Scroll down for all Safety Data Sheets (SDS) for this product.

Total Enclosures: 3



Safety Data Sheet

Version number: 11.0 2022-06-24 SDS# \$1404

SECTION 1: Identification

1.1 Product identifier

Trade name A-1404, A-6804

Other means of identification Stabilizer Solution for Ammonia & Mono-

chloramine Test Kits

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

Component of water analysis test kits: K-1413, K-1420, K-1420B, K-1420D, K-6802, K-6803

and Accessory Packs A-1410 & A-6802

1.3 Details of the supplier of the safety data sheet

CHEMetrics, Inc. 4295 Catlett Road Midland VA 22728 United States

Telephone: 1-540-788-9026 Telefax: 1-540-788-4856

e-mail: technical@chemetrics.com Website: www.chemetrics.com

1.4 Emergency telephone number

Emergency information service ChemTel Inc.: 1-800-255-3924, +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

| Section | Hazard class | Category | Hazard class and cat- egory | Hazard state- ment |
|---------|-----------------------------------|----------|--------------------------------|-----------------------|
| A.2 | skin corrosion/irritation | | Skin Corr. 1A | H314 |
| A.3 | serious eye damage/eye irritation | 1 | Eye Dam. 1 | H318 |

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS05



- Hazard statements

H314 Causes severe skin burns and eye damage.

- Precautionary statements

P260 Do not breathe dusts or mists.

P280 Wear eye protection/face protection.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

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/doctor.
P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container to industrial combustion plant.

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 GHS | Pictograms |
|-------------------|---------------------|-----|---|------------|
| water | CAS No 7732-18-5 | 82 | | |
| sodium hydroxide | CAS No 1310-73-2 | 18 | Skin Corr. 1A / H314 Eye Dam. 1 / H318 | |

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.

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.

SECTION 5: Fire-fighting 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

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate 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 vapors/dust/aerosols/gases.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. 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

Wear Impact- and splash-resistant eyewear.

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

Use local and general ventilation. Use only in well-ventilated areas. Never add water to this product.

- Handling of incompatible substances or mixtures

Do not mix with acids.

Advice on general occupational hygiene

Wash hands after use. Do not 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

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Other information

For optimum analytical performance, store in the dark and at room temperature.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| Occup | Occupational exposure limit values (Workplace Exposure Limits) | | | | | | | | | |
|--------------|--|-----------|-----------------|--------------|----------------|---------------|-----------------|--|----------------------|-------------------------|
| Coun- try | Name of agent | CAS No | Identi- fier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | | Ceiling-C [mg/m³] | Source |
| US | sodium hydroxide | 1310-73-2 | REL | | | | | | 2 | NIOSH REL |
| US | sodium hydroxide | 1310-73-2 | TLV® | | | | | | 2 | ACGIH® 2021 |
| US | sodium hydroxide | 1310-73-2 | PEL | | 2 | | | | | 29 CFR 1910.100 0 |

Occupational exposure limit values (Workplace Exposure Limits)

| Coun- try | Name of agent | CAS No | Identi- fier | TWA [mg/m³] | | Ceiling-C [mg/m³] | Source |
|--------------|------------------------------------|-----------|-----------------|----------------|--|----------------------|---------------------|
| US | sodium hydroxide (caustic soda) | 1310-73-2 | PEL (CA) | | | 2 | Cal/ OSHA PEL |

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period

(unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-

weighted average (unless otherwise specified

Relevant DNELs of components of the mixture

| Name of substance | CAS No | Endpoint | | Protection goal, route of exposure | Used in | Exposure time |
|-------------------|-----------|----------|---------|---------------------------------------|-------------------|-------------------------|
| sodium hydroxide | 1310-73-2 | DNEL | 1 mg/m³ | human, inhalatory | worker (industry) | chronic - local effects |

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Product description Opaque plastic bottle containing liquid reagent. Each bottle of solution contains approximately 9 mL of liquid reagent. Test kits contain one bottle of solution. A-1410 Accessory Packs contain two (2) bottles of A-1404 solution. A-6802 Accessory Packs contain three (3) bottles of the A-6804 solution.

Appearance

| Physical state | liquid |
|----------------|-----------------------|
| Color | colorless |
| Particle | not relevant (liquid) |
| Odor | odorless |

Other safety parameters

| pH (value) | 14 (base) |
|---|-----------------------------------|
| Melting point/freezing point | 0 °C |
| Initial boiling point and boiling range | 100 °C at 101.3 kPa |
| Flash point | not determined |
| Evaporation rate | Not determined |
| Flammability (solid, gas) | not relevant, (fluid) |
| Vapor pressure | not determined |
| Density | not determined |
| Vapor density | this information is not available |
| Relative density | 1.1 (water = 1) |

Solubility(ies)

| - Water solubility | miscible in any proportion |
|--------------------|----------------------------|
|--------------------|----------------------------|

Partition coefficient

| - n-octanol/water (log KOW) | this information is not available |
|-------------------------------|---------------------------------------|
| - 11-octation/water (log KOW) | tilis illiorination is flot available |

| Auto-ignition temperature | not determined |
|---------------------------|----------------|
| Viscosity | not determined |
| Explosive properties | none |
| Oxidizing properties | none |

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Oxidizers

Release of flammable materials with:

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

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 acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

please consider the relevant national or regional

provisions

SECTION 14: Transport information

14.1 UN number

DOT UN 1824
IMDG-Code UN 1824
ICAO-TI UN 1824

14.2 UN proper shipping name UN1824, Sodium hydroxide solutions, 8, II

DOT Sodium hydroxide solutions

IMDG-Code SODIUM HYDROXIDE SOLUTION

ICAO-TI Sodium hydroxide solution

14.3 Transport hazard class(es)

DOT 8
IMDG-Code 8
ICAO-TI 8

14.4 Packing group

DOT II
IMDG-Code II
ICAO-TI II

14.5 Environmental hazards non-environmentally hazardous acc. to the danger-

ous goods regulations

14.6 Other relevant information

Shipping container markings and labels, received from CHEMetrics, may vary from the above information. Products that are regulated for transport will be packaged by CHEMetrics as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. CHEMetrics may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipment, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Reportable quantity (RQ) 5,556 lbs (2,522 kg) (sodium hydroxide)

Danger label(s) 8



Special provisions (SP) B2, IB2, N34, T7, TP2

ERG No 154

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant -

Danger label(s) 8



Special provisions (SP) -

Excepted quantities (EQ) E2

Limited quantities (LQ) 1 L

EmS F-A, S-B

Segregation group 18 - Alkalis

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s) 8



Special provisions (SP) A3

Excepted quantities (EQ) E2

Limited quantities (LQ) 0,5 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

Specific Toxic Chemical Listings (EPCRA Section 313)
 none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

| Name of substance | CAS No | Remarks | Statutory code | Final RQ pounds (Kg) |
|-------------------|-----------|---------|----------------|----------------------|
| sodium hydroxide | 1310-73-2 | | 1 | 1000 (454) |

Legend

"1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

| Name of substance | CAS No | Remarks | Classifications |
|-------------------|-----------|---------|-----------------|
| sodium hydroxide | 1310-73-2 | | CO R1 |

Legend

CO Corrosive

R1 Reactive - First Degree

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category | Rating | Description |
|---------------------|--------|--|
| Chronic | / | none |
| Health | 3 | major injury likely unless prompt action is taken and medical treatment is given |
| Flammability | 1 | material that must be preheated before ignition can occur |
| Physical hazard | 0 | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | - | |

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category | Degree of hazard | Description |
|----------------|---------------------|--|
| Flammability | 1 | material that must be preheated before ignition can occur |
| Health | 3 | material that, under emergency conditions, can cause serious or permanent injury |
| Instability | 0 | material that is normally stable, even under fire conditions |
| Special hazard | | |

National inventories

| Country | Inventory | Status |
|---------|------------|--------------------------------|
| US | TSCA | all ingredients are listed |
| AU | AIIC | all ingredients are listed |
| CA | DSL | all ingredients are listed |
| CN | IECSC | all ingredients are listed |
| EU | ECSI | all ingredients are listed |
| EU | REACH Reg. | all ingredients are listed |
| JP | CSCL-ENCS | all ingredients are listed |
| KR | KECI | all ingredients are listed |
| MX | INSQ | all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | all ingredients are listed |
| TR | CICR | not all ingredients are listed |
| TW | TCSI | all ingredients are listed |

Legend

AIIC Australian Inventory of Industrial Chemicals
CICR Chemical Inventory and Control Regulation

CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)

DSL Domestic Substances List (DSL)

ECSI EC Substance Inventory (EINECS, ELINCS, NLP)

IECSC Inventory of Existing Chemical Substances Produced or Imported in China

INSQ National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals

PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)

REACH Reg. REACH registered substances

TCSI Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

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

SECTION 16: Other information, including date of preparation or last revision

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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 section 2 and 3)

| Code | Text |
|------|--|
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |

Disclaimer

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



Safety Data Sheet

Version number: 11.0 2022-06-24 SDS# \$1405

SECTION 1: Identification

1.1 Product identifier

Trade name A-1405, A-6805

Other means of identification Catalyzer Solution for Ammonia & Mono-

chloramine Test Kits

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

Component of water analysis test kits: K-1413, K-1420, K-1420B, K-1420D, K-6802, K-6803

and Accessory Packs A-1410 & A-6802

1.3 Details of the supplier of the safety data sheet

CHEMetrics, Inc. 4295 Catlett Road Midland VA 22728 United States

Telephone: 1-540-788-9026 Telefax: 1-540-788-4856

e-mail: technical@chemetrics.com Website: www.chemetrics.com

1.4 Emergency telephone number

Emergency information service ChemTel Inc.: 1-800-255-3924, +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

| Section | Hazard class | Category | Hazard class and cat- egory | Hazard state- ment |
|---------|-----------------------|----------|--------------------------------|-----------------------|
| A.10 | acute toxicity (oral) | 4 | Acute Tox. 4 | H302 |

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word warning

- Pictograms

GHS07



- Hazard statements

H302 Harmful if swallowed.

- Precautionary statements

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents/container to industrial combustion plant.

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 GHS | Pictograms |
|----------------------|----------------------|-----|----------------------------|------------|
| water | CAS No 7732-18-5 | 88 | | |
| Sodium Nitroprusside | CAS No 13755-38-9 | 12 | Acute Tox. 3 / H301 | \$ |

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. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

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.

SECTION 5: Fire-fighting 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

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate 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 vapors/dust/aerosols/gases.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. 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

Wear Impact- and splash-resistant eyewear.

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

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

Advice on general occupational hygiene

Wash hands after use. Do not 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

7.3 Other information

For optimum analytical performance, store in the dark and at room temperature.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

This information is not available.

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Product description Opaque plastic bottle containing liquid reagent. Each bottle of solution contains approximately 9 mL of liquid reagent. Test kits contain one bottle of solution. A-1410 Accessory Packs contain two (2) bottles of A-1405 solution. A-6802 Accessory Packs contain three (3) bottles of the A-6805 solution.

Appearance

| Physical state | liquid |
|----------------|-----------------------|
| Color | red |
| Particle | not relevant (liquid) |
| Odor | odorless |

Other safety parameters

| pH (value) | 5.7 |
|---|-----------------------------------|
| Melting point/freezing point | 0 °C |
| Initial boiling point and boiling range | 100 °C |
| Flash point | not determined |
| Evaporation rate | Not determined |
| Flammability (solid, gas) | not relevant, (fluid) |
| Vapor pressure | not determined |
| Density | not determined |
| Vapor density | this information is not available |
| Relative density | 1.1 (water = 1) |

Solubility(ies)

| - Water solubility | miscible in any proportion |
|--------------------|----------------------------|
|--------------------|----------------------------|

Partition coefficient

| - n-octanol/water (log KOW) | this information is not available |
|------------------------------|-----------------------------------|
| in detailed water (log Novy) | tins in ormation is not available |

| Auto-ignition temperature | not determined |
|---------------------------|----------------|
| Viscosity | not determined |
| Explosive properties | none |
| Oxidizing properties | none |

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Oxidizers

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 acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Harmful if swallowed.

- Acute toxicity estimate (ATE)

Oral 825 ^{mg}/_{kg}

Acute toxicity estimate (ATE) of components of the mixture

| Name of substance | CAS No | Exposure route | ATE |
|----------------------|------------|----------------|----------------------------------|
| Sodium Nitroprusside | 13755-38-9 | oral | 99 ^{mg} / _{kg} |

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods please consider the relevant national or regional

provisions

SECTION 14: Transport information

14.1 UN number not subject to transport regulations

14.2 UN proper shipping name

14.3 Transport hazard class(es) not assigned

14.4 Packing group not assigned

14.5 Environmental hazards non-environmentally hazardous acc. to the danger-

ous goods regulations

14.6 Other relevant information

Shipping container markings and labels, received from CHEMetrics, may vary from the above information. Products that are regulated for transport will be packaged by CHEMetrics as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. CHEMetrics may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipment, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Not subject to transport regulations.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

 Hazardous Substance List (NJ-RTK) none of the ingredients are listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category | Rating | Description |
|---------------------|--------|--|
| Chronic | / | none |
| Health | 1 | irritation or minor reversible injury possible |
| Flammability | 1 | material that must be preheated before ignition can occur |
| Physical hazard | 0 | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | - | |

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category | Degree of hazard | Description |
|----------------|---------------------|---|
| Flammability | 1 | material that must be preheated before ignition can occur |
| Health | 1 | material that, under emergency conditions, can cause significant irritation |
| Instability | 0 | material that is normally stable, even under fire conditions |
| Special hazard | | |

National inventories

| Country | Inventory | Status |
|---------|-----------|--------------------------------|
| AU | AIIC | all ingredients are listed |
| CA | DSL | not all ingredients are listed |
| CN | IECSC | all ingredients are listed |
| EU | ECSI | not all ingredients are listed |
| JP | CSCL-ENCS | not all ingredients are listed |
| KR | KECI | not all ingredients are listed |
| MX | INSQ | not all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | all ingredients are listed |
| TW | TCSI | all ingredients are listed |
| US | TSCA | not all ingredients are listed |

Legend

AIIC Australian Inventory of Industrial Chemicals

CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)

DSL Domestic Substances List (DSL)

ECSI EC Substance Inventory (EINECS, ELINCS, NLP)

IECSC Inventory of Existing Chemical Substances Produced or Imported in China

INSQ National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals

PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)

TCSI Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

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

SECTION 16: Other information, including date of preparation or last revision

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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 section 2 and 3)

| Code | Text |
|------|-----------------------|
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |

| icr | 1-1 | ·~ | ~ " |
|-----|-----|----|-----|
| | | | |

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



Safety Data Sheet

Version number: 10.1 2021-05-27 SDS# S1406

SECTION 1: Identification

1.1 Product identifier

Trade name A-1406, A-3801

Other means of identification Activator Solution for Ammonia CHEMets®, VACU-

ettes® & Vacu-vials® Kits, and for Cyanide

CHEMets® & Vacu-vials® Kits

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

Component of water analysis test kits: K-1413, K-1420, K-1420B, K-1420D, K-3803, K-3810

and Accesory Packs A-1410, A-3810

1.3 Details of the supplier of the safety data sheet

CHEMetrics, Inc. 4295 Catlett Road Midland VA 22728 United States

Telephone: 1-540-788-9026 Telefax: 1-540-788-4856

e-mail: technical@chemetrics.com Website: www.chemetrics.com

1.4 Emergency telephone number

Emergency information service ChemTel Inc.: 1-800-255-3924, +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class | Category | Hazard class and cat- egory | Hazard state- ment |
|---------|---|----------|--------------------------------|-----------------------|
| 3.2 | skin corrosion/irritation | 2 | Skin Irrit. 2 | H315 |
| 3.3 | serious eye damage/eye irritation | 1 | Eye Dam. 1 | H318 |
| 4.1A | hazardous to the aquatic environment - acute hazard | 2 | Aquatic Acute 2 | H401 |
| 4.1C | hazardous to the aquatic environment - chronic hazard | 3 | Aquatic Chronic 3 | H412 |

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS05



- Hazard statements

H315 Causes skin irritation.H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

- Precautionary statements

P273 Avoid release to the environment.

P280 Wear protective gloves.

P302+P352 IF ON SKIN: Wash with plenty of water.

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/doctor.
P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container to industrial combustion plant.

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 GHS | Pictograms |
|---------------------|---------------------|-----|--|------------|
| water | CAS No 7732-18-5 | ≥97 | | |
| sodium hypochlorite | CAS No 7681-52-9 | 1-2 | Acute Tox. 4 / H302 Skin Corr. 1B / H314 Eye Dam. 1 / H318 | |
| sodium hydroxide | CAS No 1310-73-2 | ≤1 | Skin Corr. 1A / H314 Eye Dam. 1 / H318 | |

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.

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.

SECTION 5: Fire-fighting 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

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate 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 vapors/dust/aerosols/gases.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. 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

Wear Impact- and splash-resistant eyewear.

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

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

Advice on general occupational hygiene

Wash hands after use. Do not 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

7.3 Other information

For optimum analytical performance, store in the dark and at room temperature.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits) Ceiling-C [mg/m³] Coun Name of agent **CAS No** Identi-TWA **STEL STEL** Ceiling-C Source Notatry fier [ppm] [mg/m³] [ppm] [mg/m³] [ppm] tion US sodium hydroxide 1310-73-2 REL 2 NIOSH REL US sodium hydroxide 1310-73-2 **TLV®** 2 **ACGIH®** 2021 US sodium hydroxide 1310-73-2 PEL 2 29 CFR 1910.100 0 US 1310-73-2 PEL (CA) 2 Cal/ sodium hydroxide (caustic soda) OSHA PEL

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period

(unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-

weighted average (unless otherwise specified

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 | 7681-52-9 | DNEL | 1.55 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic ef- fects |
| sodium hypochlorite | 7681-52-9 | DNEL | 3.1 mg/m ³ | human, inhalatory | worker (industry) | acute - systemic ef- fects |
| sodium hypochlorite | 7681-52-9 | DNEL | 1.55 mg/m ³ | human, inhalatory | worker (industry) | chronic - local effects |
| sodium hypochlorite | 7681-52-9 | DNEL | 3.1 mg/m³ | human, inhalatory | worker (industry) | acute - local effects |
| sodium hydroxide | 1310-73-2 | DNEL | 1 mg/m³ | 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 | 7681-52-9 | PNEC | 0.21 ^{µg} / _l | aquatic organisms | freshwater | short-term (single in- stance) |
| sodium hypochlorite | 7681-52-9 | PNEC | 0.042 ^{µg} / _I | aquatic organisms | marine water | short-term (single instance) |
| sodium hypochlorite | 7681-52-9 | PNEC | 4.69 ^{mg} / _l | aquatic organisms | sewage treatment plant (STP) | short-term (single in- stance) |

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Product description Opaque plastic bottle containing liquid reagent. Each test kit contains one (1) bottle of Activator Solution. Bottles of A-1406 solution contain approximately 9 mL of liquid reagent. A-1410 Accessory Packs contain two (2) bottles of A-1406 solution. Bottles of A-3801 solution contain approximately 9 mL of liquid reagent. A-3810 Accessory Packs contain two (2) bottles of A-3801 solution.

Appearance

| Physical state | liquid |
|----------------|-----------------------|
| Color | pale yellow |
| Particle | not relevant (liquid) |
| Odor | characteristic |

Other safety parameters

| pH (value) | 10.1 |
|---|----------------|
| Melting point/freezing point | 0 °C |
| Initial boiling point and boiling range | 100 °C |
| Flash point | not determined |

| Evaporation rate | Not determined |
|---------------------------|-----------------------------------|
| Flammability (solid, gas) | not relevant, (fluid) |
| Vapor pressure | 2.5 kPa at 20 °C |
| Density | not determined |
| Vapor density | this information is not available |
| Relative density | 1 (water = 1) |

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 |
| Oxidizing properties | none |

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Oxidizers

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 acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components of the mixture

| Name of substance | CAS No | Exposure route | ATE |
|---------------------|-----------|----------------|-------------------------------------|
| sodium hypochlorite | 7681-52-9 | oral | 1,100 ^{mg} / _{kg} |

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---------------------|-----------|----------|------------------------------------|-----------------------|------------------|
| sodium hypochlorite | 7681-52-9 | EC50 | 141 ^{µg} / _l | aquatic invertebrates | 48 h |
| sodium hypochlorite | 7681-52-9 | ErC50 | 0.036 ^{mg} / _l | algae | 72 h |
| sodium hydroxide | 1310-73-2 | EC50 | 40.4 ^{mg} / _l | aquatic invertebrates | 48 h |

Aquatic toxicity (chronic) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---------------------|-----------|----------|-----------------------------------|----------------|------------------|
| sodium hypochlorite | 7681-52-9 | LC50 | 0.05 ^{mg} / _l | fish | 120 h |
| sodium hypochlorite | 7681-52-9 | EC50 | 563 ^{mg} / _l | microorganisms | 3 h |

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

please consider the relevant national or regional provisions

SECTION 14: Transport information

14.1 UN number not subject to transport regulations

14.2 UN proper shipping name

14.3 Transport hazard class(es) not assigned

14.4 Packing group not assigned

14.5 Environmental hazards non-environmentally hazardous acc. to the danger-

ous goods regulations

14.6 Other relevant information

Shipping container markings and labels, received from CHEMetrics, may vary from the above information. Products that are regulated for transport will be packaged by CHEMetrics as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. CHEMetrics may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipment, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.

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

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Not subject to transport regulations.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

| Name of substance | CAS No | Remarks | Statutory code | Final RQ pounds (Kg) |
|---------------------|-----------|---------|----------------|----------------------|
| sodium hydroxide | 1310-73-2 | | 1 | 1000 (454) |
| sodium hypochlorite | 7681-52-9 | | 1 | 100 (45,4) |

Legend

"1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

| Name of substance | CAS No | Remarks | Classifications |
|---------------------|-----------|---------|-----------------|
| sodium hydroxide | 1310-73-2 | | CO R1 |
| sodium hypochlorite | 7681-52-9 | | СО |

Legend

CO Corrosive

R1 Reactive - First Degree

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category | Rating | Description |
|---------------------|--------|--|
| Chronic | / | none |
| Health | 3 | major injury likely unless prompt action is taken and medical treatment is given |
| Flammability | 1 | material that must be preheated before ignition can occur |
| Physical hazard | 0 | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | - | |

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category | Degree of hazard | Description |
|----------------|---------------------|--|
| Flammability | 1 | material that must be preheated before ignition can occur |
| Health | 3 | material that, under emergency conditions, can cause serious or permanent injury |
| Instability | 0 | material that is normally stable, even under fire conditions |
| Special hazard | | |

National inventories

| Country | Inventory | Status |
|---------|------------|--------------------------------|
| AU | AICS | all ingredients are listed |
| CA | DSL | all ingredients are listed |
| CN | IECSC | all ingredients are listed |
| EU | ECSI | all ingredients are listed |
| EU | REACH Reg. | all ingredients are listed |
| JP | CSCL-ENCS | all ingredients are listed |
| KR | KECI | all ingredients are listed |
| MX | INSQ | all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | all ingredients are listed |
| TR | CICR | not all ingredients are listed |
| TW | TCSI | all ingredients are listed |
| US | TSCA | all ingredients are listed |

Legend

AICS Australian Inventory of Chemical Substances
CICR Chemical Inventory and Control Regulation

CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)

DSL Domestic Substances List (DSL)

ECSI EC Substance Inventory (EINECS, ELINCS, NLP)

IECSC Inventory of Existing Chemical Substances Produced or Imported in China

INSQ National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals

PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)

REACH Reg. REACH registered substances

TCSI Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

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

SECTION 16: Other information, including date of preparation or last revision

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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 |
|------|--|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H401 | Toxic to aquatic life. |
| 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.