

Safety Data Sheet acc. to OSHA HCS

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1 Identification

Product identifier

Product name: p-Cresol

Stock number: A13531, L04889 CAS Number: 106-44-5 EC number: 203-398-6 Index number: 604-004-00-9

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Alfa Aesar Thermo Fisher Scientific Chemicals, Inc.

70 Annual Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660

Fax: 800-322-4757

Email: tech@alfa.com

www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.



GHS05 Corrosion

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

Eye Dam. 1 H318 Causes serious eye damage. **Hazards not otherwise classified** No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms





GHS05 GHS06

Signal word Danger

Hazard statements
H301+H311 Toxic if swallowed or in contact with skin.
H314 Causes severe skin burns and eye damage. Precautionary statements

Precautionary statements
P260 Do not breathe dusts or mists.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303+P361+P353 if on skin (or hair): 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.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
Store locked up.

P304-P312 P405 P501

Store locked up.

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

WHMIS classification

D1B - Toxic material causing immediate and serious toxic effects

D2B - Toxic material causing other toxic effects

E - Corrosive material



Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Health (acute effects) = 3
Flammability = 2 Flammability = 2 Physical Hazard = 1

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

CAS# Description: 106-44-5 p-Cresol

Product name: p-Cresol

Concentration: ≤100% Identification number(s): EC number: 203-398-6 Index number: 604-004-00-9 (Contd. of page 1)

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4 First-aid measures

Description of first aid measures General information

Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

After skin contact
Immediately 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 a doctor.
After swallowing Do not induce vomiting; immediately call for medical help.
Information for doctor
Most important symptoms and the second state of the second symptoms.

Most important symptoms and effects, both acute and delayed Causes severe skin burns.
Toxic in contact with skin.

Toxic if swallowed.

Toxic in Swallowed. Causes serious eye damage. Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Environmental precautions: Do not allow product to reach sewage system or any water course.
Methods and material for containment and cleaning up:
Use neutralizing agent.
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
Prevention of secondary hazards: Keep away from ignition sources.
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.
Protective Action Criteria for Chemicals
PAC-1: Substance is not listed.
PAC-2: Substance is not listed.
PAC-3: Substance is not listed.

7 Handling and storage

Handling
Precautions for safe handling
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.
Information about protection against explosions and fires: Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Store in the dark.

Store away from oxidizing agents. Further information about storage conditions:

Rurner information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Protect from exposure to light. Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

106-44-5 p-Cresol (100.0%)
PEL (USA) | Long-term value Long-term value: 22 mg/m³, 5 ppm

REL (USA) Long-term value: 10 mg/m³, 2.3 ppm

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Product name: p-Cresol

TLV (USA)

Long-term value: 20* mg/m³ Skin;*as inhalable fraction and vapor

EL (Canada) Long-term value: 10 mg/m3 Skiň

Additional information: No data

Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use suitable respirator when high concentrations are present.
Recommended filter device for short term use:
Use a respirator with type P100 (USA) or P3 (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if airpurifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.
Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.

Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Material of gloves Nitrile rubber, NBR
Penetration time of glove material (in minutes) 480
Glove thickness: 0.4 mm
Eye protection:
Tightly sealed goggles
Full face protection
Safety glasses with side shields / NIOSH (US) or EN 166(EU)
Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties General Information

Appearance: Form: Solid

Odor: Odor threshold: Phenol-like Not determined. Not applicable.

pH-value:

, Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 32-34 °C (90-93 °F) 201-202 °C (394-396 °F) Not determined

Flash point:

89 °C (192 °F) Not determined. 625 °C (1157 °F)

Flammability (solid, gaseous) Ignition temperature: Decomposition temperature:

Not determined

Auto igniting:

Not determined.

Auto igniting:

Danger of explosion:
Explosion limits:
Lower:
Upper:
Vapor pressure at 20 °C (68 °F):
Density at 20 °C (68 °F):
Relative density
Vapor density
Vapor density
Solubility in / Miscibility with
Water at 25 °C (77 °F):
Positive determined.
Viscosity:
Not determined.
Not applicable.
Soly g/l
Partition coefficient (n-octanol/water): Not determined.
Viscosity:

Not determined 0.2 hPa 1.034 g/cm³ (8.629 lbs/gal) Not determined.

Viscosity: dynamic at 35 °C (95 °F):

8 mPas

kinematic:

Other information

Not applicable. No further relevant information available.

10 Stability and reactivity

Reactivity No information known.

Chemical stability Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions Reacts with strong oxidizing agents

Conditions to avoid No further relevant information available.

Incompatible materials:

Oxidizing agents

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Information on toxicological effects
Acute toxicity:
Toxic in contact with skin.
Toxic if swallowed.
Danger through skin absorption.
Swallowing will lead to a strong corrosive 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 toxicity data for this substance.

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Product name: p-Cresol

LD/LC50 values that are relevant for classification:

LD50 270 mg/kg (rat)

Dermal LD50 750 mg/kg (rat)

Skin irritation or corrosion: Causes severe skin burns.

Eye irritation or corrosion: Causes serious eye damage.

Sensitization: No sensitizing effects known.

Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.

Consideration:

Gerim cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Substances (RTECS) contains multiple dose toxicity data for this substance.

Subacute to chronic toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.

Additional ecological information:
General notes:
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
Avoid transfer into the environment.
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 Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

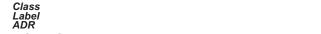
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UN-Number DOT, IMDG, IATA	UN3455
UN proper shipping name DOT ADR IMDG, IATA	Cresols, solid 3455 Cresols, solid CRESOLS, SOLID

Transport hazard class(es)

DOT





6.1 Toxic substances 6.1, 8

























Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

6.1 (TC2) Toxic substances 6.1+8

6.1 Toxic substances

6.1 Toxic substances 6.1 (8)

Not applicable. Warning: Toxic substances F-A,S-B

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Product name: p-Cresol

Transport/Additional information:

DOT

Quantity limitations On passenger aircraft/rail: 15 kg On cargo aircraft only: 50 kg

Marine Pollutant (DOT):

IMDG Limited quantities (LQ

Excepted quantities (EQ)

Code: E4
Maximum net quantity per inner packaging: 1 g
Maximum net quantity per outer packaging: 500 g

UN "Model Regulation": UN 3455 CRESOLS, SOLID, 6.1 (8), II

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms







Signal word Danger Hazard statements

H301+H311 Toxic if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage.

H314 Causes severe skin burns and eye damage.

Precautionary statements
Do not breathe dusts or mists.

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

F301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303+P361+P353 If on skin (or hair): 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.

F304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

Store locked up.

P304+P340 P312 P405

Store locked up

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

Mational regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings) 106-44-5 p-Cresol

California Proposition 65
Prop 65 - Chemicals known to cause cancer Substance is not listed.
Prop 65 - Developmental toxicity Substance is not listed.
Prop 65 - Developmental toxicity, female Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.
Information about limitation of use:
For use only by technically qualified individuals.
This substance is subject to a Significant New Use Rule (SNUR) promulgated under Section 5(a)(2) of the Toxic Substances Control Act (TSCA). See 40 CFR 721.
This product is being sold for research and development use.
Other regulations, limitations and prohibitive regulations
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Chemical safety assessment: 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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department
Date of preparation/Revision: Print date, revision date and version number are in the header of each page.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement conceming the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Information System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal doncentration, 50 percent
LD50: Lethal dose, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
VPUS: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
ARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)
Skin Corr. 18: Skin corrosion/irritation – Category 18
Eye Dam. 1: Serious eye damage/eye irritation – Category 1