Printing date 26.08.2008 Revision: 26.08.2008

#### 1 Identification of substance:

· Product details:

· Trade name: OTTO Anti- Mildew Spray

· Application of the substance / the preparation Biocide

· Manufacturer/Supplier:

Hermann Otto GmbH Krankenhausstraße 14 D-83413 Fridolfing Tel.: 0049/(0)8684/908-0 Fax.: 0049/(0)8684/908-539

· Further information obtainable from:

Tel.: 0049- (0)8684- 908- 641 ( -460 ) E-Mail: alois.parzinger@otto-chemie.de

· Information in case of emergency: Tel.: 0049- (0)89- 192 40 (emergency telephone no.)

#### 2 Hazards identification

· Hazard description: not applicable

Information concerning to particular hazards to man and environment

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 31 Contact with acids liberates toxic gas.

· Classification system

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- · Chemical characterization
- · Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components:

CAS: 7681-52-9 sodium hypochlorite, solution

< 2.5%

EINECS: 231-668-3 C, N; R 31-34-50

CAS: 643-20-5 nichtionogene Tenside

< 0.1%

· Additional information For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

· General information

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· After skin contact

Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

· After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing Drink plenty of water and provide fresh air. Call for a doctor immediately.

## 5 Fire fighting measures

· Suitable extinguishing agents

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents Water with full jet.

(Contd. on page 2)

Printing date 26.08.2008 Revision: 26.08.2008

(Contd. of page 1)

- Special hazards caused by the substance, its products of combustion or resulting gases: Formation of toxic gases is possible during heating or in case of fire.
- · Protective equipment:

Mount respiratory protective device.

Do not inhale explosion gases or combustion gases.

#### 6 Accidental release measures

- · Person-related safety precautions: Ensure adequate ventilation
- Measures for environmental protection: Dilute with plenty of water.
- · Measures for cleaning/collecting: Dispose contaminated material as waste according to item 13.
- · Additional information: See Section 8 for information on personal protection equipment.

## 7 Handling and storage

- · Handling
- · Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

see item 8: Personal protective equipment

- · Storage
- · Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
- Information about storage in one common storage facility:

Do not store together with acids.

Store away from foodstuffs.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Store under lock and key and out of the reach of children.

## 8 Exposure controls and personal protection gear

- · Additional information about design of technical facilities: No further data; see item 7.
- · 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.

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not necessary if room is well-ventilated.
- · Protection of hands: Protective gloves.
- · Material of gloves Rubber gloves
- · Penetration time of glove material

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

- · Eye protection: Tightly sealed goggles.
- · Body protection: Protective work clothing.

#### 9 Physical and chemical properties:

· General Information

Form: Fluid Colour: Yellowish

(Contd. on page 3)

Printing date 26.08.2008 Revision: 26.08.2008

(Contd. of page 2)

Odour: Characteristic

· Change in condition

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

Flash point: Not applicable

· **Self-igniting:** Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

Density at 20℃: 1.05 g/cm³

· Solubility in / Miscibility with

Water: Fully miscible

· **pH-value at 20℃**: 11

## 10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications. Avoid strong heating.

- · Dangerous reactions Reacts with acids releasing chlorine
- · Dangerous decomposition products: see item 5.3

### 11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritating effects to skin and mucous membranes possible
- · on the eye: Irritating effect possible
- · Additional toxicological information:

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

#### 12 Ecological information:

· General notes:

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

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

### 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.

- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

GB

Printing date 26.08.2008 Revision: 26.08.2008

(Contd. of page 3)

## 14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class:
- · Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -
- · Transport/Additional information: Not dangerous according to the above specifications.

## 15 Regulations

#### · Labelling according to EU guidelines:

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

#### · Risk phrases:

31 Contact with acids liberates toxic gas.

#### · Safety phrases:

- 2 Keep out of the reach of children.
- 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 water.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.
- · National regulations
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

## 16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Relevant R-phrases
- 31 Contact with acids liberates toxic gas.
- 34 Causes burns.
- 50 Very toxic to aquatic organisms.
- · Department issuing MSDS: Tel.: 0049- (0)8684- 908- 641
- · Contact: Tel.: 0049- (0)8684- 908- 641 ( -460 )
- · \* Data compared to the previous version altered.

GB