Mist.
	TWA	0,05 mg/m3	Mist.

Luxembourg. OELs. Binding Occupational Exposure Limit Values (Annex I), G.D.R. of 14 November 2016, OJ Memorial A, n ° 235/2016, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Thoracic fraction.

Malta. OELs. Protection of Health and Safety of Workers from Risks related to Chemical Agents at Work (L.N 227/2003 Schedules I and V), as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Thoracic fraction.

Netherlands. OELs per Annex XIII of Working Conditions Regulation (Staatscourant no. 252, 29 December 2006), as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Thoracic fraction.

Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TLV	0,1 mg/m3	Thoracic fraction.

Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Thoracic fraction.

Portugal. Decree-Law No. 24/2012, Occupational Exposure Limit Values, Annex II, as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Respirable mist and Inhalable mist

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,2 mg/m3	Thoracic fraction.

Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Thoracic fraction.

Slovakia. OELs. Maximum permissible exposure limits for chemical factors in workplace air (Regulation No 355/2006, Annex 1, Table 1, as amended)

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Ann. I 100/2001), as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	KTV	0,05 mg/m3	Inhalable fraction.

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Annex I), as amended

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Inhalable fraction.

Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Mist.

Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended

Impurities	Type	Value	Form
Phthalic acid (CAS 88-99-3)	STEL	5 mg/m3	
	TWA	3 mg/m3	
Sulphuric acid (CAS 7664-93-9)	STEL	0,2 mg/m3	Inhalable dust.
	TWA	0,1 mg/m3	Inhalable dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	STEL	0,2 mg/m3	Inhalable fraction.
	TWA	0,1 mg/m3	Inhalable fraction.

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Impurities	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0,05 mg/m3	Mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General population

Components	Value	Assessment factor	Notes
Reaction Mass of 4-sulphophthalic acid and 3-sulphophthalic acid (CAS N/A)			
Long-term, Systemic, Dermal	1,67 mg/kg		
Long-term, Systemic, Inhalation	2,9 mg/m ³		
Long-term, Systemic, Oral	1,67 mg/kg		

Workers

Components	Value	Assessment factor	Notes
Reaction Mass of 4-sulphophthalic acid and 3-sulphophthalic acid (CAS N/A)			
Long-term, Systemic, Dermal	3,33 mg/kg		
Long-term, Systemic, Inhalation	11,8 mg/m ³		

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Reaction Mass of 4-sulphophthalic acid and 3-sulphophthalic acid (CAS N/A)			
Freshwater	0,088 mg/l		
Marine water	0,088 mg/l		
Sediment (freshwater)	0,26 mg/kg		
Sediment (marine water)	0,026 mg/kg		
Soil	133,5 mg/kg		

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

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

Skin protection

- Hand protection Use protective gloves made of: Butyl rubber. Neoprene. Nitrile. Polyvinyl chloride (PVC). Rubber (natural, latex).

- Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Form	Liquid.
Colour	Amber
Odour	Odourless.
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	Not available.
Flammability	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Flash point	Cleveland open cup , flame extinguished; none to boiling

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	<2
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Miscible
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapour pressure	Not available.
Density and/or relative density	
Density	10,80 lb/gal
Vapour density	Not available.
Particle characteristics	Not available.

9.2. Other information

9.2.1. Information with regard to physical hazard classes No relevant additional information available.

9.2.2. Other safety characteristics

Molecular weight	326
Specific gravity	1,29 @21°C
Viscosity	11 cP @ 25 deg C

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.

Symptoms Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

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

Acute toxicity Not known.

Toxicological data

Impurities	Species	Test Results
Phthalic acid (CAS 88-99-3)		
Acute		
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 5058 mg/m ³ , 4 Hours
Oral		
LD50	Mouse	> 5000 mg/kg 2,53 g/kg

Impurities	Species	Test Results
Sulphuric acid (CAS 7664-93-9)		
Acute		
Inhalation		
LC50	Rat	375 mg/m ³ , 4 h 0,375 mg/l, 4 Hours
Oral		
LD50	Rat	2140 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory sensitisation	Not a respiratory sensitiser.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	IARC has concluded that "occupational exposure to strong inorganic mists containing sulfuric acid is carcinogenic for humans (Group 1)". This product is not expected to be present in the form of inorganic mist during normal use.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Mixture versus substance information	No information available.	

11.2. Information on other hazards

Endocrine disrupting properties	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
Other information	This product does not contain any substances present in concentrations greater than 0,1% which are included in the Candidate List for Authorisation for having endocrine disrupting properties or are identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Impurities	Species	Test Results
Phthalic acid (CAS 88-99-3)		
Aquatic		
<i>Acute</i>		
Algae	NOEC	Algae > 100 mg/l, 72 h
Crustacea	EC50	Daphnia magna > 640 mg/l, 48 h
<i>Chronic</i>		
Crustacea	NOEC	Daphnia magna 16 mg/l, 21 d Analogous material Phthalic anhydride
Fish	NOEC	Oncorhynchus mykiss 10 mg/l, 60 d Analogous material Phthalic anhydride
Sulphuric acid (CAS 7664-93-9)		
Aquatic		
<i>Acute</i>		
Algae	EC50	Algae > 100 mg/l, 72 h
Crustacea	EC50	Daphnia > 100 mg/l, 48 h
Fish	LC50	Bluegill (Lepomis macrochirus) > 16 - < 28 mg/l, 96 h
<i>Chronic</i>		
Crustacea	NOEC	Daphnia 0,15 mg/l, 35 d

Impurities	Species	Test Results
Fish	NOEC	Fish 0,025 mg/l, 65 d
12.2. Persistence and degradability	This product is expected to be readily biodegradable.	
12.3. Bioaccumulative potential		
Partition coefficient n-octanol/water (log Kow)		
Reaction Mass of 4-sulphophthalic acid and 3-sulphophthalic acid	-2,09, @ 25°C	
Phthalic acid	0,73	
Sulphuric acid	-2,2	
Bioconcentration factor (BCF)	Not available.	
12.4. Mobility in soil	This product is miscible in water and may not disperse in soil.	
12.5. Results of PBT and vPvB assessment	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.	
12.6. Endocrine disrupting properties	This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.	
12.7. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Discourage sewage disposal. Waste should not be disposed of by release to sewers. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN3265
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (4-SULFO-1,2-BENZENEDICARBOXYLIC ACID)
14.3. Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Label(s)	8
Hazard No. (ADR)	80
Tunnel restriction code	E
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN3265
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (4-SULFO-1,2-BENZENEDICARBOXYLIC ACID)
14.3. Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Label(s)	8
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN3265
14.2. UN proper shipping name	Corrosive Liquid, Organic, N.o.s. (4-sulfo-1,2-Benzenedicarboxylic acid)
14.3. Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Label(s)	8
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number	UN3265
14.2. UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (4-sulfo-1,2-Benzenedicarboxylic acid)
14.3. Transport hazard class(es)	
Class	8
Subsidiary hazard	-
14.4. Packing group	II
14.5. Environmental hazards	No.
ERG Code	8L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

14.1. UN number	UN3265
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (4-SULFO-1,2-BENZENEDICARBOXYLIC ACID)
14.3. Transport hazard class(es)	
Class	8
Subsidiary hazard	-
14.4. Packing group	II
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

ADN; ADR; IATA; IMDG; RID

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations**

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex I, as amended

Not listed.

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex II, as amended

Not listed.

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended Use of this product by young persons under the age of 18 is not allowed in accordance with the Management of Health and Safety at Work Regulations 1999 [SI 1999/3242], as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

France regulations

France INRS Table of Occupational Diseases

Not regulated.

15.2. Chemical safety assessment

Chemical Safety Assessment has been carried out. Exposure scenarios relevant for this material are annexed and distributed as separate document to this eSDS.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MAC: Maximum Allowed Concentration.
MARPOL: International Convention for the Prevention of Pollution from Ships.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TLV: Threshold Limit Value.
TWA: Time Weighted Average.
VLE: Exposure Limit Value.
VME: Exposure Average Value.
vPvB: Very persistent and very bioaccumulative.

References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any statements, which are not written out in full under sections 2 to 15	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
Revision information	Product and Company Identification: EU Poison Centre SECTION 2: Hazards identification: Prevention SECTION 3: Composition/information on ingredients: Component information SECTION 6: Accidental release measures: For non-emergency personnel SECTION 7: Handling and storage: 7.1. Precautions for safe handling SECTION 13: Disposal considerations: Disposal methods/information
Training information	Follow training instructions when handling this material.
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