

Safety Data Sheet

in accordance with 29 CFR 1910 (OSHA HCS)

Printing date 01/27/2017

Rev 9

Reviewed on 01/27/2017

1 Identification

- **Product identifier**
- **Trade name:** Two in One
- **Relevant identified uses of the substance or mixture and uses advised against**
Only for commercial application in combi steamers with WaveClean[®]. Please observe the notes in the operating instructions.
- **Application of the substance / the mixture** Cleaning agent / Cleaner
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Henny Penny Corporation
P.O. Box 60
Eaton, OHIO 45320
Tel.: 1 937 456.8400, Fax: 1 937 456.8434
- **Emergency telephone number:** (001) 352 323 3500

2 Hazard(s) identification

- **Classification of the substance or mixture**

	<i>Met. Corr.1 H290 May be corrosive to metals.</i>
	<i>Skin Corr. 1A H314 Causes severe skin burns and eye damage.</i>
	<i>Eye Dam. 1 H318 Causes serious eye damage.</i>



GHS05 Corrosion

Hazard Classification:

Corrosive to metals - Category 1, Skin Corrosion/Irritation: Category 1A

Serious Eye Dam./Eye Irritation: category 1, Specific Target Organ Toxicity-Single Exposure: Category 3

Acute hazards to the aquatic environment: Category 3

- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
Sodium hydroxide
- **Hazard statements**
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P310 Immediately call a poison center/doctor.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
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.

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



- **HMIS**

HEALTH	4	Health = 4
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **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:**

1310-73-2	Sodium hydroxide	Met. Corr.1, H290; Skin Corr. 1A, H314	25-50%
77-92-9	Citric acid	Eye Irrit. 2A, H319	25-50%
497-19-8	Sodium carbonate	Eye Irrit. 2, H319	2.5-10%
146340-16-1	Fatty alcohol alcoxyolate	Skin Irrit. 2, H 315; Aquatic Acute 1, H 400, Aquatic Chronic 3, H 412	< 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 if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **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. Then consult a doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting - danger of perforation!
Call a doctor immediately.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Danger** Danger of gastric perforation.
- **Indication of any immediate medical attention and special treatment needed** symptomatic treatment

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.

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· Special hazards arising from the substance or mixture*Carbon monoxide and carbon dioxide***· Advice for firefighters****· Protective equipment:** *Wear self-contained respiratory protective device.***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.**Damp down dust with water spray.**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.**Dispose of the collected material according to regulations.***· 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***At room temperature, standing on its lid.**Decant and handle the product in dust-proof units.**Avoid contact with skin and eyes.**Keep receptacles tightly sealed.**Any deposit of dust which cannot be avoided must be regularly removed.**Do not breathe dust.***· Information about protection against explosions and fires: Protect from heat.****· Conditions for safe storage, including any incompatibilities****· Storage****· Requirements to be met by storerooms and receptacles:***Store only in the original receptacle.**Observe all local and national regulations for storage of water polluting products.***· Information about storage in one common storage facility:***Store away from foodstuffs.**Store away from oxidizers.***· 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.**Protect from frost.***· Specific end use(s) No further relevant information available.**

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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

EL	Ceiling limit value: 2 mg/m ³ US. ACGIH Treshold Limit Values (2011)
EV	Ceiling limit value: 2 mg/m ³

- **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

Wash hands before breaks and at the end of work.

Use skin protection cream for skin protection.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working.

Do not breathe dust.

- **Breathing equipment:**

Use breathing protection in case of dust formation.

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

- **Protection of hands:**

Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

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.

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 penetration 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**

Penetration time: ≥ 8 hours

Protective gloves should be replaced at first signs of wear.

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:**

Protective work clothing.

Body protection must be chosen depending on activity and possible exposure.

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9 Physical and chemical properties· **Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:** solid**Color:** White· **Odor:** odorless· **Odor threshold:** Not determined.· **pH-value:** >12 / <2 (2 comp. system)· **Change in condition****Melting point/Melting range:** undetermined**Boiling point/Boiling range:** undetermined· **Flash point:** Not applicable· **Flammability (solid, gaseous)** Not determined.· **Ignition temperature:****Decomposition temperature:** Not determined.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:****Lower:** Not determined.**Upper:** Not determined.· **Oxidizing properties** not classified as oxidising· **Vapor pressure:** Not applicable.· **Density:** Not determined· **Relative density** Not determined.· **Vapour density (AIR = 1)** Not applicable.· **Evaporation rate** Not applicable.· **Solubility in / Miscibility with****Water:** soluble· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:****dynamic:** Not applicable.**kinematic:** Not applicable.· **Other information** No further relevant information available.**10 Stability and reactivity**· **Reactivity** No further relevant information available.· **Chemical stability**· **Thermal decomposition / conditions to be avoided:** Heat· **Possibility of hazardous reactions** No dangerous reactions known· **Conditions to avoid** No further relevant information available.· **Incompatible materials:** Strong oxidizing agents· **Hazardous decomposition products:**

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:**

1310-73-2 Sodium hydroxide

Oral	LD50	2000 mg/kg (rat)
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77-92-9 Citric acid

Oral	LD50	5790 mg/kg (rat) (OECD Guideline 401)
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Dermal	LD50	> 2000 mg/kg (rat) (OECD 402)
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497-19-8 Sodium carbonate

Oral	LD50	4090 mg/kg (rat)
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Dermal	LD50	2000 mg/kg (rabbit)
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Inhalative	LC50/2h	2300 mg/m ³ (rat, male)
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Fatty alcohol alcoxylate

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.

- **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.	3
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- **NTP (U.S. National Toxicology Program)**

None of the ingredients is listed.

- **U.S. OSHA (Occupational Safety & Health Administration) 29 CFR 1910.1001-1050**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

1310-73-2 Sodium hydroxide

LC50/48 h	133 - 189 mg/l (leuciscus idus)
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LC50/96 h	99 mg/l (Bluegill sunfish)
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	45.4 mg/l (rainbow trout (oncorhynchus mykiss))
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77-92-9 Citric acid

EC0	> 10000 mg/l (bacteria)
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EC50/72 h	~120 mg/l (water flea (daphnia magna))
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LC50	440 - 760 mg/l (leuciscus idus)
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497-19-8 Sodium carbonate

EC50/48 h	256 mg/l (water flea (daphnia magna))
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LC50/96 h	740 mg/l (gambusia affinis)
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	300 mg/l (Bluegill sunfish)
Fatty alcohol alcoxylate	
EC50/48 h	0.1 - 1 mg/l (aquatic invertebrates)
LC50/96 h	0.1 - 1 mg/l (leuciscus idus)
NOEC/21 d	0.25 mg/l (aquatic invertebrates)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **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.
- **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:**
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

· UN-Number	
· TDG, IMDG, IATA	UN1823
· UN proper shipping name	
· TDG	UN1823 Sodium hydroxide, solid MIXTURE
· IMDG, IATA	SODIUM HYDROXIDE, SOLID MIXTURE
· Transport hazard class(es)	
· TDG (Transport dangerous goods):	
· Class	8 (C6) Corrosive substances
· IMDG, IATA	
	
· Class	8 Corrosive substances
· Label	8
· Packing group	
· TDG, IMDG, IATA	II
· Special precautions for user	Warning: Corrosive substances
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Segregation groups	Alkalis

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- | | |
|--|---|
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | Transport by post may be prohibited or restricted. |
| · TDG | |
| · Excepted quantities (EQ) | Code: E2
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 500 g |
| · IMDG | |
| · Limited quantities (LQ) | LQ3, 1 kg |
| · Excepted quantities (EQ) | Code: E2
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 500 g |
| · 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.

- **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

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

1310-73-2 Sodium hydroxide

77-92-9 Citric acid

497-19-8 Sodium carbonate

- **US. California Prop 65 - Chemicals known to cause cancer (IARC, US. NTP, US. OSHA)**

None of the ingredients is listed.

- **Carcinogenicity categories**

- **AGW (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 2012/18/EU 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.

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· Relevant phrases

The(se) phrase(s) are those of the ingredient(s) and do not necessarily represent the classification of the preparation.

· Date of preparation / last revision 06/15/2015 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals, Hazard Category 1

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

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