

SAFETY DATA SHEET

ELECTROLYTE D2

Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier : ELECTROLYTE D2
Cat. No. : 40900032
Container size : 1 l
Other means of identification : Not available.
Product type : Liquid.

Recommended use of the chemical and restrictions on use

Product use : For electrolytic preparation of metallographic specimens
Area of application : Professional applications.

Supplier's details : Struers ApS
Pederstrupvej 84
DK-2750 Ballerup

Telephone: +45 44 600 800

e-mail address of person responsible for this SDS : sdsquestions@struers.dk

Emergency telephone number (with hours of operation) : 112 (24/7)

Section 2. Hazards identification

Classification of the substance or mixture : H226 FLAMMABLE LIQUIDS - Category 3
H314 SKIN CORROSION/IRRITATION - Category 1
H318 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Flammable liquid and vapour.
Causes severe skin burns and eye damage.

Precautionary statements

Prevention : P280 - Wear protective gloves, protective clothing and eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264 - Wash thoroughly after handling.

Section 2. Hazards identification

- Response** : P304 + P340, P316 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P361 + P354 - IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P363 - Wash contaminated clothing before reuse.
P305 + P354 + P338, P317 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
- Storage** : P405 - Store locked up.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Causes digestive tract burns.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

Ingredient name	%	Identifiers
Phosphoric acid	≥30 - ≤60	CAS: 7664-38-2
ethanol	≥10 - ≤30	CAS: 64-17-5
propan-1-ol	≤5	CAS: 71-23-8

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 and hence require reporting in this section.

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

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes severe burns.
- Ingestion** : Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Section 5. Firefighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised 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".
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. 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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools.
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Section 7. Handling and storage

- Take precautionary measures against electrostatic discharges. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from alkalis. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Phosphoric acid	DOL OEL (South Africa, 3/2021) TWA 8 hours: 2 mg/m ³ . STEL 15 minutes: 6 mg/m ³ .
ethanol	DOL OEL (South Africa, 3/2021) STEL 15 minutes: 2000 ppm.
propan-1-ol	DOL OEL (South Africa, 3/2021) Absorbed through skin. TWA 8 hours: 200 ppm.

Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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.

Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Recommended: Butyl rubber gloves. The breakthrough time must be greater than the end use time of the product.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- 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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: (as filter combination A2/P2)

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Odourless.
- Odour threshold** : Not available.
- pH** : <2
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : Not available.
- Flash point** : Closed cup: 23 to 60°C (73.4 to 140°F)
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not available.
- Vapour pressure** :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
ethanol	42.94865	5.7				



Section 9. Physical and chemical properties

Relative vapour density : Not available.

Relative density : 1.11

Solubility(ies) :	Media	Result
	water	Soluble

Solubility in water : Not available.

Miscible with water : Yes.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature :	Ingredient name	°C	°F	Method
	ethanol	455	851	DIN 51794

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): 6.8 mm²/s (6.8 cSt)
Kinematic (40°C (104°F)): Not available.

Particle characteristics

Median particle size : Not applicable.

Other information

Physical/chemical properties comments : No additional information.

Section 10. Stability and reactivity

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

Chemical stability : The product is stable.

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

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Reactive or incompatible with the following materials:
alkalis
oxidising materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	
Phosphoric acid	Rabbit - Dermal - LD50 2740 mg/kg Rat - Oral - LD50 1.25 g/kg	<u>Toxic effects:</u> Lung, Thorax, or Respiration - Acute pulmonary edema Liver - Changes in liver weight
ethanol	Rat - Oral - LD50 7060 mg/kg Rabbit - Dermal - LD50 >15800 mg/kg Rat - Inhalation - LC50 Vapour 124700 mg/m³ [4 hours]	<u>Toxic effects:</u> Lung, Thorax, or Respiration - Other changes
propan-1-ol	Rat - Oral - LD50 2200 mg/kg Rabbit - Dermal - LD50 4032 mg/kg Rat - Male, Female - Inhalation - LC50 Vapour >33.8 mg/l [4 hours]	<u>Toxic effects:</u> Behavioral - General anesthetic OECD [Acute Dermal Toxicity] OECD 403 [Acute Inhalation Toxicity]
Conclusion/Summary[Product]	: Not available.	

Skin corrosion/irritation

Product/ingredient name	Result	
ethanol	Rabbit - Skin - Not irritant	OECD 404 [Acute Dermal Irritation/ Corrosion]
propan-1-ol	Rabbit - Skin - Mild irritant Amount/concentration applied: 500 mg	
Conclusion/Summary[Product]	: Not available.	

Serious eye damage/eye irritation

Product/ingredient name	Result	
ethanol	Rabbit - Eyes - Mild irritant Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg Rabbit - Eyes - Moderate irritant Duration of treatment/exposure: 0.066666667 minutes Amount/concentration applied: 100 mg Rabbit - Eyes - Moderate irritant Amount/concentration applied: 100 uL Rabbit - Eyes - Severe irritant Amount/concentration applied: 500 mg Rabbit - Eyes - Mild irritant Duration of treatment/exposure: 1 hours	



Section 11. Toxicological information

propan-1-ol

Amount/concentration applied: 50 pph

Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 20 mg

Conclusion/Summary[Product] : Not available.

Respiratory corrosion/irritation

Conclusion/Summary[Product] : Not available.

Respiratory or skin sensitization

Product/ingredient name

propan-1-ol

Result

Guinea pig - skinResult: Not sensitizing**Human - skin**Result: Not sensitizing

Skin

Conclusion/Summary[Product] : Not available.

Respiratory

Conclusion/Summary[Product] : Not available.

Germ cell mutagenicity

Product/ingredient name

Phosphoric acid

Result

In vitro - BacteriaResult: Negative**In vitro - Mammalian-Animal**Result: Negative**In vitro - Mammalian-Animal**Result: Negative

propan-1-ol

In vitro - Bacteria - GermResult: Negative**In vitro - Mammalian-Animal**Result: Negative

OECD 471 [Bacterial Reverse Mutation Test]

OECD 473 [In vitro Mammalian Chromosomal Aberration Test]

OECD 476 [In vitro Mammalian Cell Gene Mutation Test]

Conclusion/Summary[Product] : Not available.

Carcinogenicity

Conclusion/Summary[Product] : Not available.

Reproductive toxicity

Product/ingredient name

Result



Section 11. Toxicological information

Phosphoric acid

Rat - Oral
 ≥500 mg/kg - NOAEL
Fertility effects: Negative

OECD 422 [Combined Repeated
 Dose Toxicity Study with the
 Reproduction/Developmental Toxicity
 Screening Test]
 OECD 414 [Prenatal Developmental
 Toxicity Study]

Rat - Oral
 ≥410 mg/kg - NOAEL
Maternal toxicity: Negative
Developmental: Negative

Conclusion/Summary[Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

propan-1-ol

Result

SPECIFIC TARGET ORGAN TOXICITY - SINGLE
 EXPOSURE (Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes severe burns.
Ingestion : Corrosive to the digestive tract. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 pain
 watering
 redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
Ingestion : Adverse symptoms may include the following:
 stomach pains

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Section 11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	
Phosphoric acid	Chronic - Rat - Oral - NOAEL 250 mg/kg [90 days]	OECD 422 [Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test]

Conclusion/Summary[Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
ELECTROLYTE D2	3440.5	N/A	N/A	N/A	N/A
Phosphoric acid	1250	2740	N/A	N/A	N/A
ethanol	7060	N/A	N/A	124.7	N/A
propan-1-ol	2200	4032	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	
Phosphoric acid	Acute - EC50 - Fresh water Daphnia >100 mg/l [48 hours]	OECD [Daphnia sp. Acute Immobilization Test and Reproduction Test]
	Acute - EC50 - Fresh water Algae >100 mg/l [72 hours]	OECD [Alga, Growth Inhibition Test]
	Acute - NOEC - Fresh water Algae 100 mg/l [72 hours]	OECD 201 [Alga, Growth Inhibition Test]
	EC50 Micro-organism >1000 mg/l [3 hours]	OECD 209 [Activated Sludge, Respiration Inhibition Test]
ethanol	Acute - EC50 - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u> : 31 days; <u>Size</u> : 22 mm; <u>Weight</u> : 0.14 g 12.8 g/l [96 hours]	<u>Effect</u> : Behavior

Section 12. Ecological information

propan-1-ol	Acute - EC50	
	Daphnia - <i>Daphnia magna</i>	
	12340 mg/l [48 hours]	
	Acute - EC50	
	Algae - <i>Chlorella vulgaris</i>	
	275 mg/l [72 hours]	
	Acute - LC50 - Marine water	<u>Effect</u> : Mortality
	Fish - Bleak - <i>Alburnus alburnus</i>	
	Size: 8 to 10 cm	
	3800 mg/l [96 hours]	
	Acute - EC50 - Fresh water	<u>Effect</u> : Population
	Algae - Green algae - <i>Selenastrum sp.</i>	
	4480 mg/l [96 hours]	
	Acute - LC50 - Fresh water	<u>Effect</u> : Mortality
	Crustaceans - Scud - <i>Gammarus pulex</i>	
	1000 mg/l [48 hours]	

Conclusion/Summary[Product] : Not available.

Persistence and degradability

Product/ingredient name	Result
ethanol	84% [20 days] - Readily
propan-1-ol	75% [20 days] - Readily

Conclusion/Summary[Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ethanol	-	-	Readily
propan-1-ol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
ethanol	-0.35	-	Low
propan-1-ol	0.2	-	Low

Mobility in soil

Soil/water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN2920	UN2920	UN2920
UN proper shipping name	 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Phosphoric acid, ethanol)	 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Phosphoric acid, ethanol)	 Corrosive liquid, flammable, n. o.s. (Phosphoric acid, ethanol)
Transport hazard class(es)	8 (3)  	8 (3)  	8 (3)  
Packing group	II	II	II
Environmental hazards	No.	No.	No.

Additional information

UN : **Special provisions** 274

IMDG : **Emergency schedules** F-E, S-C
Special provisions 274
IMDG Code Segregation group SGG1 - Acids

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840.

Special precautions for user : **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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

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.

Section 16. Other information

History

Date of issue/Date of revision : 3/20/2026

Date of previous issue : 1/13/2025

Version : 2

Key to abbreviations

ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 IMO = International Maritime Organization
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 SGG = Segregation Group
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN CORROSION/IRRITATION - Category 1	On basis of test data
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	On basis of test data

References : GHS - Globally Harmonised System of Classification and Labelling of Chemicals
 International transport regulations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.