

**Safety data sheet
according to 1907/2006/EC, Article 31**

revised on: 20.10.2021

Version number 3

Creation Date: 13.02.2018

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

- **1.1 Product identifier**
- **Trade name:** Phenolphthalein solution 1%
- **Article number:** 2761
- **CAS Number:** Relevant CAS No. see chapter 3
- **Registration number** This product is a mixture. REACH registration numbers see section 3.
- **UFI:** EXC0-H0Q8-V00F-SHSR
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Reagent for analysis
Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Th. Geyer GmbH & Co. KG
Dornierstr. 4 – 6
D-71272 Renningen

Tel.: +49(0)7159-1637-0, Fax:+49 (0)7159/18417
www.thgeyer.de
sicherheitsdatenblaetter@thgeyer.de
- **Further information obtainable from:** Product management department
- **1.4 Emergency telephone number:**
National Poisons Information Service
(Birmingham Centre)
City Hospital
Dudley Road
Birmingham B18 7QH
Tel.:Emergency: (00 44) 87 06 00 62 66

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1B H350 May cause cancer.



GHS07

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Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS02 GHS07 GHS08

Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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

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

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

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS No. Description

Ethanol 50-<100 %

CAS 64-17-5

EINECS 200-578-6

Reach 01-2119457610-43-XXXX

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43-XXXX	Ethanol Flam. Liq. 2, H225 Eye Irrit. 2, H319	95-<100%
CAS: 77-09-8 EINECS: 201-004-7	phenolphthalein Muta. 2, H341; Carc. 1B, H350; Repr. 2, H361f	1%

SVHC

CAS: 77-09-8 | phenolphthalein

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

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SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:**

First aider needs to protect himself.

Immediately remove any clothing soiled by the product.

· **After inhalation:**

Remove person from danger area.

Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Flush contaminated skin with soap and plenty of water.

After prolonged contact or any signs of skin changes (redness or other signs of inflammation) seek medical attention.

take care of a Possibility of inhalation at the same time

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

· **Information for doctor:** Please observe safety data sheet/label.

· **4.2 Most important symptoms and effects, both acute and delayed**

Gastric or intestinal disorders

Dazed feeling

Vertigo

Cramp

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

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

Water spray, powder, carbon dioxide or foam. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet.

· **5.2 Special hazards arising from the substance or mixture**

Combustible.

Ambient fire may liberate hazardous vapours.

In a fire, CO can be released

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

· **Additional information**

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

Avoid contact with eyes and skin.

· **6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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Dispose of the material collected according to regulations.

- **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**

- Store in cool, dry place in tightly closed receptacles.

- Keep away from heat and direct sunlight.

- Apply the general protection and hygiene measures for the handling with chemicals.

- **Information about fire - and explosion protection:**

- Flammable gas-air mixtures may form in empty receptacles.

- Keep away from open flames, hot surfaces and sources of ignition.

- Fumes can combine with air to form an explosive mixture.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

- **Information about storage in one common storage facility:**

- Away from combustible materials and sources of ignition and heat.

- **Further information about storage conditions:**

- Store in cool, dry conditions in well sealed receptacles.

- Protect from heat and direct sunlight.

- **Storage class:** 3

- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

CAS: 64-17-5 Ethanol

WEL	Long-term value: 1920 mg/m ³ , 1000 ppm
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- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

- **Respiratory protection:** Not required.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

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.

- **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.

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· Eye protection:



Safety glasses

· Body protection:



Protective work clothing (e. g. safety shoes EN ISO 20345, long-sleeved protective working garments).

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Fluid
· Colour:	Colourless
· Odour:	Alcohol-like

· pH-value at 20 °C: ~7

· Change in condition

· Melting point/freezing point:	-114 °C
· Initial boiling point and boiling range:	78 °C (CAS: 64-17-5 Ethanol)

· Flash point: 23 - 60 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 425 °C (CAS: 64-17-5 Ethanol)

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:

· Lower:	3.5 Vol %
· Upper:	15 Vol %

· Vapour pressure at 20 °C: 59 hPa

· Density at 20 °C: ~0.79 g/cm³
Not determined.

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water at 20 °C: 1,000 g/l

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

· Dynamic at 20 °C:	1.2 mPas
· Kinematic:	Not determined.

· Solvent content:

· Organic solvents: 95–<100 %

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VOC (EC)	95-<100 %
Solids content:	1-<2.5 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable with proper storage and handling.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Forms explosive gas mixture with air.
- **10.4 Conditions to avoid** Heat, flames and sparks
- **10.5 Incompatible materials:** Avoid contact with other chemicals.
- **10.6 Hazardous decomposition products:**
In case of fire / burns, development of hazardous combustion gases or vapors possible.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

CAS: 64-17-5 Ethanol

Oral	LD50	7,060 mg/kg (rat)
Inhalative	LC50/4 h	20,000 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:** -
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
Suspected of causing genetic defects.
- **Carcinogenicity**
May cause cancer.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (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.

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- **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**

Observe local (country-specific) regulations and laws

This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Chemicals must be disposed of in compliance with the respective national regulations.

- **European waste catalogue**

HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP7	Carcinogenic
HP11	Mutagenic

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, IMDG, IATA** UN1170

- **14.2 UN proper shipping name**

- **ADR** 1170 ETHANOL (ETHYL ALCOHOL) mixture
- **IMDG** ETHANOL (ETHYL ALCOHOL) mixture
- **IATA** ETHANOL mixture

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class** 3 (F1) Flammable liquids.
- **Label** 3

- **IMDG, IATA**



- **Class** 3 Flammable liquids.
- **Label** 3

- **14.4 Packing group**

- **ADR, IMDG, IATA** III

- **14.5 Environmental hazards:** Not applicable.

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<ul style="list-style-type: none"> · 14.6 Special precautions for user Warning: Flammable liquids. · Hazard identification number (Kemler code): 30 · EMS Number: F-E,S-D · Stowage Category A
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information:
<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) 5L · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml · Transport category 3 · Tunnel restriction code D/E
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) 5L · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> · UN "Model Regulation": UN 1170 ETHANOL (ETHYL ALCOHOL) MIXTURE, 3, III

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 is listed.
- **Seveso category** P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 28

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **National regulations:**

· **Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

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- **Other regulations, limitations and prohibitive regulations**

- **Substances of very high concern (SVHC) according to REACH, Article 57**

CAS: 77-09-8	phenolphthalein
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- **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. Application, use and handling of our products take place out of our control and are solely your responsibility.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361f Suspected of damaging fertility.

- **Department issuing SDS:** Product management

- **Contact:** Product management

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1B: Carcinogenicity – Category 1B

Repr. 2: Reproductive toxicity – Category 2

- *** Data compared to the previous version altered.**

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