

# Safety Data Sheet

# **1. PRODUCT AND COMPANY IDENTIFICATION**

#### **1.1 Product identifiers**

Product Name: m-Cresol CAS No.: 108-39-4

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances. For scientific research and development only. Not for use in humans or animals.

## 1.3 Details of the supplier of the safety data sheet

Brand: MuseChem

#### 1.4 Emergency telephone number

Telephone: +1-862-686-3898 Fax: +1-323-978-5598 E-mail address: info@musechem.com

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318 Short-term (acute) aquatic hazard (Category 2), H401 Long-term (chronic) aquatic hazard (Category 3), H412 For the full text of the H-Statements mentioned in this Section, see Section 16

#### 2.2 GHS Label elements, including precautionary statements



Signal word: Danger Hazard statement(s) H227 Combustible liquid. H301 + H311 Toxic if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage. H401 Toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects. Precautionary statement(s) P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.



P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

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

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms : 3-Methylphenol Formula :  $C_7H_8O$ Molecular Weight : 108.14 g/mol CAS-No. : 108-39-4 EC-No. : 203-577-9

#### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### **General advice**

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance. **If inhaled** 

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

# Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately.



In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to Neutralise.

# 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

Water Foam Carbon dioxide (CO2) Dry powder

## Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

# 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### 6. ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

# 6.2 Environmental precautions

Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

#### 6.4 Reference to other sections



For disposal see section 13.

#### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

#### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

#### Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

#### 7.3 Specific end use(s)

Apart 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

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

#### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

#### **Skin protection**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Chloroprene

Minimum layer thickness: 0.65 mm

Break through time: 480 min



Material tested:KCL 720 Camapren®

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Splash contact Material: Latex gloves Minimum layer thickness: 0.6 mm Break through time: 60 min Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M) **Body Protection** Protective clothing **Respiratory protection** required when vancurs/acroscils are generated. Our recomme

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

## Control of environmental exposure

Do not let product enter drains.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

a) Appearance	
Form	Liquid
b) Odour	phenol-like
c) pH	No data available
d) Melting point	Melting point/range: 8 - 10 °C (46 - 50 °F) - lit.
e) Boiling point	203 °C 397 °F - lit.
f) Flash point	86 °C (187 °F) - closed cup
g) Evaporation rate	No data available
h) Flammability (solid, gas)	No data available
i) Upper/lower flammability	Upper explosion limit: 1.35 %(V)
or explosive limits	Lower explosion limit: 1.06 %(V)
j) Vapour pressure	< 1 hPa at 20 °C (68 °F)
k) Vapour density	3.73 - (Air = 1.0)
I) Relative density	1.03 at 20 °C (68 °F)
Density	1.034 g/cm3 at 25 °C (77 °F) - lit
m) Water solubility	22.7 g/l at 25 °C (77 °F)
n) Partition coefficient: n-octanol/water	log Pow: 1.96 - Bioaccumulation is not expected.
o) Auto-ignition temperature	559 °C (1038 °F) at 1,013 hPa



- p) Decomposition temperature No data available
- q) Viscosity

- No data available No data available
- r) Explosive propertiess) Oxidizing properties none

# 9.2 Other safety information

Dissociation constant 10.09 at 25 °C (77 °F) Relative vapor 3.73 - (Air = 1.0) Density

# **10. STABILITY AND REACTIVITY**

## 10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

#### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Nitric acid

fuming sulfuric acid

chlorosulfonic acid

alkalines

# 10.4 Conditions to avoid

Strong heating.

# 10.5 Incompatible materials

bronze, brass, Iron, Lead

#### **10.6 Hazardous decomposition products**

In the event of fire: see section 5

# **11. TOXICOLOGICAL INFORMATION**

# 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - male - 242 mg/kg (OECD Test Guideline 401) Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Inhalation: No data available Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Inhalation: Corrosive to respiratory system. LD50 Dermal - Rabbit - 620 mg/kg Remarks: Behavioral:Somnolence (general depressed activity).



Behavioral:Tetany. (RTECS) No data available Skin corrosion/irritation Skin - Rabbit Result: Causes burns. - 24 h Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Serious eye damage/eye irritation Causes serious eye damage. Respiratory or skin sensitisation No data available Germ cell mutagenicity Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 **Result:** negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: positive Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Chromosome aberration test Species: Mouse Cell type: Bone marrow Application Route: Oral Method: OECD Test Guideline 475 Result: negative Carcinogenicity IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### **Reproductive toxicity**



No data available Specific target organ toxicity - single exposure No data available Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available

#### **11.2 Additional Information**

Repeated dose toxicity - Rat - male - Oral - 13 Weeks - NOAEL (No observed adverse effect level) - 50 mg/kg RTECS: GO6125000 Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Systemic effects:

- Headache
- Nausea
- Vomiting
- Dizziness
- agitation, spasms
- respiratory arrest

Unconsciousness

Damage to:

Central nervous system Liver

Kidney

This substance should be handled with particular care.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

# 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Toxicity to fish	static test LC50 - Salvelinus fontinalis - 7.6 mg/l - 96 h Remarks: (ECHA)
	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 8.6 mg/l - 96 h
	Remarks: (ECHA)
	static test LC50 - Salmo trutta (brown trout) - 8.4 mg/l - 96 h



Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates flow-through test EC50 - Daphnia pulicaria - > 99.5 mg/l - 48 h (US-EPA)

## 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 10 d Result: 96 % - Inherently biodegradable. (OECD Test Guideline 302B)

# 12.3 Bioaccumulative potential

Bioaccumulation Leuciscus idus (Golden orfe) - 3 d- 0.05 mg/l(meta-Cresol) Bioconcentration factor (BCF): 17 – 20

#### 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

No data available

# **13. DISPOSAL CONSIDERATIONS**

# 13.1 Waste treatment methods

#### Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

#### **14. TRANSPORT INFORMATION**

#### DOT (US)

UN number: 2076 Class: 6.1 (8) Packing group: II Proper shipping name: Cresols, liquid Reportable Quantity (RQ): 100 lbs Reportable Quantity (RQ): 100 lbs Poison Inhalation Hazard: No **IMDG** UN number: 2076 Class: 6.1 (8) Packing group: II EMS-No: F-A, S-B Proper shipping name: CRESOLS, LIQUID **IATA** UN number: 2076 Class: 6.1 (8) Packing group: II Proper shipping name: Cresols, liquid

# **15. REGULATORY INFORMATION**

#### SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.



## SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

meta-Cresol

CAS-No. 108-39-4

## SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

## Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### **16. OTHER INFORMATION**

#### **Further information**

Copyright 2017 MuseChem License granted to make unlimited paper copies for internal use only. 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. MuseChem and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.