SAFETY DATA SHEET

1st Edition: 13 Apr 2004
8th Edition: 21 Jul 2023

Section 1 – Identification

Product identifier

Product name:	CLEANAC•3
Product code:	MEK-620

Recommended use of the chemical and restrictions on use

Detergent for Nihon Kohden hematology analyzer

Supplier's details

Company name:	Nihon Kohden Corporation
Address:	1-31-4 Nishiochiai, Shinjuku-ku, Tokyo 161-8560, Japan
Telephone number:	+81 3-5996-8041
Fax:	+81 3-5996-8100
Website for contact:	https://www.nihonkohden.com/contact/index.html

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

GHS classification

Corrosive to metals Category 1
Serious eye damage/eye irritation Category 1
Hazardous to the aquatic environment short-term (Acute) Category 2
Hazardous to the aquatic environment long-term (Chronic) Category 3

GHS label elements

Hazard pictogram:

Signal word: Danger

Hazard statements:

H290	May be corrosive to metals
H318	Causes serious eye damage
H401	Toxic to aquatic life
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.

Other hazards

No data available

Section 3 – Composition/Information on Ingredients

Substance/mixture: Mixture

Hazardous ingredients

Chemical Name	Concentration or Its Ranges	CAS Number
Sodium hypochlorite	1.3%	7681-52-9

Section 4 – First Aid Measures

Description of necessary aid measures

Inhalation: When chlorine gas produced by decomposition is inhaled, immediately move the patient to a well ventilated area and apply the following treatment.
1) If coughing occurs, move into fresh air and rest in a position that allows easier breathing.
2) If pain occurs because of chlorine gas in the eyes, immediately wash the eyes carefully with running water for several minutes and see a physician.
3) In severe cases, immediately see a physician and follow the physician's instructions.

Skin contact: If the product is on the skin or clothing, immediately wash it off with large quantities of running water. See a physician if unusual symptoms are noticed. Wash the contaminated clothing before wearing it again.

Eye contact: Immediately wash the eyes with large quantities of running water (right to the corners of the eyelids) and see a physician. Pain can be reduced by washing the eyes with clean lukewarm water rather than with cold water.

Ingestion: If the product is swallowed, wash the inside of the mouth with water, do not induce vomiting and immediately see a physician.

Most important symptoms/effects, acute and delayed

No data available

Indication of any immediate medical attention and special treatment needed

No data available

Section 5 – Fire-fighting Measures

Extinguishing media

Suitable extinguishing media: The product is noncombustible, so there are no suitable extinguishing media for it. Use extinguishing media appropriate for the fire occurring in the location where the product is used or stored.

Unsuitable extinguishing media: Avoid using CO_2 or dry powder fire-extinguishers containing acid. The product generates harmful chlorine gas when it comes in contact with acid.

Specific hazards arising from chemical: The product decomposes when heated and may generate oxidizing gases such as chlorine gas.

Special protective equipment and precautions for fire-fighters

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

Personal precautions, protective equipment and emergency procedures

The product is highly corrosive. Wear appropriate protective gear.

Environmental precautions: In the case of a large spill, take measures to prevent the product entering a public waterway such as collecting the product, replacing it in a fresh container and reductive decomposition of the product. Avoid release into the environment.

Methods and material for containment and cleaning up

Small spill: Wipe up the spilled product and store it in an empty, sealable container for later disposal. For wiping up small chemical spills, wear work clothes and use a cotton, hemp, rayon or polyester cloth. Do not use paper, wool, silk, nylon, acetote, urethane or a combination of those materials.

Large spill: Construct temporary dikes of sand to prevent spreading of the product. Try collecting the product in an empty container or absorbing it into sand before collecting it in a container. After collecting as much as possible of the spill, wash the area where the spill occurred with large volumes of water. If necessary, treat the area with sodium sulfite before washing with large volumes of water. In that case, be careful not to wash highly concentrated waste into a public drainage or waterway. Prevent leakage if safe to do so.

Prevention measures for secondary accidents

Immediately warn residents of the surrounding area and have them evacuate the area of danger.

When there is a possibility of affecting residents of the surrounding area or transport infrastructure etc., alert the public authorities and any other relevant parties.

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

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 handing the product. Wash hands thoroughly after handling the product.

Conditions for safe storage, including any incompatibilities

Technical measures: Seal the container.

Storage conditions: Store the product in a cool place (1 to 30°C). Avoid direct sunlight. Do not freeze. Do not put heavy metals such as cobalt, nickel, chromium, copper or iron into the product containers or allow to contact the product. Such heavy metals act as catalysts and promote the decomposition of the product.

Use a storage tank made of plastic or steel with an anticorrosive or lining or coating on the interior surface, or made from anticorrosive material. The product is highly corrosive, so steel materials cannot be used. Titanium or Rigid PVC or other plastics are recommended. Be careful using rubber as rubber materials used for long period may swell and crack. 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 inner bag, outer carton

Section 8 – Exposure Controls/Personal Protection

Control parameters	Not set
Appropriate engineering controls	Install local and general exhaust ventilation. Facilities storing or utilizing this material should be equipped with a basin for washing hands, an eyewash facility and a safety shower, and the locations of those facilities should be clearly marked.
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

Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid
Colour	Translucent pale yellow
Odour	Pungent
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/flammability limit	No data available
Flash point	No data available
Auto-ignition temperature	Noncombustible
Decomposition temperature	No data available
pH	10.0 to 13.0
Kinematic viscosity	No data available
Solubility	Water soluble
Partition coefficient n-octanol/water (log value)	No data available
Vapour pressure	No data available
Density and/or relative density	1.01 g/cm^3 (25°C, 77°F)
Relative vapour density	No data available
Particle characteristics	No data available

Section 10 – Stability and Reactivity

Reactivity	No data available
Chemical stability	Stable under recommended handling and storage conditions.
Possibility of hazardous reactions	Produces chlorine gas when mixed with acid.
Conditions to avoid	Contact with incompatible materials. High temperatures and direct sunlight.
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.
Hazardous decomposition products	Chlorine gas

Section 11 – Toxicological Information

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:vapor)	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 pH can be over 11.5. Classification result: Category 1
Respiratory sensitization or skin sensitization	Unable to classify due to insufficient data.
Germ cell mutagenicity	Unable to classify due to insufficient data.
Carcinogenic	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.

Section 12 – Ecological Information

Ecotoxicity

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

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

(M×10×Category 1) + Category 2 ≥ 25%

Classification result: Category 2

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

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

(M×100×Category 1) + (M×10×Category 2) + Category 3 ≥ 25%

Classification result: Category 3

Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available

Other adverse effects

Hazardous to the ozone layer: No data available

Section 13 – Disposal Considerations

Disposal 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

UN number	ADR/RID:	UN3266
	IMDG:	UN3266
	IATA:	UN3266
UN proper shipping name	ADR/RID:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Hypochlorite solution)
	IMDG:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Hypochlorite solution)
	IATA:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Hypochlorite solution)
Transport hazard class(es)	ADR/RID:	8
	IMDG:	8
	IATA:	8
Packing group	ADR/RID:	III
	IMDG:	III
	IATA:	III
Environmental hazards	ADR-Environmental Pollutant:	No
	IMDG-Marine pollutant:	No
Special precautions for user	IMDG-Segregation Group:	18
	IMDG-Segregation Group Code:	SGG18 (alkalis)
	IMDG-Segregation Code:	SG35 (Stow “separated from” SGG1 -acids.)

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.
The product releases chlorine gas upon contact with acid.
Do not transport with acid. Do not expose the product to direct sunlight during transport.
Do not freeze the product.

Section 15 – Regulatory Information

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

Thailand

Hazardous Substance Act: Hazardous Substances: FDA Responsible Substances
Hazardous Substances: Department of Industrial Works Responsible Substances

Vietnam

Law on Chemicals: Annex I: Conditional Chemicals
Annex V: Chemicals Subject to Declaration

Indonesia

Government Regulation Regarding Management of Hazardous and Poisonous Substances:
Hazardous and Poisonous Substances (B3)

Malaysia

Occupational Safety and Health (Prohibition of Use of Substances) Order:
Occupational Safety and Health

Environmentally Hazardous Substances Notification and Registration (EHSNR) Scheme:
Environmentally Hazardous Substances (EHS)

Poison Act: Poisons List

Section 16 – Other Information

Literature references

NITE-CHRIP
ECHA
EU CLP Regulation, AnnexVI
Indonesia's Decree of the Ministry of Industry
Ministry of Industry Regarding Hazard Classification and Communication System of Hazardous Substance
ICOP CHC 2014
Safety data sheet of Sodium hypochlorite issued by JSIA (Japan Soda Industry Association) (2016)
UN Model Regulations Rev. 22 (2021)

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.