

**1 Identification of the substance/mixture and of the company/undertaking**· **Product identifier**· **Trade name:** P400 SC· **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.· **Application of the substance / the preparation** Alkaline cleaner/ detergent· **Details of the supplier of the safety data sheet**· **Manufacturer/Supplier:**Stratasys, Inc.  
7665 Commerce Way  
Eden Prairie, MN 55344  
USATel +1 952 937 3000  
Fax +1 952 937 0070

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E-Mail: [info@csb-online.de](mailto:info@csb-online.de)· **Information department:** Sales / Technics· **Emergency telephone number:** see above**2 Hazards identification**· **Classification of the substance or mixture**

GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Corrosive

Causes severe burns.

· **Classification system:**

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.

· **Label elements**· **GHS label elements**

The product is classified and labelled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS05

· **Signal word** Danger· **Hazard-determining components of labelling:**

Sodium hydroxide

Sodiumsilicate, pentahydrate

· **Hazard statements**

H314 Causes severe skin burns and eye damage.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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- P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
- P303+P361+P353 *IF ON SKIN (or hair): Remove/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.*
- P310 *Immediately call a POISON CENTER or doctor/physician.*
- P301+P330+P331 *IF SWALLOWED: rinse mouth. Do NOT induce vomiting.*
- P405 *Store locked up.*

- **Additional information:** Void
- **Classification system**
- **NFPA ratings (scale 0-4)**


 · **HMIS**













HEALTH	3	Health = 3
FIRE	0	Fire = 0
REACTIVITY	1	Reactivity = 1

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

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

 · **Dangerous components:**

497-19-8	Sodium carbonate  Xi R36  Eye Irrit. 2, H319	50-100%
1310-73-2	Sodium hydroxide  C R35  Met. Corr. 1, H290; Skin Corr. 1A, H314	10-25%
151-21-3	sodium dodecyl sulphate  Xn R21/22;  Xi R36/38  Acute Tox. 3, H311;  Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	< 2.5%
10213-79-3	Sodiumsilicate, pentahydrate  C R34;  Xi R37  Met. Corr. 1, H290; Skin Corr. 1B, H314;  STOT SE 3, H335	< 2.5%

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

### 4 First aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing contaminated by the product.
- **After inhalation**  
 Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor.  
 In case of unconsciousness place patient stably in side position for transportation.

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- **After skin contact**  
Immediately rinse with water.  
Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.
- **After eye contact**  
Rinse opened eye for several minutes under running water.  
Call a doctor immediately.  
Protect unharmed eye.  
Remove contact lenses, if present and easy to do.
- **After swallowing**  
Drink copious amounts of water and provide fresh air. Immediately call a doctor.  
Do not induce vomiting - danger of perforation!
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Firefighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** None
- **Special hazards arising from the substance or mixture**  
Sulphur oxides (SO<sub>x</sub>)  
Sodium oxide (Na<sub>2</sub>O)  
Carbon monoxide and carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Avoid formation of dust.  
Do not breathe dust.  
Avoid contact with skin and eyes.
- **Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Inform respective authorities in case product reaches water or sewage system.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Pick up mechanically.  
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections** See Section 8 for information on personal protection equipment.

**7 Handling and storage**

- **Precautions for safe handling**  
Prevent formation of dust.  
Any deposit of dust which cannot be avoided must be regularly removed.  
Do not breathe dust.  
Avoid skin and eye contact under any circumstances.  
Make sure that all applicable workplace limits are observed.

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- When diluting, always stir the product into standing water, not water to product.*
- **Information about protection against explosions and fires:** *No special measures required.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**  
*Observe all local and national regulations for storage of water polluting products.*
- **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.*  
*Store in cool, dry conditions in well sealed receptacles.*  
*Store under lock and key and out of the reach of children.*
- **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.*
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

#### 1310-73-2 Sodium hydroxide

PEL	2 mg/m <sup>3</sup>
REL	Short-term value: C 2 mg/m <sup>3</sup>
TLV	Short-term value: C 2 mg/m <sup>3</sup>

- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
*Keep away from foodstuffs, beverages and feed.*  
*Immediately remove all soiled and contaminated clothing*  
*Do not breathe dust.*  
*Avoid contact with the eyes and skin.*  
*Wash hands before breaks and at the end of work.*
- **Breathing equipment:**  
*If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.*
- **Protection of hands:**  
*Alkaline resistant gloves*  
*Check the permeability prior to each renewed use of the glove.*  
*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**  
*Natural rubber, NR*  
*PVC gloves*
- **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.*
- **Eye protection:** *Tightly sealed goggles.*
- **Body protection:** *Alkaline resistant protective clothing*

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**9 Physical and chemical properties**
*· Information on basic physical and chemical properties*
*· General Information*
*· Appearance:*

<i>Form:</i>	Granulate Beads
<i>Color:</i>	White
<i>Odor:</i>	odorless
<i>Odor threshold:</i>	no data available

*· pH-value:* ~ 13 (soln.)

*· Change in condition*
*Melting point/Melting range:* undetermined  
*Boiling point/Boiling range:* Not applicable

*· Flash point:* Not applicable

*· Flammability (solid, gaseous)* Not applicable

*· Ignition temperature:* Not applicable

*· Decomposition temperature:* Not determined

*· Auto igniting:* Product is not selfigniting.

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

*· Explosion limits:*
*Lower:* Not applicable  
*Upper:* Not applicable

*· Oxidizing properties* Not applicable

*· Vapor pressure:* Not determined

*· Density:* Not determined

*· Solubility in / Miscibility with*
*Water:* soluble

*· Viscosity:*
*dynamic:* Not applicable  
*kinematic:* Not applicable

*· Other information* No further relevant information available.

**10 Stability and reactivity**
*· Reactivity*
*· Chemical stability*
*· Thermal decomposition / conditions to be avoided:* No decomposition if used according to specifications.

*· Possibility of hazardous reactions*
*Strong exothermic reaction with acids*
*Reacts with metals forming hydrogen*
*· Conditions to avoid* No further relevant information available.

*· Incompatible materials:*
*Strong acids*
*base metals*
*· Hazardous decomposition products:*
*Sulfur oxides (SO<sub>x</sub>)*
*Sodium oxide (Na<sub>2</sub>O)*

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Carbon monoxide and carbon dioxide

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## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

**497-19-8 Sodium carbonate**

Oral	LD50	4090 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/1 h	2.3 mg/l (rat) (LC50/2h)

**1310-73-2 Sodium hydroxide**

Oral	LD50	2000 mg/kg (rat)
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- **Primary irritant effect:**

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

- **on the eye:** Strong corrosive 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.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

**497-19-8 Sodium carbonate**

EC50/48 h	256 mg/l (water flea (daphnia magna))
LC50/96 h	740 mg/l (gambusia affinis)
	300 mg/l (Bluegill sunfish)

**1310-73-2 Sodium hydroxide**

EC50/48 h	> 100 mg/l (water flea (daphnia magna))
LC50/48 h	133 - 189 mg/l (leuciscus idus)
LC50/96 h	99 mg/l (Bluegill sunfish)
	45.4 mg/l (rainbow trout (oncorhynchus mykiss))

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

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

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:** Water hazard class 1 (Self-assessment) (German regulation): slightly hazardous for water.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

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- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Disposal must be made according to local/official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to local/official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· <b>UN-Number</b> · <b>ADR, IMDG, IATA</b>	UN1823
· <b>UN proper shipping name</b> · <b>IMDG, IATA</b> · <b>ADR</b>	SODIUM HYDROXIDE, SOLID, MIXTURE 1823 SODIUM HYDROXIDE, SOLID, MIXTURE
· <b>Transport hazard class(es)</b> · <b>DOT</b>	§ 173.154 Exceptions for Class 8 (corrosive materials). Limited Quantities. (1) For corrosive materials in Packing Group II, inner packagings not over 1.0 L (0.3 gallon) net capacity each for liquids or not over 1.0 kg (2.2 pounds) net capacity each for solids, packed in a strong outer packaging. [§ 173.154(b)(1)]
· <b>ADR</b>	
	
· <b>Class</b> · <b>Label</b>	8 (C6) Corrosive substances 8
· <b>IMDG, IATA</b>	
	
· <b>Class</b> · <b>Label</b>	8 Corrosive substances. 8
· <b>Packing group</b> · <b>DOT, ADR, IMDG, IATA</b>	II
· <b>Special precautions for user</b> · <b>Danger code (Kemler):</b> · <b>EMS Number:</b> · <b>Segregation groups</b>	Warning: Corrosive substances 80 F-A,S-B Alkalis
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable

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· UN "Model Regulation": UN1823, SODIUM HYDROXIDE, SOLID, MIXTURE, 8, II

### 15 Regulatory information

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

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

None of the ingredients is listed.

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

497-19-8	Sodium carbonate
1310-73-2	Sodium hydroxide
7757-82-6	Sodium sulphate
151-21-3	sodium dodecyl sulphate
68439-46-3	Alcohols, C9-11, ethoxylated

· **Carcinogenicity categories**

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **National regulations**

· **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

· **Disturbance regulations:** Directive 96/82/EC does not apply.

· **Water hazard class:**

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

· **Other regulations, limitations and prohibitive regulations**

Observe restrictions on the marketing and use according to Annex XVII of Regulation (EC) No 1907/2006.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.

· **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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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