



**sasol**

# Safety Data Sheet

## Phenol (Crystals)

Version 1.00

Revision Date 29.08.2018

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier**

**Trade name**

Phenol (Crystals)

**Synonyms**

Carbolic acid, phenyl alcohol, mono hydroxyl benzene.

**CAS-No.**

108-95-2

**EINECS-No.**

203-632-7

**Relevant identified uses of the substance or mixture and uses advised against**

**Use**

Industrial use. Solvent. Binding agents

**Manufacturer or supplier's details**

**Company**

Sasol Chemicals, a division of Sasol South Africa (Pty) Ltd

**Address**

Sasol Place, 50 Katherine Street  
Sandton  
2090  
South Africa  
+27103445000

**Telephone**

**E-mail address**

sasolchem.info.sa@sasol.com

**Emergency telephone number**

+44 (0)1235 239 670 (Europe, Israel, Africa, Americas)

+44(0)1235 239 671 (Middle East, Arabic African countries)

+65 3158 1074 (Asia Pacific)

+86 10 5100 3039 (China)

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+27 (0)17 610 4444 (South Africa)

+61 (2) 8014 4558 (Australia)

## SECTION 2. Hazards identification

### Classification of the substance or mixture

#### Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

##### Classification

Flammable Liquids	Category 4
Acute oral toxicity	Category 4
Acute dermal toxicity	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity - repeated exposure	Category 1

### Label elements

##### Pictogram



##### Signal word

Danger

##### Hazard statements

H227: Combustible liquid.  
H302: Harmful if swallowed.  
H311: Toxic in contact with skin.

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H314: Causes severe skin burns and eye damage.  
H318: Causes serious eye damage.  
H372: Causes damage to organs through prolonged or repeated exposure.

### Precautionary statements

#### Prevention

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P242: Use non-sparking tools.  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P270: Do not eat, drink or smoke when using this product.  
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P264: Wash hands thoroughly after handling.

#### Response

P370 + P378: In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.  
P341: If breathing is difficult, remove victim to fresh air and keep at rest in a position 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.  
P304 + P312: IF INHALED: Call a POISON CENTER/ doctor if you feel unwell.  
P362 + P364: Take off contaminated clothing and wash it before reuse.  
P301 + P330 + P331 + P310: IF SWALLOWED: Rinse mouth. Do NOT

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induce vomiting. Immediately call a POISON CENTER/ doctor.  
 P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water.

**Storage** P403: Store in a well-ventilated place.  
 P405: Store locked up.

**Disposal** P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

**Other hazards** No data available

### SECTION 3. Composition/information on ingredients

#### Substance

Phenol, carboic acid; monohydroxybenzene; phenyl alcohol

**Contents:** 100.00 %W/W

**CAS-No.** 108-95-2

**Index-No.** 604-001-00-2

**EC-No.** 203-632-7

**Hazard statements** H227 H302 H311 H314 H318 H372

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

### SECTION 4. First aid measures

#### Description of necessary first-aid measures

**Inhalation** Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

**Skin contact** Rapid skin decontamination is critical. Take off contaminated



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clothing and shoes immediately. Wash off immediately with plenty of water. Apply PEG/EtOH solution liberally to affected area. Allow to remain 15 to 30 seconds, then wash with water. Continue cycle of water and PEG/EtOH solution for at least 15 minutes. (PEG/EtOH solution consists of 2 parts polyethylene glycol 400 to 1 part ethanol. For external use only.) Wash off with soap and water. Wash contaminated clothing before re-use. Call a physician immediately.

#### Eye contact

Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately. Danger of very serious irreversible effects

#### Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

#### Most important symptoms/effects, acute and delayed

Refer to SECTION 11

## SECTION 5. Firefighting measures

#### Suitable extinguishing media

Water spray, Foam, CO<sub>2</sub>, Dry powder.

#### Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions

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**Special protective equipment for firefighters**      Wear self-contained breathing apparatus and protective suit.

### SECTION 6. Accidental release measures

**Personal precautions**      Avoid dust formation. Wear respiratory protection. Protective suit Ensure adequate ventilation. Do not breathe dust or decomposition vapours.

**Environmental precautions**      Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods for cleaning up**      Sweep up and shovel into suitable containers for disposal. Prevent the formation of dust.

**Reference to other sections**      Refer to section 8 and 13

### SECTION 7. Handling and storage

**Safe handling advice**      Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Ensure adequate ventilation. Do not breathe dust or decomposition vapours.

**Advice on protection against fire and explosion**      No data available

**Requirements for storage areas and containers**      Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from sources of ignition - No smoking.

**Advice on common storage**      No data available

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## SECTION 8. Exposure controls/personal protection

### Components with workplace control parameters

#### NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
PHENOL		19 mg/m <sup>3</sup>	06 2014	Taiwan OELs
PHENOL		5 ppm	06 2014	Taiwan OELs
PHENOL				

### Exposure controls

#### Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Effective exhaust ventilation system

Safety shower and eye bath

#### Personal protective equipment

**Respiratory protection** Self-contained breathing apparatus (EN 133)

**Hand protection** Gloves suitable for permanent contact:

Material: butyl-rubber

Break through time: 4 h

Material thickness: 0.5 mm

**Eye protection** Safety glasses with side-shields

**Skin and body protection** Protective suit Safety shoes

**Hygiene measures** Wash hands before breaks and immediately after handling the

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product.

## SECTION 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Form</b>	crystalline, granular, Solid
<b>State of matter</b>	Solid
<b>Colour</b>	Colourless - pale yellow
<b>Odour</b>	Phenol-like
<b>Odour Threshold</b>	No data available
<b>pH</b>	6
<b>Melting point/range</b>	40.6 ° C; 101.3 kPa
<b>Boiling point/boiling range</b>	182 ° C; 101.3 kPa
<b>Flash point</b>	79 ° C; closed cup
<b>Flash point</b>	85 ° C; open cup
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Auto-ignition temperature</b>	595 ° C
<b>Relative vapour density</b>	3.24
<b>Density</b>	1.07 g/cm <sup>3</sup> ; 20 ° C
<b>Partition coefficient: n-octanol/water</b>	log Pow: 1.5



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Viscosity, kinematic 3.437 mm<sup>2</sup>/s; 50 ° C

#### SECTION 10. Stability and reactivity

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None known.
Conditions to avoid	Avoid moisture. Heat, flames and sparks.
Materials to avoid	Air
Hazardous decomposition products	Carbon dioxide (CO <sub>2</sub> )Carbon monoxide

#### SECTION 11. Toxicological information

Acute oral toxicity	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: LD50 Rat: 340 - 540 mg/kg; (literature value)
Acute inhalation toxicity	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: LC50 Rat: 4 h; vapour; 316 mg/l; (literature value)
Acute dermal toxicity	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: LD50 Rabbit: 850 mg/kg; (literature value)
Skin irritation	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: Causes burns.; (literature value)
Eye irritation	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: Causes burns. (literature value)



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## SECTION 12. Ecological information

<b>Toxicity to fish</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: semi-static test; <i>Poecilia reticulata</i> ; 14 d; LC50; 21.93 mg/l; (literature value)
<b>Toxicity to daphnia and other aquatic invertebrates</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: static test; <i>Ceriodaphnia dubia</i> (water flea); 48 h; EC50; 3.1 mg/l(literature value)
<b>Toxicity to algae</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: <i>Pseudokirchneriella subcapitata</i> (green algae)96 h; EC50; 61.1 mg/l;
<b>Toxicity to bacteria</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: <i>Nitrosomonas</i> sp.; IC50; 21 mg/l
<b>Bioaccumulation</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: Does not bioaccumulate.
<b>Mobility in soil</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: Not expected to adsorb on soil.
<b>Results of PBT and vPvB assessment</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol: This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
<b>Other adverse effects</b>	Phenol, carbolic acid; monohydroxybenzene; phenyl alcohol:



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No data available

### SECTION 13. Disposal considerations

**Product** Dispose of as special waste in compliance with local and national regulations.

### SECTION 14. Transport information

#### IMDG

**UN number:** 1671

**Class:** 6.1

**EmS:** F-A; MFAG: S-A

**Packaging group:** II; Marine pollutant

**Proper shipping name:** PHENOL, SOLID

#### ICAO/IATA

**UN number :** 1671

**Class:** 6.1

**Packaging group:** II

**Proper shipping name:** PHENOL, SOLID

**Transport in bulk according** Phenol  
Pollution Category: Y



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to Annex II of MARPOL Ship Type: 2  
73/78 and the IBC Code

### SECTION 15. Regulatory information

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

Inv. of Exist. Chem. Substances in China	All chemical constituents are listed in: Inv. of Exist. Chem. Substances in China (See chapter 3)
USA TSCA Inventory	All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)
Canadian Domestic Substances List (DSL)	All chemical constituents are listed in: Canadian Domestic Substances List (DSL) (See chapter 3)
Australian Inv. of Chem. Substances (AICS)	All chemical constituents are listed in: Australian Inv. of Chem. Substances (AICS) (See chapter 3)
New Zealand Inventory of Chemicals (NZIoC)	All chemical constituents are listed in: New Zealand Inventory of Chemicals (NZIoC) (See chapter 3)
Jap. Inv. of Exist. & New Chemicals (ENCS)	All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals (ENCS) (See chapter 3)
Japan. Industrial Safety & Health Law (ISHL)	All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) (See chapter 3)
Korea. Existing Chemicals Inventory (KECI)	All chemical constituents are listed in: Korea. Existing Chemicals Inventory (KECI) (See chapter 3)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	All chemical constituents are listed in: Philippines Inventory of Chemicals and Chemical Substances (PICCS) (See chapter 3)

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**China Inv. Existing Chemical Substances  
(IECSC)**

All chemical constituents are listed in: China Inv. Existing  
Chemical Substances (IECSC) (See chapter 3)

### SECTION 16. Other information

#### Full text of H-Statements

- H227 Combustible liquid.  
H302 Harmful if swallowed.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H372 Causes damage to organs through prolonged or repeated exposure.

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding the health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.

Although all reasonable efforts were exercised in the compilation of this SDS, Sasol does not expressly warrant the accuracy of, or assume any liability for incomplete information contained herein or any advice given. When this product is sold, risk passes to the purchaser in accordance with the specific terms and conditions of sale.