





1 Identification of substance

- **Product details**
- **Trade name:** *TM Desana MAX ic indicator & cleaner*
- **Application of the substance / the preparation** *Cleaning agent*
- **Manufacturer/Supplier:**
THONHAUSER USA INC Tel.: 1-877-DESANA-1
1329 E Kemper Rd Tel.: +1 513 771 6263
Cincinnati, OH 45246
- **Information department: department for product safety:** *info@desana-usa.com*
- **Emergency information:** +1 866 706 3262

2 Composition/Data on components

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

· **Dangerous components:**

1310-73-2	sodium hydroxide	Danger:  3.2/1A	50-100%
7722-64-7	potassium permanganate	Danger:  2.14/2 Warning:  4.1.C/1;  3.1.O/4	<1%

3 Hazards identification

· **Hazard description:**



Corrosive

- **Information pertaining to particular dangers for man and environment:**
*The product has to be labelled due to the calculation procedure of international guidelines.
Causes severe burns.*
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	3	Health = 3
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

· **GHS label elements**



3.2/1A - Causes severe skin burns and eye damage.

- **Prevention:**
*Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.*

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Wear protective gloves/protective clothing/eye protection/face protection.

· **Response:**

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

· **Storage:**

Store locked up.

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:** *Product was tested non-oxidizing according to EU-Regulations.*

4 First aid measures

· **General information:** *Immediately remove any clothing soiled by the product.*

· **After inhalation:** *In case of unconsciousness place patient stably in side position for transportation.*

· **After skin contact:** *Immediately 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:** *Drink copious amounts of water and provide fresh air. Immediately call a doctor.*

5 Fire fighting measures

· **Suitable extinguishing agents:**

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

· **Special hazards caused by the material, its products of combustion or resulting gases:**

During heating or in case of fire poisonous gases are produced.

· **Protective equipment:** *Mouth respiratory protective device.*

6 Accidental release measures

· **Person-related safety precautions:**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

· **Measures for environmental protection:** *Do not allow to enter sewers/ surface or ground water.*

· **Measures for cleaning/collecting:**

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

· **Handling:**

· **Information for safe handling:**

Thorough dedusting.

Prevent formation of dust.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

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Keep respiratory protective device available.

- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

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:**

1310-73-2 sodium hydroxide

PEL	2 mg/m ³
REL	Short-term value: C 2 mg/m ³
TLV	Short-term value: C 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:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetrati on times, rates of diffusion and the degradation

- **Material of gloves**
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

USA

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9 Physical and chemical properties

· General Information

Form:	Solid
Color:	According to product specification
Odor:	Characteristic

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

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

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

· **Density:** Not determined.

· Solubility in / Miscibility with

Water: Soluble.

· Solvent content:

Organic solvents: 0.0 %

· **Solids content:** 100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

1310-73-2 sodium hydroxide

Oral	LD50	2000 mg/kg (rat)
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7722-64-7 potassium permanganate

Oral	LD50	1090 mg/kg (rat)
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· 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 internally approved calculation methods for preparations:

Corrosive

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

USA

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12 Ecological information

· **General notes:**

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

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

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

13 Disposal considerations

· **Product:**

· **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

· **DOT regulations:**



· **Hazard class:**

8

· **Identification number:**

UN3262

· **Packing group:**

II

· **Proper shipping name (technical name):** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM PERMANGANATE)

· **Label**

8

· **Remarks:**

Special marking with the symbol (fish and tree).

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



· **ADR/RID class:**

8 Corrosive substances

· **UN-Number:**

3262

· **Packaging group:**

II

· **Label:**

8

· **Description of goods:**

3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM PERMANGANATE)

· **Remarks:**

Product was tested no n-oxidizing according to paragraph 2.2.51.1.6 ADR 2009!

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· Maritime transport IMDG:



· **IMDG Class:** 8
 · **UN Number:** 3262
 · **Label** 8
 · **Packaging group:** II
 · **EMS Number:** F-A,S-B
 · **Marine pollutant:** No
 · **Propper shipping name:** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM PERMANGANATE)
 · **Remarks:** Product was tested non-oxidizing according to paragraph 2.5.2.2.1 "Classification of solid substances of class 5.1" International Maritime Dangerous Goods Code including Amendment 34-08; IMDG Code 2008 Edition

· Air transport ICAO-TI and IATA-DGR:



· **ICAO/IATA Class:** 8
 · **UN/ID Number:** 3262
 · **Label** 8
 · **Packaging group:** II
 · **Propper shipping name:** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM PERMANGANATE)
 · **Remarks:** Product was tested non-oxidizing according to paragraph 3.5.1.3.1 "Solid Oxidizers - Classification Criteria" IATA - Dangerous Goods Regulations 50th Edition, 2009

· **UN "Model Regulation":** UN3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S., 8, II

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

7722-64-7 | potassium permanganate

· **TSCA (Toxic Substances Control Act):**

1310-73-2 | sodium hydroxide

7722-64-7 | potassium permanganate

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

7722-64-7 potassium permanganate

D

· 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.

· 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.

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:

Corrosive

· Hazard-determining components of labelling:

sodium hydroxide

· Risk phrases:

Causes severe burns.

· Safety phrases:

Keep locked up and out of the reach of children.

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 (show the label where possible).

Dispose of this material and its container to hazardous or special waste collection point.

· National regulations:

Class	Share in %
III	<1

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.

· Department issuing MSDS: Product Safety, Email: info@desana-usa.com

· 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)

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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

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

USA