

MERCURIC OXIDE**0981**

March 2001

CAS No: 21908-53-2
 RTECS No: OW8750000
 UN No: 1641
 EC No: 080-002-00-6

Mercury (II) oxide
 HgO
 Molecular mass: 216.6

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Not combustible but enhances combustion of other substances. Gives off irritating or toxic fumes (or gases) in a fire.	NO contact with reducing agents.	In case of fire in the surroundings: all extinguishing agents allowed.
EXPLOSION			

EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Cough.	Avoid inhalation of fine dust and mist. Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Eyes	Redness.	Safety goggles, 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	Abdominal pain. Diarrhoea. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give plenty of water to drink. Rest. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: P3 filter respirator for toxic particles.)	<p>T+ Symbol N Symbol R: 26/27/28-33-50/53 S: (1/2-)13-28-45-60-61 Note: A UN Hazard Class: 6.1 UN Pack Group: II</p> <p>Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Severe marine pollutant.</p>

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-61G64b	Separated from food and feedstuffs, reducing agents, chlorine and other reactive substances. See Chemical Dangers. Keep in the dark.

IMPORTANT DATA

Physical State; Appearance

YELLOW OR ORANGE-YELLOW OR RED HEAVY CRYSTALLINE POWDER.

Chemical dangers

The substance decomposes on exposure to light, on heating above 500°C producing highly toxic fumes including mercury and oxygen, which increases fire hazard. Reacts violently with reducing agents, chlorine, hydrogen peroxide, magnesium (when heated), disulfur dichloride and hydrogen trisulfide. Shock-sensitive compounds are formed with metals and elements such as sulfur and phosphorus.

Occupational exposure limits

TLV (as Hg): 0.025 mg/m³ A4 (skin) (ACGIH 2000).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

Inhalation risk

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract.

Effects of long-term or repeated exposure

The substance may have effects on the kidneys, resulting in kidney impairment.

PHYSICAL PROPERTIES

Melting point (decomposes): 500°C
Density: 11.1 g/cm³

Solubility in water: none

ENVIRONMENTAL DATA

In the food chain important to humans, bioaccumulation takes place, specifically in aquatic organisms. It is strongly advised not to let the chemical enter into the environment.

NOTES

Depending on the degree of exposure, periodic medical examination is indicated. Do NOT take working clothes home. Red and Yellow mercuric oxide are common names.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information