

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
TM DESANA VERIFY

Version number: GHS 1.1

Date of compilation: 2015-06-17

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

1.1 Product identifier

Trade name **TM DESANA VERIFY**
Registration number (REACH) not relevant (mixture)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses cleaning agent
Uses advised against do not use for squirting or spraying
do not use for products which come into direct contact with the skin

1.3 Details of the supplier of the safety data sheet

Thonhauser GmbH
Perlhofgasse 2/1
2372 Giesshübl/Wien
Austria

Telephone: +43 (0)2236 320 272
Telefax: +43 (0)2236 320 273
e-mail: QA@thonhauser.net
Website: www.thonhauser.net

Competent person Herr Dr. Daniel Herzog
e-mail (competent person) QA@thonhauser.net

1.4 Emergency telephone number

Emergency information service **+43 (0)1 406 43 43 24h**

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

GHS chapter	Hazard class and category		Hazard statement code(s)
2.16	corrosive to metals	Cat. 1	(Met. Corr. 1) H290
3.2	skin corrosion/irritation	Cat. 1A	(Skin Corr. 1A) H314
3.3	serious eye damage/eye irritation	Cat. 1	(Eye Dam. 1) H318
4.1A	hazardous to the aquatic environment - acute hazard	Cat. 1	(Aquatic Acute 1) H400
4.1C	hazardous to the aquatic environment - chronic hazard	Cat. 3	(Aquatic Chronic 3) H412

Remarks

For full text of H-phrases: see SECTION 16.

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Supplemental hazard information

Code	Supplemental hazard information
EUH031	contact with acids liberates toxic gas

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word **Danger**

Pictograms

GHS05, GHS09



Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Precautionary statements - prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

P303+P361+P353 IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P390 Absorb spillage to prevent material damage.
P391 Collect spillage.

Precautionary statements - disposal

P501 Dispose of contents/container to industrial combustion plant.

Additional labelling requirements

EUH031 Contact with acids liberates toxic gas.

Hazardous ingredients for labelling: sodium hydroxide, potassium hydroxide, tripotassium orthophosphate

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2.3 Other hazards

There is no additional information.




SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
sodium hypochlorite, solution 15% Cl active	CAS No 7681-52-9 EC No 231-668-3	10 - < 25	Met. Corr. 1 / H290 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	
sodium hydroxide	CAS No 1310-73-2 EC No 215-185-5	5 - < 10	Met. Corr. 1 / H290 Skin Corr. 1A / H314 Eye Dam. 1 / H318	
potassium hydroxide	CAS No 1310-58-3 EC No 215-181-3	5 - < 10	Met. Corr. 1 / H290 Acute Tox. 4 / H302 Skin Corr. 1A / H314	

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

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Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Corrosive to metals.

Hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

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Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust. , kieselgur (diatomite), sand, universal binder). Absorbents and binders, neutralising agents.

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

Reference to other sections

Hazardous combustion products: see section 5. Incompatible substances or mixtures: see section 7. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- **Measures to prevent fire as well as aerosol and dust generation**

Use local and general ventilation. Use only in well-ventilated areas.

- **Handling of incompatible substances or mixtures**

Do not mix with acids.

- **Keep away from**

acids - (alkalis)

Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- **Corrosive conditions**

Store in corrosive resistant container with a resistant inner liner.

Incompatible substances or mixtures

Prohibition of joint storage (with): Acids

Floors

The materials shall display sufficient resistance to the prevalent chemical conditions (Caustic solutions)

- **Protect against external exposure, such as**

frost

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Consideration of other advice

Observe technical data sheet

Lagerklasse (storage class according to TRGS 510, Germany): 8 A (combustible corrosive materials)

- **Specific designs for storage rooms or vessels**

Floors: The materials shall display sufficient resistance to the prevalent chemical conditions (Caustic solutions).

- **Packaging compatibilities (Receptacles / Material)**

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

These information are not available.

7.4 Other information

Recommended storage temperature: 15-25 °C.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Relevant DNELs/DMELs/PNECs and other threshold levels

- **relevant DNELs of components of the mixture**

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
sodium hypochlorite, solution 15% Cl active	7681-52-9	DNEL	1.55 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
sodium hypochlorite, solution 15% Cl active	7681-52-9	DNEL	1.55 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
sodium hydroxide	1310-73-2	DNEL	1 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
potassium hydroxide	1310-58-3	DNEL	1 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects

- **relevant PNECs of components of the mixture**

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
sodium hypochlorite, solution 15% Cl active	7681-52-9	PNEC	0.21 µg/l	aquatic organisms	freshwater	short-term (single instance)
sodium hypochlorite, solution 15% Cl active	7681-52-9	PNEC	0.042 µg/l	aquatic organisms	marine water	short-term (single instance)

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Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
sodium hypochlorite, solution 15% Cl active	7681-52-9	PNEC	4.69 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
sodium hypochlorite, solution 15% Cl active	7681-52-9	PNEC	11.1 mg/kg	(top) predators	water	short-term (single instance)
sodium hypochlorite, solution 15% Cl active	7681-52-9	PNEC	0.26 µg/l	aquatic organisms	water	continuous

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	violet
Odour	characteristic

Other physical and chemical parameters

pH (value)	12.3 in 10 ^{g/l} water at 20 °C (base)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	not determined
Vapour pressure	32 hPa at 25 °C
Density	1.15 ^{g/cm³} at 20 °C
Solubility(ies)	
Water solubility	miscible in any proportion
Partition coefficient	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidising properties	none

9.2 Other information

Solvent content	83.98 %
Solid content	16.02 %

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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". corrosive to metals

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Exhibits an exothermic reaction (with): Acids Dangerous/dangerous reactions with: base metals (Formation of hydrogen)

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

Release of flammable materials with

light metals (due to the release of hydrogen in an acid/alkaline medium)

Release of toxic materials with
acids

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

• Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
potassium hydroxide	1310-58-3	oral	333

Skin corrosion/irritation

Causes severe skin burns and eye damage.

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Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life. Harmful to aquatic life.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium hypochlorite, solution 15% Cl active	7681-52-9	EC50	141 µg/l	aquatic invertebrates	48 hours
sodium hypochlorite, solution 15% Cl active	7681-52-9	ErC50	0.0365 mg/l	algae	72 hours
sodium hydroxide	1310-73-2	EC50	40.4 mg/l	aquatic invertebrates	48 hours

Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium hypochlorite, solution 15% Cl active	7681-52-9	EC50	563 mg/l	microorganisms	3 h

12.2 Process of degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

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12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

13.2 Relevant provisions relating to waste

List of wastes

Assign arising waste to a waste code according to the national list of waste.

13.3 Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number	3266
14.2	UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
	Hazardous ingredients	Potassium hydroxide, Sodium hypochlorite, solution 15% Cl active
14.3	Transport hazard class(es)	
	Class	8 (corrosive substances)
14.4	Packing group	II (substance presenting medium danger)
14.5	Environmental hazards	hazardous to the aquatic environment (sodium hypochlorite, solution 15% Cl active)
14.6	Special precautions for user	
	Provisions for dangerous goods (ADR) should be complied within the premises.	

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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

UN number	3266
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Class	8
Classification code	C5
Packing group	II
Danger label(s)	8 + "fish and tree"



Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	80

• International Maritime Dangerous Goods Code (IMDG)

UN number	3266
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Class	8
Marine pollutant	yes (hazardous to the aquatic environment)
Packing group	II
Danger label(s)	8 + "fish and tree"



Special provisions (SP)	223, 274
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-A, S-B
Stowage category	B
Segregation group	18 - Alkalis

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• **International Civil Aviation Organization (ICAO-IATA/DGR)**

UN number	3266
Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s.
Class	8
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	II
Danger label(s)	8



Special provisions (SP)	A3, 274
Excepted quantities (EQ)	E2
Limited quantities (LQ)	0.5 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant provisions of the European Union (EU)

• **Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)**

VOC content 0 %

• **Directive on industrial emissions (VOCs, 2010/75/EU)**

VOC content 0 %

National regulations (Austria)

• **Ordinance on combustible liquids (VbF)**

VbF (group and hazard class): not assigned

Flash point higher than 55 °C, water miscible.

National regulations (Switzerland)

Ordinance on the incentive tax on volatile organic compounds (VOCV)

VOC content (object of taxation):

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

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SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	hazardous to the aquatic environment - acute hazard
Aquatic Chronic	hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EmS	Emergency Schedule
Eye Dam.	seriously damaging to the eye
Eye Irrit.	irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
Met. Corr.	corrosive to metals
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	corrosive to skin
Skin Irrit.	irritant to skin
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
VbF	ordinance on combustible liquids (Austria)
VOC	Volatile Organic Compounds

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Abbr.	Descriptions of used abbreviations
vPvB	very Persistent and very Bioaccumulative

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 453/2010/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H290	may be corrosive to metals
H302	harmful if swallowed
H314	causes severe skin burns and eye damage
H318	causes serious eye damage
H400	very toxic to aquatic life
H411	toxic to aquatic life with long lasting effects
H412	harmful to aquatic life with long lasting effects

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.