



Quicksilver
Liquid silver

CAS No: 7439-97-6
RTECS No: OV4550000
UN No: 2809
EC No: 080-001-00-0

Hg
Atomic mass: 200.6



TYPES OF HAZARD / EXPOSURE	ACUTE HAZARDS / SYMPTOMS	PREVENTION	FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Risk of fire and explosion		In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Abdominal pain. Cough. Diarrhoea. Shortness of breath. Vomiting. Fever or elevated body temperature.	Local exhaust or breathing protection	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention
Skin	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
Eyes		Face shield, or eye protection in combination with breathing protection	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion		Do not eat, drink, or smoke during work. Wash hands before eating.	Refer for medical attention
SPILLAGE DISPOSAL		PACKAGING & LABELLING	
Evacuate danger area in case of a large spill! Consult an expert! Ventilation. Collect leaking and spilled liquid in sealable non-metallic containers as far as possible. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.		I Symbol N Symbol R: 23-33-50/53 S: (1/2)-7-45-60-61 UN Hazard Class: 8 UN Pack Group: III Special material. Do not transport with food and feedstuffs.	
EMERGENCY RESPONSE		STORAGE	
Transport Emergency Card: TEC (R)-80GC9-II+III		Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Well closed.	
ICSC: 0056		© IPCS 2004	



MSDS Sheet For:

MA-162

Supplied By:



MERCURY

ICSC: 0056

IMPORTANT DATA	
Physical State; Appearance ODOURLESS, HEAVY AND MOBILE SILVERY LIQUID METAL. Chemical dangers Upon heating, toxic fumes are formed. Reacts violently with ammonia and halogens causing fire and explosion hazard. Attacks aluminium and many other metals forming amalgams. Occupational exposure limits TLV: 0.025 mg/m³ as TWA; (skin); A4; BEI issued; (ACGIH 2004). MAK: 0.1 mg/m³; Sh; Peak limitation category: II(8); Carcinogen category: 3B; (DFG 2003).	Routes of exposure The substance can be absorbed into the body by inhalation of its vapour and through the skin, also as a vapour! Inhalation risk A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C. Effects of short-term exposure The substance is irritating to the skin. Inhalation of the vapours may cause pneumonitis. The substance may cause effects on the central nervous system and kidneys. The effects may be delayed. Medical observation is indicated. Effects of long-term or repeated exposure The substance may have effects on the central nervous system and kidneys, resulting in irritability, emotional instability, tremor, mental and memory disturbances, speech disorders. May cause inflammation and discoloration of the gums. Danger of cumulative effects. Animal tests show that this substance possibly causes toxic effects upon human reproduction.
PHYSICAL PROPERTIES	ENVIRONMENTAL DATA
Boiling point: 357°C Melting point: -39°C Relative density (water = 1): 13.5 Solubility in water: none Vapour pressure, Pa at 20°C: 0.26 Relative vapour density (air = 1): 6.93 Relative density of the vapour/air-mixture at 20°C (air = 1): 1.009	The substance is very toxic to aquatic organisms. In the food chain important to humans, bioaccumulation takes place, specifically in fish. 
NOTES	
Depending on the degree of exposure, periodic medical examination is indicated. No odour warning if toxic concentrations are present. Do NOT take working clothes home.	
IPCS International Programme on Chemical Safety	
ICSC: 0056	Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission © IPCS 2004

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

- **Product name:** **CREOSOTE**
- **Application of the substance / the preparation** Pharmaceutical intermediate
- **Manufacturer/Supplier:**
Perstorp Specialty Chemicals AB
SE-284 80 Perstorp, Sweden
Tel. +46 435 38000
Fax +46 435 38100
www.perstorp.com
- **Further information obtainable from:** EHS-department Perstorp Speciality Chemicals AB
- **Information in case of emergency:** (Int.) +46 8 337043 (Emergency Response Center, Sweden)

MSDS Sheet For:

MA-162

Supplied By:



2 Composition/information on ingredients

- **Chemical characterization**

- **Chemical components:**

CAS: 8021-39-4	Creosote, wood	 T, N; R 24/25-34-50	>95.0%
EINECS: 232-419-1			

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:**



T Toxic

N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**

R 24/25 Toxic in contact with skin and if swallowed.

R 34 Causes burns.

R 50 Very toxic to aquatic organisms.

4 First-aid measures

- **General information:** Remove any clothing soiled by the product.
- **After inhalation:** Take affected persons into fresh air and keep quiet.
- **After skin contact:** Wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Rinse out mouth and then drink plenty of water or milk.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

(Contd. on page 2)

Product name: CREOSOTE

(Contd. of page 1)

Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/personal protection

- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

- **Material of gloves:** Chloroprene rubber, CR
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
PVC gloves
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· General Information

Form:	Viscous liquid
Colour:	Light yellow
Odour:	Characteristic

· Change in condition

Melting point/Melting range:	<-20°C
Boiling point/Boiling range:	200-240°C

· **Flash point:** 91°C

· **Vapour pressure at 20°C:** <0.7 hPa

· **Density at 20°C:** 1.08-1.09 g/cm³

· **Solubility in / Miscibility with water:**

Slightly soluble.
Not miscible or difficult to mix.

(Contd. on page 3)

03.12.2003

Reviewed on 03.12.2003

Product name: CREOSOTE

(Contd. of page 2)

- pH-value at 20°C: 7-8
- Partition coefficient (n-octanol/water): non established log POW

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions** Reacts with strong acids and oxidizing agents.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**
Oral LD50 300 mg/kg (rat)
- **Primary irritant effect:**
 - **on the skin:** Corrosive effect on skin and mucous membranes.
 - **on the eye:** Strong corrosive effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:**
8021-39-4 Creosote, wood
LC50 0.13 mg/l (f)
- **Remark:** Very toxic for fish

13 Disposal considerations

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 6
- **Danger code (Kemler):** 68
- **UN-Number:** 2927
- **Packaging group:** II
- **Hazard label:** 6.1+8
- **Description of goods:** 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

(Contd. on page 4)

03.12.2003

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Product name: CREOSOTE

(Contd. of page 3)

Maritime transport IMDG:


- **IMDG Class:** 6
- **UN Number:** 2927
- **Label** 6.1+8
- **Packaging group:** II
- **EMS Number:** F-A,S-B
- **Proper shipping name:** TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

Air transport ICAO-TI and IATA-DGR:


- **ICAO/IATA Class:** 6
- **UN/ID Number:** 2927
- **Label** 6.1+8
- **Packaging group:** II
- **Proper shipping name:** TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

15 Regulatory information
Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Symbol and hazard designation of product:


T Toxic
N Dangerous for the environment

Hazard-determining components of labelling:

Creosote, wood

Risk phrases:

24/25 Toxic in contact with skin and if swallowed.

34 Causes burns.

50 Very toxic to aquatic organisms.

Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer).

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16 Other information

This Safety Data Sheet is not a Product Specification. It is based on our present knowledge and experience and it is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.

Explanation R-phrases

24/25 Toxic in contact with skin and if swallowed.

34 Causes burns.

50 Very toxic to aquatic organisms.

· **Department issuing SDS:** EHS-department, Perstorp Speciality Chemicals AB.