

Safety Data Sheet

Detersol

Safety Data Sheet dated 04/12/2022 version 14

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

1.1. Product identifier

Trade name: Detersol

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

Recommended use: DETERGENT

FOR PROFESSIONAL USE

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company:

ESSECO S.r.l. Via San Cassiano 99

28069 - Trecate (NO)

Italy

Enartis - Phone n. +39-0321-790300

Competent person responsible for the safety data sheet: vino@enartis.it

1.4. Emergency telephone number

Enartis - Phone n. +39-0321-790300

Malta: 112

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Corr. 1A Causes severe skin burns and eye damage.

Eye Dam. 1 Causes serious eye damage.

Met. Corr. 1 May be corrosive to metals.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words



Danger

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P280 Wear protective gloves/clothing and eye/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
1

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
3

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
8 to do. Continue rinsing.

P310 Immediately call a doctor.

Contains

Sulphuric acid (15-35%)

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: Detersol

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
$\geq 40 - < 50$ %	Sulphuric acid (15-35%)	CAS:7664-93-9 EC:231-639-5 Index:016-020-00-8	Skin Corr. 1A, H314 Specific Concentration Limits: 5% \leq C < 15%: 3.2/2,H315 5% \leq C < 15%: 3.3/2,H319 15% \leq C < 100%: 3.2/1A,H314	01-2119458838-20-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash immediately with water.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and hazard labelling.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Wear suitable protective clothing (helmet, protective clothings, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).

Use suitable breathing apparatus .

Move undamaged containers from immediate hazard area if it can be done safely.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Remove persons to safety.
- See protective measures under point 7 and 8.

6.2. Environmental precautions

- Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
- Dispose of the collected material in accordance with the current regulations.
- Wash with plenty of water.
- Retain contaminated washing water and dispose it.

6.4. Reference to other sections

- See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Don't use empty container before they have been cleaned.
 - Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
- Advice on general occupational hygiene:
- Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

- Keep away from food, drink and feed.
- Incompatible materials:
- Store the product in original container, do not mix with other products. Store away from incompatible materials such as light metals, alkali metals, organic materials. It reacts with halogens, nitrates, magnesium, azides.
 - None in particular.
- Instructions as regards storage premises:
- Adequately ventilated premises.

7.3. Specific end use(s)

- Recommendation(s)
- None in particular
- Industrial sector specific solutions:
- None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
Sulphuric acid (15-35%) CAS: 7664-93-9	EU	0.05				thoracic fraction
	ACGIH	0.2				(T), A2(M) - Pulm func

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
Sulphuric acid (15-35%) CAS: 7664-93-9	0.002 mg/l	Marine water		
	0.003 mg/l	Fresh Water		

Derived No Effect Level (DNEL) values

	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
Sulphuric acid (15-35%) CAS: 7664-93-9			0.1 mg/m3	Human Inhalation	Short Term (acute)	

8.2. Exposure controls

Individual protection measures:

Personal protective equipment selections vary based on potential exposure conditions and working conditions.

The final choice of protective equipment will depend upon a risk assessment.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Please see both sections 5 and 6 for information about personal protective equipment to be worn in an emergency (e.g.: fire or unintentional release of the substance).

Eye protection:

Safety goggles with side protection and protective shield.

Technical reference standard: UNI EN 166

Protection for skin:

Chemical protection clothing.

Technical reference standard: UNI EN 13034

Wear chemical resistant safety shoes.

Technical reference standard: UNI EN 20345

Protection for hands:

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.

Glove suitability and breakthrough time will differ depending on the specific use conditions.

Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions.

Use protective gloves that provides comprehensive protection.

UNI EN 420/UNI EN 374

CR (polychloroprene, chloroprene rubber) (Recommended thickness of the material: 0.5 mm; Permeation time: > 480 min)

Respiratory protection:

Depending on the potential for exposure, select respiratory protective equipment suitable for the specific conditions of use and in compliance with current legislation.

Half-face mask with combined filter

Technical reference standard for filters to be used in the presence of gases and vapours: UNI EN 14387

Combined filter: E-P2 (yellow-white colour)

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid

Color: N.A.

Odour: Characteristic

pH: ± 1.00

Kinematic viscosity: N.A.

Melting point / freezing point: -5°C

Initial boiling point and boiling range: >200°C

Flash point: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: ± 1.390 g/mL

Solubility in water: 100%

Solubility in oil: 0%

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = N.A.

Particle characteristics:

Particle size: N.A. (Does not apply to liquid.)

9.2. Other information

Miscibility: N.A.
Conductivity: N.A.
Evaporation rate: N.A.
No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

The substance is highly reactive, dehydrates and sulfones most organic compounds. Attacks and corrodes numerous metals with development of hydrogen; the corrosiveness of sulfuric acid towards metals depends on its concentration and on temperature.

10.2. Chemical stability

Strongly hygroscopic liquid. At 340 ° C it decomposes into sulfur trioxide and water

Stable under normal conditions

10.3. Possibility of hazardous reactions

The dilution of the substance in water is strongly exothermic and fast.

10.4. Conditions to avoid

Avoid heating.

Do not mix with alkalis and chlorine

10.5. Incompatible materials

Flammable substances, reducing substances, basic substances, metals, organic substances and water.

Oxidants.

10.6. Hazardous decomposition products

As it burns, it develops sulfur oxides. When heated, it emits highly toxic fumes.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Corr. 1A(H314)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Sulphuric acid (15-35%) a) acute toxicity LD50 Oral Rat = 2140 mg/kg
LC50 Inhalation Rat = 510 mg/m3 2h

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Sulphuric acid (15-35%)	CAS: 7664-93-9 - EINECS: 231-639-5 - INDEX: 016-020-00-8	a) Aquatic acute toxicity : LC50 Fish = 44.56 mg/l 96h
		a) Aquatic acute toxicity : LC50 Fish = 42 mg/l 96h

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number or ID number

2796

14.2. UN proper shipping name

ADR-Shipping Name: UN 2796 ACIDO SOLFORICO più del 51% di acido o ELETTRILITA ACIDO PER ACCUMULATORI

IMDG-Technical name: UN 2796 SULPHURIC ACID

14.3. Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-A,S-B

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 8

ADR-Transport category (Tunnel restriction code): (E)

Air (IATA):

IATA-Passenger Aircraft: 851

IATA-Cargo Aircraft: 855

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisions: -

Sea (IMDG):

IMDG-Stowage Code: Category B

IMDG-Subsidiary hazards: -

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Regulation (EU) n. 2020/878

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: None.

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

Where applicable, refer to the following regulatory provisions :

German Water Hazard Class.

3: Severe hazard to waters

SVHC Substances:

No data available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Code	Hazard class and hazard category	Description
------	----------------------------------	-------------

2.16/1	Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.3/1	Eye Dam. 1	Serious eye damage, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008

[CLP]:

Classification according to Regulation (EC) Nr. 1272/2008 **Classification procedure**

3.2/1A	On basis of test data (pH)
3.3/1	On basis of test data (pH)
2.16/1	On basis of test data

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

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

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

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

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: KAFH

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/D: Not defined/ Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 4: First aid measures
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 10: Stability and reactivity
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information