



## Material Safety Data Sheet According to 91/155 EEC

Printing date 25.10.2005

Reviewed on 25.10.2005

### \* 1 Identification of substance:

- **Product details:** Reagent for water analysis
- **Product name:** Chlorine HR
- **Catalog number:** 00513009, 501210, 501211, (4)513001, 513003(0)
- **Supplier:**  
Tintometer GmbH  
Schleefstraße 8a-12  
D - 44287 Dortmund  
Made in Germany
- **Informing department:** Department Laboratory
- **Emergency information:**  
Poison Center Berlin, Germany  
phone: +49(0)30 19240

phone: +49(0)231 94510-0

### 2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Designation:**  
7681-11-0 potassium iodide
- **Identification number(s):**
- **EINECS Number:** 231-659-4

### \* 3 Hazards identification

- **Hazard designation:** void
- **Information pertaining to particular dangers for man and environment** void

### \* 4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Instantly rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing**  
Drink copious amounts of water, induce vomiting.  
In case of persistent symptoms consult doctor.
- **The following symptoms may occur:**  
After swallowing of large amounts:  
sickness  
vomiting  
Danger of system failure.  
drop in blood pressure

### 5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

(Contd. on page 2)

# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 25.10.2005

Reviewed on 25.10.2005

---

**Product name: Chlorine HR**

---

(Contd. of page 1)

- **Special hazards caused by the material, its products of combustion or resulting gases:**  
Formation of toxic gases is possible during heating or in case of fire.  
iodine compounds  
dipotassium oxide
  - **Protective equipment:**  
Wear self-contained breathing apparatus.  
Wear full protective suit.
  - **Additional information**  
Collect contaminated fire fighting water separately. It must not enter drains.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
- 

### 6 Accidental release measures

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Use breathing protection against the effects of fumes/dust/aerosol.
  - **Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.
  - **Measures for cleaning/collecting:**  
Collect mechanically.  
Ensure adequate ventilation.  
Dispose of contaminated material as waste according to item 13.
  - **Additional information:** No dangerous materials are released.
- 

### \* 7 Handling and storage

- **Handling**
  - **Information for safe handling:** No special measures required.
  - **Information about protection against explosions and fires:** The product is not flammable
  - **Storage**
  - **Requirements to be met by storerooms and containers:** Store in cool location.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**  
Store under dry conditions.  
Protect from heat and direct sunlight.  
Protect from humidity and keep away from water.  
Protect from the effects of light.
  - **Storage class** Not required.
- 

### \* 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
  - **Components with limit values that require monitoring at the workplace:** Not required.
  - **Additional information:** The lists that were valid during the compilation were used as basis.
  - **Personal protective equipment**
  - **General protective and hygienic measures**  
Wash hands during breaks and at the end of the work.  
Do not eat, drink or smoke while working.
  - **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
  - **Recommended filter device for short term use:** Filter P2
  - **Protection of hands:** Preventive skin protection by use of skin-protecting agents is recommended.
  - **Material of gloves**  
nitrile  
Recommended thickness of the material:  $\geq 0.11$  mm
- 

(Contd. on page 3)

# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 25.10.2005

Reviewed on 25.10.2005

**Product name: Chlorine HR**

(Contd. of page 2)

**· Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Value for the permeation: Level  $\geq 6$  (480 min)

**· Eye protection:** Safety glasses

**· Body protection:** Protective work clothing.

### 9 Physical and chemical properties:

· <b>Form:</b>	Tablets
· <b>Colour:</b>	White
· <b>Odour:</b>	Odourless
· <b>Melting point/Melting range:</b>	686°C
· <b>Boiling point/Boiling range:</b>	1330°C
· <b>Flash point:</b>	Not applicable
· <b>Inflammability (solid, gaseous)</b>	Product is not inflammable.
· <b>Danger of explosion:</b>	Product is not explosive.
· <b>Density at 20°C</b>	3.13 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with Water at 20°C:</b>	1430 g/l
· <b>pH-value (19.6 g/l) at 20°C:</b>	6.1
· <b>Organic solvents:</b>	0.0 %
· <b>Solids content:</b>	100.0 %

### 10 Stability and reactivity

**· Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.

**· Materials to be avoided:**

alkali metals

ammonia

halogen compounds

oxidizing agents

**· Dangerous products of decomposition:** see chapter 5

### \* 11 Toxicological information

**· Acute toxicity:** Quantitative data on the toxicity of the preparation are not available.

**· LD/LC50 values that are relevant for classification:**
**7681-11-0 potassium iodide**

Oral	LD50	2779 mg/kg (rat)
------	------	------------------

**· Primary irritant effect:**
**· on the skin:** No irritant effect.

**· on the eye:** Irritant effect.

**· Sensitization:** Sensitizing effect by skin contact is possible by prolonged exposure.

**· Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The material is not subject to classification according to EC lists in the last version.

(Contd. on page 4)

# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 25.10.2005

Reviewed on 25.10.2005

---

**Product name: Chlorine HR**


---

(Contd. of page 3)

The usual precautionary measures should be adhered to general rules for handling chemicals.

---

### \* 12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:** Methods for the determination of biodegradability are not applicable to inorganic substances.
- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:** Does not accumulate in organisms
- **Ecotoxic effects:**

· <b>Aquatic toxicity:</b>
----------------------------

<b>7681-11-0 potassium iodide</b>
-----------------------------------

Daphnia EC50	2.7 mg/l/24h (Daphnia magna)
--------------	------------------------------

- **Remark:**
- **Protozoa:** CAS-No. 7681-11-0: E. sulcatum toxic > 40 mg/l
- **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

---

### \* 13 Disposal considerations

- **Product:**
- **Recommendation**  
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· <b>European waste catalogue</b>
-----------------------------------

16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
----------	----------------------------------------------------------------------------------

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

---

### 14 Transport information

- |                                                |
|------------------------------------------------|
| · <b>Land transport ADR/RID (cross-border)</b> |
| · <b>ADR/RID-GGVS/E Class:</b> -               |

- |                                   |
|-----------------------------------|
| · <b>Maritime transport IMDG:</b> |
| · <b>IMDG Class:</b> -            |
| · <b>Marine pollutant:</b> No     |

- |                                              |
|----------------------------------------------|
| · <b>Air transport ICAO-TI and IATA-DGR:</b> |
| · <b>ICAO/IATA Class:</b> -                  |

- **Transport/Additional information:** Not dangerous according to the above specifications.

---

### \* 15 Regulatory information

- **Designation according to EC guidelines:**  
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

— GB —  
(Contd. on page 5)

# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 25.10.2005

Reviewed on 25.10.2005

---

**Product name: Chlorine HR**

---

(Contd. of page 4)

### 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** Technical Department
- **\* Data compared to the previous version altered.**

---

GB

---