



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/09/2011

Reviewed on 08/09/2011

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

- **Product identifier**
- **Trade name:** **TM DESANA IC**
- **Application of the substance / the preparation** Cleaning material/ Detergent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Thonhauser GmbH
Salitergasse 26
A-2380 Perchtoldsdorf
- **Information department:**
Abteilung Produktsicherheit:
Tel.: +43 (1) 869 41 82
Fax: +43 (1) 865 40 109
E-Mail-Adresse: QA@thonhauser.net
- **Emergency telephone number:** Poison Control Center: +43 (01) 406 43 43

2 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 1310-58-3 Reg.nr.: 01-2119487136-33	potassium hydroxide H314; H302	10-25%
CAS: 7681-52-9 Reg.nr.: 01-2119488157-34-0033	sodium hypochlorite, solution H314; H400	2.5-10%

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

3 Hazards identification

- **Classification of the substance or mixture**
H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Corrosive
Causes severe burns.
Dangerous for the environment
Very toxic to aquatic organisms.
Contact with acids liberates toxic gas.
- **Information concerning particular hazards for human 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.
- **Classification system:**
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

(Contd. on page 2)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/09/2011

Reviewed on 08/09/2011

Trade name: **TM DESANA IC**

(Contd. of page 1)

- **Code letter and hazard designation of product:**



C Corrosive
N Dangerous for the environment

- **Hazard-determining components of labelling:**

potassium hydroxide
sodium hypochlorite, solution

- **Risk phrases:**

Contact with acids liberates toxic gas.
Causes severe burns.
Very toxic to aquatic organisms.

- **Safety phrases:**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately.
This material and its container must be disposed of as hazardous waste.

- **Classification system**

- **NFPA ratings (scale 0-4)**

Health = 2
Fire = 0
Reactivity = 1

4 First aid measures

- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation**
Take affected persons into fresh air and keep quiet.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment.
- **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.
Drink copious amounts of water and provide fresh air. Immediately call a doctor.

5 Firefighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:**
Mount respiratory protective device.
Wear fully protective suit.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
Mount respiratory protective device.

(Contd. on page 3)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/09/2011

Reviewed on 08/09/2011

Trade name: **TM DESANA IC**

(Contd. of page 2)

- **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Provide alkali-resistant floor.
Provide ventilation for receptacles.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**
Store receptacle in a well ventilated area.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/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:**

1310-58-3 potassium hydroxide (10-25%)

REL	C2 mg/m ³
TLV	Short-term value: C 2 mg/m ³

7681-52-9 sodium hypochlorite, solution (2.5-10%)

WEEL	Short-term value: 2 mg/m ³
------	---------------------------------------

- **Additional information:** The lists that were valid during the creation were used as basis.
- **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.
- **Breathing equipment:**
Use suitable respiratory protective device only when aerosol or mist is formed.
Filter P2.
Filter P3.
- **Protection of hands:**
Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
Nitrile rubber, NBR
PVC gloves

(Contd. on page 4)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/09/2011

Reviewed on 08/09/2011

Trade name: **TM DESANA IC**

(Contd. of page 3)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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**

- **Appearance:**

Form:	Fluid
Color:	Violet
Odor:	Chlorine-like

- **pH-value:** ca. 12

- **Change in condition**

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	100 °C (212 °F)

- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Density at 20 °C (68 °F):** 1.268 g/cm³ (10.581 lbs/gal)

- **Solubility in / Miscibility with**

Water:	Fully miscible
--------	----------------

- **Other information** No further relevant information available.

10 Stability and reactivity

- **Possibility of hazardous reactions**

Reacts with acids releasing chlorine
 Reacts with strong acids and oxidizing agents
 Reacts with base metals forming hydrogen
 Corrosive action on metals

- **Incompatible materials:**

Acids
 Aluminium

- **Hazardous decomposition products:** Poisonous gases/vapors

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

1310-58-3 potassium hydroxide

Oral	LD50	273 mg/kg (rat)
------	------	-----------------

7681-52-9 sodium hypochlorite, solution

Oral	LD50	1100 mg/kg (rat)
------	------	------------------

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/09/2011

Reviewed on 08/09/2011

Trade name: **TM DESANA IC**

(Contd. of page 4)

Dermal	LD50	20000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 10.5 mg/l (rat)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **Acquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Very toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

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

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**

- **DOT, ADR, IMDG, IATA**

UN1719

- **UN proper shipping name**

- **ADR**

1719 CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE)

- **IMDG, IATA**

CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE, HYPOCHLORITE SOLUTION)

- **Transport hazard class(es)**

- **DOT, IMDG, IATA**



- **Class**

8 Corrosive substances.

(Contd. on page 6)

USA

Material Safety Data Sheet


acc. to ISO/DIS 11014

Printing date 08/09/2011

Reviewed on 08/09/2011

Trade name: **TM DESANA IC**

(Contd. of page 5)

· Label	8
· ADR	
	
· Class	8 Corrosive substances
· Label	8
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Corrosive substances
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Segregation groups	Alkalis
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN1719, CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE), 8, II

15 Regulatory information

· SARA Section 355 (extremely hazardous substances)
None of the ingredients is listed.
· SARA Section 313 (specific toxic chemical listings)
None of the ingredients is listed.
· TSCA (Toxic Substances Control Act)
All ingredients are listed.
· Prop 65 - Chemicals known to cause cancer
None of the ingredients is listed.
· Carcinogenicity categories
· EPA (Environmental Protection Agency)
None of the ingredients is listed.
· IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
· NTP (National Toxicology Program)
None of the ingredients is listed.
· TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.
· MAK (German Maximum Workplace Concentration)
None of the ingredients is listed.
· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.
· OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.
· Markings according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

(Contd. on page 7)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/09/2011

Reviewed on 08/09/2011

Trade name: **TM DESANA IC**

(Contd. of page 6)

- **Code letter and hazard designation of product:**



C Corrosive
N Dangerous for the environment

- **Hazard-determining components of labelling:**

potassium hydroxide
sodium hypochlorite, solution

- **Risk phrases:**

Contact with acids liberates toxic gas.
Causes severe burns.
Very toxic to aquatic organisms.

- **Safety phrases:**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately.
This material and its container must be disposed of as hazardous waste.

- **National regulations**

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information

Liability about information is not warranted although information is given to our best knowledge.

- **Department issuing MSDS:**

DONAUCHEM GmbH
Department DCH Technik

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

USA