

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


Product identifier
Trade name **4-Chloro-2-methylphenol**
Stock number: L04164
CAS Number: 1570-64-5
EINECS Number: 216-381-3
Index number: 604-012-00-2
Relevant identified uses of the substance or mixture and uses advised against
Sector of Use SU24 Scientific research and development

Details of the supplier of the safety data sheet
Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG
A Johnson Matthey Company
Benzstrasse 3
D-76185 Karlsruhe / Germany
Tel: +49 (0) 721 84007 280
Fax: +49 (0) 721 84007 300
Email: tech@alfa.com
www.alfa.com


Informing department: Product safety department.
Emergency telephone number: Product Safety Department +049 (0) 7275 988687-0 (business hours)
Carechem 24: +44 (0) 1235 239 670 (Multi-language 24 hour emergency)
Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification


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

 GHS06 skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


 GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.


 GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.


Classification according to Directive 67/548/EEC or Directive 1999/45/EC

 T; Toxic

R23: Toxic by inhalation.

 C; Corrosive

R35: Causes severe burns.

 N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

Information concerning particular hazards for human and environment:

Not applicable

Label elements
Labelling according to Regulation (EC) No 1272/2008
Hazard pictograms

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



GHS05 GHS06 GHS09

Signal word
Hazard statements

Danger
H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.

Precautionary statements

P260 Do not breathe the dust/fume/gas/mist/vapours/spray.
P303+P361+P353 IF ON SKIN (or hair): Remove/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.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards
Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances (CAS#) Designation: 1570-64-5 4-Chloro-2-methylphenol
Identification number(s):
EINECS Number: 216-381-3
Index number: 604-012-00-2

4 First aid measures

Description of first aid measures
General information

Instantly remove any clothing soiled by the product.
Remove breathing apparatus only after soiled clothing has been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

After eye contact

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

After swallowing

Seek immediate medical advice.

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Information for doctor
Most important symptoms and effects, both acute and delayed
Indication of any immediate medical attention and special treatment needed

No further relevant information available.
 No further relevant information available.

5 Firefighting measures

Extinguishing media
Suitable extinguishing agents
Special hazards arising from the substance or mixture

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
 Can be released in case of fire:
 Carbon monoxide and carbon dioxide
 Hydrogen chloride (HCl)

Advice for firefighters
Protective equipment:

Wear self-contained breathing apparatus.
 Wear full protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Environmental precautions:
Methods and material for containment and cleaning up:
Reference to other sections

Wear protective equipment. Keep unprotected persons away.
 Ensure adequate ventilation
 Do not allow material to be released to the environment without proper governmental permits.
 Use neutralizing agent.
 Dispose of contaminated material as waste according to item 13.
 Ensure adequate ventilation.
 See Section 7 for information on safe handling
 See section 8 for information on personal protection equipment.
 See Section 13 for information on disposal.

7 Handling and storage

Handling
Precautions for safe handling

Keep containers tightly sealed.
 Store in cool, dry place in tightly closed containers.
 Ensure good ventilation/exhaustion at the workplace.
 Open and handle container with care.

Information about protection against explosions and fires:
Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:
Further information about storage conditions:
Specific end use(s)

Keep ignition sources away - Do not smoke.
 No special requirements.
 Store away from oxidizing agents.
 Keep container tightly sealed.
 Store in cool, dry conditions in well sealed containers.
 Store in a locked cabinet or with access restricted to technical experts or their assistants.
 No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:
Control parameters
Components with critical values that require monitoring at the workplace:
Additional information:
Exposure controls
Personal protective equipment
General protective and hygienic measures

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
 Not required.
 No data
 The usual precautionary measures should be adhered to in handling the chemicals.
 Keep away from foodstuffs, beverages and food.
 Instantly remove any soiled and impregnated garments.
 Wash hands during breaks and at the end of the work.
 Store protective clothing separately.
 Avoid contact with the eyes and skin.
 Use breathing protection with high concentrations.
 Check protective gloves prior to each use for their proper condition.
 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.
 Impervious gloves
 Not determined
 Safety glasses
 Tightly sealed safety glasses.
 Face protection
 Full face protection
 Protective work clothing.

Breathing equipment:
Protection of hands:
Material of gloves

Penetration time of glove material
Eye protection:

Body protection:

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form:
Colour:
Smell:
Odour threshold:
pH-value:
Change in condition
Melting point/Melting range:
Boiling point/Boiling range:
Sublimation temperature / start:

Solid.
 Not determined.
 Not determined.
 Not determined.
 Not applicable.
 45-48°C
 220-225°C
 Not determined

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Trade name **4-Chloro-2-methylphenol**

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Flash point:	78°C
Inflammability (solid, gaseous)	Not determined.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Self-inflammability:	Not determined.
Danger of explosion:	Product is not explosive.
Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined
Steam pressure:	Not applicable.
Density at 20°C	1.2 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity	
Chemical stability	
Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
Possibility of hazardous reactions	No dangerous reactions known
Incompatible materials:	Oxidizing agents
Hazardous decomposition products:	Carbon monoxide and carbon dioxide Hydrogen chloride (HCl)

11 Toxicological information

Information on toxicological effects	
Acute toxicity:	
LD/LC50 values that are relevant for classification:	
Oral LD50	1320 mg/kg (mouse)
Primary irritant effect:	
on the skin:	Strong corrosive effect on skin and mucous membranes.
on the eye:	Strong corrosive effect.
Sensitization:	No sensitizing effect known.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute and/or other multiple dose toxicity data for components in this product. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information

Toxicity	
Aquatic toxicity:	No further relevant information available.
Persistence and degradability	No further relevant information available.
Behaviour in environmental systems:	
Bioaccumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.
Ecotoxicological effects:	
Remark:	Very toxic for fish
Additional ecological information:	
General notes:	Do not allow product to reach ground water, water bodies or sewage system. Water hazard class 2 (Assessment by list): hazardous for water. Danger to drinking water if even small quantities leak into soil. Also poisonous for fish and plankton in water bodies. Do not allow material to be released to the environment without proper governmental permits. Very toxic for aquatic organisms
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
Other adverse effects	No further relevant information available.

13 Disposal considerations

Waste treatment methods	
Recommendation	Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.
Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class:	6.1 (T1) Toxic substances.
Kemler Number:	60
UN-Number:	3437
Packaging group:	II

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Label 6.1
Special marking: Symbol (fish and tree)
UN proper shipping name: 3437 CHLOROCRESOLS, SOLID
Limited quantities (LQ) LQ18
Transport category 2
Tunnel restriction code D/E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 6.1
UN Number: 3437
Label 6.1
Packaging group: II
EMS Number: F-A, S-A
Marine pollutant: No
Correct technical name: CHLOROCRESOLS, SOLID

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 6.1
UN/ID Number: 2020
Label 6.1
Packaging group: II
Correct technical name: CHLOROPHENOLS, SOLID

UN "Model Regulation":

Environmental hazards: UN3437, CHLOROCRESOLS, SOLID, 6.1, II
 Environmentally hazardous substance, solid; Marine Pollutant
Special precautions for user Warning: Toxic substances.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****Labelling according to Regulation (EC) No 1272/2008****Hazard pictograms**

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



GHS05 GHS06 GHS09

Signal word**Hazard statements**

Danger
 H331 Toxic if inhaled.
 H314 Causes severe skin burns and eye damage.
 H400 Very toxic to aquatic life.

Precautionary statements

P260 Do not breathe the dust/fume/gas/mist/vapours/spray.
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 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations**Information about limitation of use:**

Employment restrictions concerning young persons must be observed.
 For use only by technically qualified individuals.

Technical instructions (air):

Class	Share in %
I	100.0

Water hazard class:**Chemical safety assessment:**

Water hazard class 2 (Assessment by list): hazardous for water.
 A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.**Contact:**

Zachariah C. Holt
 Global EHS Manager

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)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent