

SAFETY DATA SHEET

1st Edition: 29 Jun 2016

5th Edition: 20 Nov 2023

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

1.1 Product identifier

Product name: CHM cleaning kit

Product code: YZ-006B0

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

Detergent for Nihon Kohden clinical chemistry analyzer

1.3 Details of the supplier of the safety data sheet

Nihon Kohden Corporation

1-31-4 Nishiochiai, Shinjuku-ku, Tokyo 161-8560, Japan

Tel: +81 (3) 5996-8041

Fax: +81 (3) 5996-8085

1.4 Emergency telephone number

1-800-424-9300; CHEMTREC (US)

613-996-6666; CANUTEC (Canada)

+81 3-5996-8022 (Outside US and Canada)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Corrosive to metals Category 1

Serious eye damage/eye irritation Category 1

Hazardous to the aquatic environment long-term (Chronic) Category 3

2.2 Label elements

Hazard pictogram:



Signal word:

Danger

Hazard statements:

H290

May be corrosive to metals

H318

Causes serious eye damage

H412

Harmful to aquatic life with long lasting effects

Precautionary statements:

P234

Keep only in original packaging.

P273

Avoid release to the environment.

P280

Wear protective gloves/eye protection/face protection.

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.

P390

Absorb spillage to prevent material-damage.

P406

Store in a corrosion resistant container with a resistant inner liner.

P501

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

2.3 Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical Name	Concentration or Its Ranges	CAS Number	EC Number REACH Registration No.	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hypochlorite	1.5%	7681-52-9	231-668-3	EU Acid Toxic; EUH031 ¹ Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Sodium hydroxide; caustic soda	< 0.5%	1310-73-2	215-185-5	Skin Corr. 1A; H314 ²

¹ Concentration limit of EUH031 is $\geq 5\%$.

² Skin Corr. 1A; Concentration limit is $\geq 5\%$, Skin Corr. 1B. 2; Concentration limit is $\geq 2\%$ and $< 5\%$, Skin Irrit. 2; Concentration limit is $\geq 0.5\%$ and $< 2\%$, Eye Irrit. 2; 1B. 2; Concentration limit is $\geq 0.5\%$ and $< 2\%$.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	If coughing occurs because of inhaling chlorine gas, move into fresh air and rest in a position that allows easier breathing. In severe cases, immediately see a physician.
Skin contact:	If the product is on the skin or clothing, immediately wash it off with large quantities of running water. Wash the contaminated clothing thoroughly before wearing it again.
Eye contact:	Immediately wash the eyes with large quantities of running water for more than 15 minutes and see a physician. Pain can be reduced by washing the eyes with lukewarm water rather than with cold water. If the eyes are hurt by chlorine gas, keep eyes open under running water at least 15 minutes and see a physician. If wearing contact lenses, remove them when possible and wash the eyes with running water.
Ingestion:	Drink 30 to 50 g/L of sodium hydrogen carbonate solution or large quantities of water to induce vomiting, and immediately see a physician.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Large quantities of water
Unsuitable extinguishing media:	Avoid using CO ₂ or powder fire-extinguishers. The product generates harmful chlorine gas when it comes in contact with acid.

5.2 Special hazards arising from the substance or mixture

The product decomposes when heated or burned and generates harmful and corrosive chlorine gas.

5.3 Advice for firefighters

When there is a fire in the surrounding area, immediately move the product containers to a safe place. If the product containers cannot be moved, pour water on and around the containers to cool the containers and surroundings.

When extinguishing the fire, wear appropriate protection such as rubber clothing, rubber gloves, goggles, high rubber boots and an air respirator.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
Wear appropriate protective gloves, protective clothing, eye protection and face protection for skin, eyes and clothing.
Ventilate the room adequately until the spillage is collected and cleaned.
- 6.2 Environmental precautions
Do not drain the product into public drainage or waterway.
- 6.3 Methods and material for containment and cleaning up
Small spill: Use a waste cloth or sawdust to absorb the product and incinerate it.
Large spill: Construct temporary dikes of sand to prevent spreading of the product. Try collecting the product.
- 6.4 Reference to other sections
Do not mix the product with acid. Harmful gas is produced.
Do not drain the product into drains, gutters, basements or enclosed spaces.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
Technical measures: Install local and general exhaust ventilation. Wear appropriate protective gear for eyes and skin.
Precautions: Take care when handling the product because increases in temperature or mixing with heavy metals causes the product to decompose and emit chlorine gas. Mixing with acid or lowering the pH of the product produces chlorine gas. Handle the product only when outdoors or in a ventilated area. Ensure that you understand "SECTION 2: Hazards identification" thoroughly and avoid contact of the product with the human body.
Contact avoidance: Prohibit contact with flammables, acetylene, ethylene, hydrogen, ammonia, or microscopic metal particles.
Hygiene measures: Do not eat, drink or smoke while handling the product. Wash hands thoroughly after handling the product.
- 7.2 Conditions for safe storage, including any incompatibilities
Technical measures: Seal the container.
Storage conditions: Store at temperatures between 2 and 8°C (36 and 46°F) and avoid direct sunlight.
Do not put heavy metals such as cobalt, nickel, chromium, copper or iron into the product containers. Such heavy metals act as catalysts and promote the decomposition of the product. Refer to "SECTION 10: Stability and reactivity" and prohibit contact with incompatible materials.
Store the product away from acid, metals or flammables.
Packing material: Polyethylene bottle, Lamizip® pouch
- 7.3 Specific end use(s)
No relevant information available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical name	ACGIH(TLV)	OSHA(PEL)	DFG (REL)
Sodium hydroxide	TWA - STEL C 2 mg/m ³	2 mg/m ³ TWA	Not established

8.2 Exposure controls

- Appropriate engineering controls
Use local exhaust ventilation in case of production of fume or mist.
Facilities storing or utilizing this material should be equipped with an eyewash facility, a safety shower and a drainage facility.
- Individual protection measures
Eye/face protection: Wear eye protection/face protection.
Skin protection: Wear protective gloves. If necessary, wear protective clothing.
Respiratory protection: If necessary, wear respiratory protection.
Thermal hazards: No data available
- Environmental exposure controls
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Translucent pale yellow
Odour:	Irritating odor (chlorine)
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability:	Noncombustible
Lower and upper explosion limit:	No data available
Flash point:	No data available
Auto-ignition temperature:	Noncombustible
Decomposition temperature:	No data available
pH:	9.0 to 12.5
Kinematic viscosity:	No data available
Solubility:	Dissolves in water
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density and/or relative density:	1.00 to 1.05 g/cm ³ (20/20°C, 68°F)
Relative vapour density:	No data available
Particle characteristics:	No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

Releases chlorine gas upon contact with acid.

10.4 Conditions to avoid

Contact with incompatible materials. High temperatures and direct sunlight.

10.5 Incompatible materials

Reacts with amines and ammonia and generates harmful and explosive nitrogen trichloride. Generates chlorine gas due to contact with acid or decrease in pH.

10.6 Hazardous decomposition products

Chlorine gas

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (Oral):	Unable to classify due to insufficient data.
Acute toxicity (Dermal):	Unable to classify due to insufficient data.
Acute toxicity (Inhalation: gas):	Does not fall under gas based on GHS definitions.
Acute toxicity (Inhalation: vapour):	Unable to classify due to insufficient data.
Acute toxicity (Inhalation: dust/mist):	Unable to classify due to insufficient data.
Skin corrosion/irritation:	Not classified. The Acute Dermal Irritation/Corrosion (OECD Guideline No.404) test result was "No corrosivity"
Serious eye damage/eye irritation:	Category 1:7681-52-9 Category 1 \geq 1% and pH can be over 11.5. Classification result: Category 1
Respiratory or skin sensitisation:	Unable to classify due to insufficient data.

Germ cell mutagenicity:	Unable to classify due to insufficient data.
Carcinogenicity:	Unable to classify due to insufficient data.
Reproductive toxicity:	Unable to classify due to insufficient data.
STOT-single exposure:	Unable to classify due to insufficient data.
STOT-repeated exposure:	Unable to classify due to insufficient data.
Aspiration hazard:	Unable to classify due to insufficient data.

11.2 Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment short-term (Acute):

Category 1: 7681-52-9 (M=10)

$M \times \text{Category 1} < 25\%$

Classification result: Not classified

Hazardous to the aquatic environment long-term (Chronic):

Category 1: 7681-52-9 (M=1)

$(M \times 100 \times \text{Category 1}) + (10 \times \text{Category 2}) + \text{Category 3} \geq 25\%$

Classification result: Category 3

12.2. Persistence and degradability

Degradability

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Hazardous to the ozone layer:

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste of the remainder:

Dispose of the product according to your local laws and your facility's guidelines for waste disposal.

Pollution container and wrapping:

Dispose of the product according to your local laws and your facility's guidelines for waste disposal.

SECTION 14: Transport information

14.1 UN number or ID number

1791

14.2 UN proper shipping name

Hypochlorite solution

14.3 Transport hazard class (es)

8

14.4 Packing group

III

14.5 Environmental hazards

Hazardous to the aquatic environment long-term (Chronic) Category 3

14.6 Special precautions for user

Make sure that there is no leakage. Do not turn over, drop or damage the product containers when loading.
Tie down the product containers to prevent load shifting.
Releases chlorine gas upon contact with acid. Do not transport with acid.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU - REACH (1907/2006) Article 59 (1) Candidate List of Substances Subject to Authorization
Annex XVII Restrictions of Certain Dangerous Substances, Mixtures and Articles

15.2 Chemical safety assessment

See “SECTION 8: Exposure controls/personal protection” and “SECTION 11: Toxicological information”

SECTION 16: Other information

Abbreviations and acronyms

ACGIH:	American Conference of Governmental Industrial Hygienists
TLV:	Threshold Limit Values
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limits
DFG:	Deutsche Forschungsgemeinschaft
REL:	Recommended Exposure Limits
TWA:	Time-Weighted Average
STEL:	Short-Term Exposure Limits
Skin Corr. 1A:	Skin corrosion/irritation Category 1-1A
Skin Corr. 1B:	Skin corrosion/irritation Category 1-1B
Eye Dam. 1:	Serious eye damage/eye irritation Category 1
Aquatic Acute 1:	Hazardous to the aquatic environment short-term (Acute) Category 1
Aquatic Chronic 1:	Hazardous to the aquatic environment long-term (Chronic) Category 1
EUH031:	Contact with acids liberates toxic gas.
H314:	Causes severe skin burns and eye damage
H318:	Causes serious eye damage
H400:	Very toxic to aquatic life
H410:	Very toxic to aquatic life with long lasting effects

Literature references

NITE-CHRIP
ECHA
EU CLP Regulation, Annex VI
Safety data sheet of Sodium hypochlorite issued by JSIA (Japan Soda Industry Association) (2016)

Changes made in the most recent edition are indicated by a bar in the left margin of each page.

This data sheet is complete and accurate to the best of our knowledge but all information may not be covered. Any product may contain unknown harmful substances. This product must be handled carefully and used under the responsibility of the user, taking appropriate safety measures.