Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 16 Aug 2022

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

4-Chlorophenol

1.1. Catalog No.:

673138

1.2. Relevant identified uses of the substance or mixture

Identified uses: Laboratory chemical
R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
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Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
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1.4. Emergency telephone number

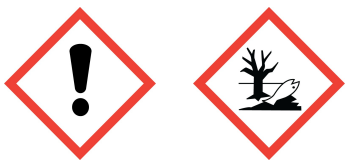
HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Chronic aquatic toxicity (Category 2), H411
For the full text of the H-Statements mentioned in this Section, see Section 16.
Classification according to EU Directives 67/548/EEC or 1999/45/EC
Xn Harmful R20/21/22
N Dangerous for the environment
R51/53

2.2. Label elements

2.2.1. Pictogram



2.2.2.

Signal word Warning
Hazard statement(s)
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled
H411 Toxic to aquatic life with long lasting effects.
Precautionary statement(s)
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing.
Supplemental Hazard
Statements
none
2.3 Other hazards
Stench.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : C6H5ClO
Molecular Weight : 128,56 g/mol
CAS-No. : 106-48-9
EC-No. : 203-402-6
Index-No. : 604-008-00-0
Hazardous ingredients according to Regulation (EC) No 1272/2008
Component Classification Concentration
4-Chlorophenol
CAS-No.
EC-No.
Index-No.
106-48-9
203-402-6
604-008-00-0
Acute Tox. 4; Aquatic Chronic
2; H302 + H312 + H332, H411
<= 100 %
Phenol
CAS-No.
EC-No.
Index-No.
108-95-2
203-632-7
604-001-00-2
Acute Tox. 3; Skin Corr. 1B;
Muta. 2; STOT RE 2; Aquatic
Chronic 3; H301 + H311 +
H331, H314, H341, H373,
H412
< 1 %
Hazardous ingredients according to Directive 1999/45/EC
Component Classification Concentration
4-Chlorophenol
CAS-No.
EC-No.
Index-No.
106-48-9
203-402-6
604-008-00-0
Xn, N, R20/21/22 - R51/53 <= 100 %
Phenol
CAS-No.
EC-No.
Index-No.
108-95-2
203-632-7
604-001-00-2
T, Mut.Cat.3, R23/24/25 - R34
- R48/20/21/22 - R68
< 1 %

3.1.1. Formula

C6H5ClO

3.1.2. Molecular Weight (g/mol)

128.56

3.1.3. CAS-No.

106-48-9

4. FIRST AID MEASURES

4.1 Description of first aid measures
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
4.3 Indication of any immediate medical attention and special treatment needed
no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2 Special hazards arising from the substance or mixture
Carbon oxides, Hydrogen chloride gas
5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.
5.4 Further information
no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
For personal protection see section 8.
6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Store under inert gas. Stench.
7.3 Specific end use(s)
A part from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters
8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment
Eye/face protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
a) Appearance Form: solid
b) Odour Stench.
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing
point
no data available
f) Initial boiling point and
boiling range
220 °C - lit.
g) Flash point 121 °C - closed cup
h) Evapouration rate no data available
i) Flammability (solid, gas) no data available
j) Upper/lower
flammability or
explosive limits
no data available
k) Vapour pressure 1 hPa at 49,8 °C
l) Vapour density no data available
m) Relative density 1,306 g/mL at 25 °C
n) Water solubility no data available
o) Partition coefficient: noctanol/
water
log Pow: 2,39log Pow: 5
p) Auto-ignition
temperature
no data available
q) Decomposition
temperature
no data available
r) Viscosity no data available
s) Explosive properties no data available
t) Oxidizing properties no data available
9.2 Other safety information
no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
no data available
10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
no data available
10.4 Conditions to avoid
no data available
10.5 Incompatible materials
Acid chlorides, Acid anhydrides, Oxidizing agents
10.6 Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - rat - 670 mg/kg
LC50 Inhalation - rat - 11 mg/m3

LD50 Dermal - rat - 1.500 mg/kg
Remarks: Behavioral:Muscle contraction or spasticity. Extremely corrosive and destructive to tissue.
Skin corrosion/irritation
no data available
Serious eye damage/eye irritation
no data available
Respiratory or skin sensitisation
no data available
Germ cell mutagenicity
rat
Cytogenetic analysis
Carcinogenicity
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Phenol)
Reproductive toxicity
Reproductive toxicity - mouse - Inhalation
Paternal Effects: Spermatogenesis (including genetic material, sperm morphology,motility, and count).
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetal death.
Specific target organ toxicity - single exposure
no data available
Specific target organ toxicity - repeated exposure
no data available
Aspiration hazard
no data available
Additional Information
RTECS: SK2800000
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish mortality NOEC - Cyprinodon variegatus (sheepshead minnow) - 3,2 mg/l - 96,0 h
LC50 - Lepomis macrochirus (Bluegill) - 3,1 - 4,8 mg/l - 96,0 h
Toxicity to daphnia and other aquatic invertebrates
mortality NOEC - Daphnia - 0,2 mg/l - 8 d
EC50 - Daphnia magna (Water flea) - 2,8 - 8,6 mg/l - 24 h
12.2 Persistence and degradability
12.3 Bioaccumulative potential
Bioaccumulation Cyprinus carpio (Carp) - 42 d - 4 μg/l
Bioconcentration factor (BCF): 11 - 52
Cyprinus carpio (Carp) - 42 d - 40 μg/l
12.4 Mobility in soil
no data available
12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6 Other adverse effects
Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 2020 IMDG: 2020 IATA: 2020
14.2 UN proper shipping name
ADR/RID: CHLOROPHENOLS, SOLID
IMDG: CHLOROPHENOLS, SOLID
IATA: Chlorophenols, solid
14.3 Transport hazard class(es)
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1
14.4 Packaging group
ADR/RID: III IMDG: III IATA: III
14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
14.6 Special precautions for user
no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available
15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!