



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

1.1 Product identifier:

Trade name: Sulfuric Acid 2 mol/L (H₂SO₄)

Article number: 600017 (Identipack BV)

CAS-number: 7664-93-9

EINECS: 231-639-5

UFI: Not applicable.

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

Application of the substance / the mixture : Laboratory, Research or Fabricage.

1.3 Details of the supplier of the safety data sheet:

Downstreamuser

Identipack B.V.

Broekstraat 4

5721 CT Someren

Netherlands

Tel:(+31) (0)493 - 672277

Fax:(+31) (0)439 - 672268

E-mail : info@identipack.com

1.4 Emergency telephone number:

UK Tel: +44 151 951 3317 - Health and Safety Executive (HSE) Chemicals Regulation Directorate (24/7)

Ireland Tel: +353 1 8092566 - Beaumont Hospital - National Poisons Information Centre (24/7)

(EU Tel: 112)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) nr. 1272/2008:

Skin Corr. 1A: H314

2.2 Label elements:

Labelling according to Regulation (EC) nr. 1272/2008:

The product is classified and labelled according to the CLP regulation.

Hazard pictogram:



GHS05

Signal word: Danger

Hazard-determining components of labelling:

Sulfuric Acid 2 mol/L

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash hands thoroughly after handling.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313	Get medical advice/attention.

2.3 Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture made by the following substances:

Dangerous components:

CAS-number: 7664-93-9
EINECS: 231-639-5
Index: 016-020-00-8



Sulfuric Acid 2 mol/L
Skin Corr. 1A, H314

Additional details:

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information:

Remove immediately any clothing soiled by the product and wash with plenty of water. The rescuer has to be equipped with individual protection.

After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Treat affected skin with cotton wool or cellulose. Then wash and rinse thoroughly with water and a mild cleaning agent. Immediately wash with water and soap and rinse thoroughly. Wash contaminated clothing before reuse.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Drink plenty of water and provide fresh air.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

CO₂, sand, extinguishing powder. Fight larger fires with alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions. Do not use water.

5.2 Special hazards arising from the substance or mixture:

Sulfur Oxides (SO_x).

5.3 Advice for firefighters:

Protective equipment:

Do not inhale gases in case of fire or combustion.

Additional information:

Keep receptacles cool with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away. Use respiratory protective device against the effects of fumes. Ensure adequate ventilation.

6.2 Environmental precautions:

Dilute with plenty of water after collecting the liquid. Do not allow to enter sewers/surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Collect the liquid with vacuum in a suitable container and absorb the remainder with a porous material (diatomite, acid binders, universal binders, etc.). Use neutralising agent. Ensure adequate ventilation. Dispose contaminated material as waste according to Section 13.

6.4 Reference to other sections:

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

7.2 Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Provide acid-resistant floor. Provide floor trough without outlet.

Information about storage in one common facility:

Do not store together with alkalis (caustic solutions).

Further information about storage conditions:

Keep receptacle tightly sealed.

7.3 Specific end use(s):

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

Ingredients with limit values that require monitoring at the workplace:

7664-93-9 Sulfuric Acid 2 mol/L:

WEL (Great Britain) Long-term value: 0.05* mg/m³
*mist: defined as thoracic fraction

IOELV (European Union) Long-term value: 0.05 mg/m³

DNELs:

Inhalative DNEL (workers-local acute effects) 0.1 mg/m³
DNEL (workers-local chronic effects) 0.05 mg/m³

PNECs:

PNEC (Fresh water) 2.5 mg/L
PNEC (Freshwater sediment) 0.002 mg/kg
PNEC (Marine water) 0.25 mg/L
PNEC (Seawater sediment) 0.002 mg/L

Additional information: No further relevant information available.

8.2 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective rubber gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Material of gloves:

The glove material has to be impermeable and resistant to the product/substance/preparation. Selection of the glove material on consideration of penetration times, rates of diffusion and the degradation.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

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

Eye protection: Tightly sealed goggles.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Form:	Fluid.
Colour:	Colourless.
Odour:	Characteristic.
Odour threshold:	Not determined.

pH-value: <0.5

Change in condition:

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	<125 °C.

Flash point: Not applicable.

Flammability (solid, gas): Not applicable.

Ignition temperature:

Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure at 20 °C: <0,1 Pa

Density at 20 °C: 1,84 g/cm³

Relative density: Not determined.

Verdampingsnelheid Not determined.

Solubility in / Miscibility with:

Water: Fully miscible.

Partition coefficient: (n-octanol/water): Not determined.

Viscosity: Not determined.

9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity: See 10.3

10.2 Chemical stability:

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions:

When diluting, always add acid to water, never vice versa. Reacts violently with water. Reacts dangerously with alkali (lyes) or amines in bulk. Reacts with various metals.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: Metals.

10.6 Hazardous decomposition products: In case of fire: Sulfur oxides (SOx)

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity: Oral - LD50 - 2140 mg/kg (rat)

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation: Causes serious eye damage.

Ingestion: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Inhalation: Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Germ cell mutagenicity: No further relevant information available.

Carcinogenicity: No further relevant information available.

Reproductive toxicity: No further relevant information available.

STOT-single exposure: No further relevant information available.

STOT-repeated exposure: No further relevant information available.

Aspiration hazard: No further relevant information available.

SECTION 12: Ecological information

12.1 Toxicity:

Aquatic toxicity: **7664-93-9 Sulfuric Acid:**

EC50/48h >100 mg/L (Daphnia) (OECD 202)

LC50/96h 16 mg/L (fishes)

LC50 >100 mg/L (algae) (72h)

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Ecotoxicological effects:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course 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. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

12.5 Results of PBT- and vPvB-assessment:

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewer system.

Reutilise if possible or contact a waste processor for recycling or safe disposal.

Waste disposal key:

The European Union does not establish uniform rules for the disposal of chemical waste, which are special waste. Their treatment and elimination of the domestic legislation of each country. So in each case, you should contact the relevant authorities, or those companies legally authorized for elimination of waste.

Uncleaned packaging:

The containers and packing materials contaminated with dangerous substances or preparations, have the same treatment of products.

Recommended cleansing agents:

Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number:

ADR, IMDG, IATA: UN2796

14.2 UN proper shipping name:

ADR: 2796 SULFURIC ACID
IMDG, IATA: SULFURIC ACID

14.3 Transport hazard class(es):

ADR:



Class: 8 (C1) Corrosive substances.

Label: 8

IMDG, IATA:



Class: 8 Corrosive substances.

Label: 8

14.4 Packing group:

ADR, IMDG, IATA: II

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user:

Danger code (Kemler): Warning: Corrosive substances.
80
EMS-number: F-A, S-B
Segregation groups: Acids

14.7 Transport in bulk according to Annex II of:

MARPOL and the IBC-code: Not applicable.

Transport/Additional information:

ADR:

Limited quantities (LQ): 1L

Excepted quantities (EQ): Code E2

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 500 ml

Transport category: 2

Tunnel restriction code: E

IMDG:

Limited quantities (LQ): 1L

Excepted quantities (EQ): Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation": UN2796, SULFURIC ACID, 8, II

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Directive 2012/18/EU

Named dangerous substances - ANNEX I: None of the ingredients are listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations:

Information about limitation of use: -

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment: A chemical safety assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H314 Causes severe skin burns and eye damage.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

EINECS: European Inventory of Existing Commercial Chemical Substances.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

DNEL: Derived No-Effect Level (REACH).

PNEC: Predicted No-Effect Concentration (REACH).

LC50: Lethal concentration, 50 percent.

LD50: Lethal dose, 50 percent.

PBT: Persistent, Bioaccumulative and Toxic.

vPvB: very Persistent and very Bioaccumulative.

Skin Corr. 1A Skin corrosion/irritation - Category 1A.

Sources:

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006, REACH, in latest valid version.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008, CLP, in the latest valid version.

Globally Harmonized System, GHS

ADR2017