Labo Derva
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Safety Data Sheet

1. Identification of substance

Product name: SPI A

Application: Reagent for water testing

Supplier:
Labo Derva n.v.
Lochtemanweg 77
3550 Heusden-Zolder
Belgium
+32 11 452101
info@laboderva.be

Emergency telephone: +32 11 452101 (Monday – Friday 09:00 – 17:00)

2. Hazard identification

Danger

Hazard Statements:

H314 - Causes severe skin burns and eye damage Precautionary statements

Precautionary Statements:

P260 - Do not breathe mist, vapours, spray
P264 - Wash exposed skin thoroughly after handling
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER/doctor/…
P363 - Wash contaminated clothing before reuse P405 - Store locked up P501 - Dispose of contents/container to comply with local, state and federal regulations

Storage:

Store locked up.

Disposal:

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

3. Composition/information on ingredients

Chemical characterization

Description: Preparation contains anorganic and organic compounds.

Dangerous components:		
CAS: 7664-93-9 EINECS: 231-639-5 EC Number: 016-020-00-8	sulphuric acid  C; R 35 Danger:  3.2/1A	< 5%

Additional information: For the wording of the listed risk phrases refer to section 16

4. First-aid measures

General information : Instantly remove any clothing soiled by the product.

After inhalation: Supply fresh air.

After skin contact: Instantly wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes
(at least 10 min) under running water.
Call a doctor immediately.

After swallowing: Seek medical treatment.
Rinse out mouth and then drink plenty of water.

The following symptoms may occur:

After inhalation: Coughing
Mucous membrane irritation
Breathing difficulty

After swallowing: Damage to the affected mucous membranes possible

After swallowing of large amounts: Danger of gastric perforation.

5. Fire-fighting measures

Suitable extinguishing agents: Foam, Dry powder, Carbon dioxide, Water spray, Sand.

Special hazards caused by the material, its products of combustion or resulting gases:

Formation of corrosive vapours is possible during heating or in case of fire.

Protective equipment: Wear self-contained breathing apparatus.

Wear full protective suit.

Additional information: Ambient fire may liberate hazardous vapors.
Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. Accidental release measures

Person-related safety precautions: Wear protective equipment.
Keep unprotected persons away.
Ensure adequate ventilation

Measures for environmental protection:

Do not allow product to reach sewage system or water bodies.

Measures for cleaning/collecting: Ensure adequate ventilation.
Neutralize with diluted sodium hydroxide solution or by throwing on lime sand, lime or sodium carbonate.
Absorb with liquid-binding material (sand, diatomite, universal binders).
Dispose of contaminated material as waste according to item 13.

7. Handling and storage

Handling:

Information for safe handling: Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about protection against explosions and fires: The product is not flammable

Storage:

Requirements to be met by storerooms and containers:

Store in cool location.

Information about storage in one common storage facility:

Store away from metals.

Further information about storage conditions:

Keep container tightly sealed.
Protect from humidity and keep away from water.
Protect from the effects of light.

Recommended storage temperature: 20°C +/- 3°C

8. Exposure controls/personal protection

Additional information about design of technical systems:

No further data; see item 7.

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.

Breathing equipment: Use breathing protection against the effects of fumes/dust/aerosol.

Recommended filter device for short term use: Filter B

Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves: nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Penetration time of glove material:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Value for the permeation:	Level ≥ 6 (480 min)
Eye protection:	Tightly sealed safety glasses.
Body protection:	Protective work clothing.

9. Physical and chemical properties

Form:	Fluid
Colour:	Colourless
Odour:	Odourless
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	100°C
Flash point:	Not applicable
Danger of explosion:	Product is not explosive.
Density at 20°C:	Not determined
Solubility in / Miscibility with Water:	Fully miscible
pH-value at 20°C:	0.1
Solvent content:	
Organic solvents:	0.0 %
Water:	> 90 %
Solids content:	> 1 %

10. Stability and reactivity

Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

Materials to be avoided:	ammonia (NH3) alkalis acids metals

combustible substances
organic solvents
oxidizing agents

Dangerous reactions:

Corrosive action on metals
Reacts with metals forming hydrogen
Forms hydrogen in aqueous solution with metals
---> Explosive
Reacts with organic substances

Dangerous products of decomposition:

nitrous gases
Sulphur oxides (SOx)
see chapter 5

11. Toxicological information

Acute toxicity: Quantative data on toxicity not available

LD/LC50 values that are relevant for classification:

7664-93-9 sulphuric acid	Oral	LD50 2140 (25%) mg/kg (rat)
	Inhalative	LC 50 510 (pure) mg/m³/2h (rat)

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritant effect.

Sensitization: No sensitizing effect known.

Experience with humans: May cause lung damages.

Additional toxicological information:

12. Ecological information

Information about elimination (persistence and degradability):

Quantitative data on the ecological effect of this product are not available

The following statements refer to the individual components.

Ecotoxical effects:

7664-93-9 sulphuric acid	Daphnia EC50 29 mg/l/24h (Dapnia magna)
	LC50 16-29 mg/l/96h (Oncorhynchus mykiss)

Remark:

Toxic for fish: sulphates > 7 g/l
Forms corrosive mixtures with water even if diluted.
toxic for fish
toxic for algae

Bacterial toxicity: sulphates toxic > 2.5 g/l

Remark: neutralization possible

General notes:

Do not allow product to reach ground water, water bodies or sewage system.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms.

13. Disposal considerations

Product:

Recommendation: Hand over to disposers of hazardous waste.

European waste catalogue:

16 05 06 laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleaning agent: Water, if necessary with cleaning agent.

14. Transport information

Land transport ADR/RID (cross-border)

ADR/RID-GGVS/E Class: none
Kemler Number: 80
UN-Number: 3264
Packaging group: III
Label 8
Designation of goods:
3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID)

Limited quantities (LQ) LQ7

Maritime transport IMDG:

IMDG Class: 8
UN Number: 3264
Label 8
Packaging group: III
EMS Number: F-A,S-B
Marine pollutant: No
Correct technical name:
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 8
UN/ID Number: 3264
Label 8
Packaging group: III
Correct technical name:
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID)

15. Regulatory information

Hazard Statements:

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16. Other information

Abbreviations and acronyms:

EC50:	effective concentration, 50 percent (in vivo)
ADR:	Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Reglement internationale concernent le transport des merchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
IATA-DGR:	Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent