Safety Data Sheet

 Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier: Product name: VC-409 2 Details of the sumplion of the sefety data sheet
1.3 Details of the supplier of the safety data sheet Manufacturer: Clean Chemical Co., Ltd. Address: 12-14, Yokoe 1-chome, Ibaraki-shi, Osaka 567-0865, Japan
Telephone number: +81-72 (632) 2253 FAX:-81-72 (632) 2263
2. Hazards identification
GHS classification and label elements of the product
2.1 Classification of the substance or mixture
HEALTH HAZARDS
Serious eye damage/eye irritation: Category 2 2.2 Label elements
Signal word: Warning
HAZARD STATEMENT
H319 Causes serious eye irritation
PRECAUTIONARY STATEMENT
Prevention
P264 Wash contaminated parts thoroughly after handling.
P280 Wear eye protection/face protection.
Response
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
Disposal
Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	CAS No.	Content(%)
tetra - Sodium Ethylenediaminetetraacetate	64-02-8	<2%
2- (2-Butoxyethoxy) ethanol	112-34-5	1-5%
Isopropyl alcohol	67-63-0	<1%

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

- 4.1 Descriptions of first-aid measures
 - IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Wash the affected area with a lot of cold water, get medical treatment if necessary.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse inside the mouth with water sufficiently. If the patient is conscious, drink fresh water or milk. Never force the affected person to vomit. Immediately get medical treatment.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO2.

5.3 Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Wear proper protective equipment.

6.2 Environmental precautions

Be careful not to dispose such chemical product into the rivers to cause bad influence on peripheral area.

6.3 Methods and materials for containment and cleaning up

Collect the leakage as much as possible and wipe off some remaining liquid on the floor or ground with some pieces of waste cloth. Burn out such clothes. If the leakage can't be recovered, discharge them into a pit by flushing with a lot of water.

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Wear proper protective equipment.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid to inhale mist/spray absolutely.

It is not allowed to fall down, it drops, the impact is added, and uncouth handling of product etc. is done again.

Safety Measures/Incompatibility

Wear protective gloves/protective clothing/eye protection/face protection.

7.2 Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep the material away from high temperature, direct sunlight and close the cap tightly and keep in a cool place

Keep out of the reach of children.

8. Exposure controls/personal protection

8.1 Control parameters

Adopted value

(2- (2-Butoxyethoxy) ethanol) ACGIH(2012) TWA: 10ppm (IFV) (Hematologic; liver & kidney eff)

(Isopropyl alcohol)	
ACGIH(2001) TWA: 200ppm;	
STEL: 400ppm (Eye & URT irr; CNS impair) 8.2 Exposure controls	
Appropriate engineering controls	
In case of handling indoor, install a proper ventilation equipment and keep the room within the	
controlled concentration level.	
Install a facility for washing hands, eyes or bodies. Put a notice to indicate there is such a facility.	
Individual protection measures	
Respiratory protection	
Wear suitable respiratory equipment such as a protective mask.	
Hand protection	
Wear protective gloves.	
Eye protection	
Wear protective eyeglasses.	
Skin and body protection	
Wear protective clothing.	
Safety and Health measures	
Wash thoroughly after handling.	
9. Physical and Chemical Properties	
9.1 Information on basic physical and chemical properties	
Physical properties	
Appearance: Water-soluble liquid	
Color: Blue transparent solution	
Odor: Characteristic odor	
pH: 10.5 (central value)	
Phase change temperature	
Initial Boiling Point/Boiling point: $35^{\circ}C <$	
Boiling range data N.A.	
Evaporation rate data N.A.	
Melting point/Freezing point data N.A.	
Decomposition temperature data N.A.	
Self-Accelerating Decomposition Temperature/SADT data N.A.	
Flammability (solid, gas) data N.A.	
Flash point data N.A.	
Auto-ignition temperature data N.A.	
Vapor pressure data N.A.	
Specific gravity/Density: 1.02 (central value)	
Solubility	
Solubility in water: Soluble	
n-Octanol /water partition coefficient data N.A.	
10. Stability and Reactivity	
10.2 Chemical stability	
Stable under the normal storage/handling condition.	
10.3 Possibility of hazardous reactions	
Metallic tools other than stainless steel (SUS304, 316) may be affected. Before using, be	
sure to have a test of any metallic container.	
10.4 Conditions to avoid	
Sunlight, heat	

11. Toxicological Information

11.1 Information on toxicological effects

Carcinogenicity

(Isopropyl alcohol)IARC-Gr.3 : Not Classifiable as a Human Carcinogen(Isopropyl alcohol)ACGIH-A4(2001) : Not Classifiable as a Human Carcinogen

12. Ecological Information

Water solubility

(2- (2-Butoxyethoxy) ethanol) 100 g/100 ml (PHYSPROP_DB, 2009)

(tetra - Sodium Ethylenediaminetetraacetate) 100 - 110 g/100 ml (20°C) (ICSC, 2006)

(Isopropyl alcohol) In water, infinitely soluble $(25^{\circ}C)$ (HSDB, 2013)

12.2 Persistence and degradability

(Isopropyl alcohol) Degrade rapidly (Degradation : 86% (Registered chemicals data check & review, 1993))

12.3 Bioaccumulative potential

(2- (2-Butoxyethoxy) ethanol) log Pow=0.3 (ICSC, 2004) (tetra - Sodium Ethylenediaminetetraacetate) log Pow=5.01 (calcualted) (ICSC, 2006) (Isopropyl alcohol) log Pow=0.05 (ICSC, 1999)

13. Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/national regulation. In case of bulky lot, ask a professional industrial waste disposing company

14. Transport Information

UN No, UN CLASS Not applicable to UN NO.

14.6 Special precautions for user

In transporting the product, keep away from direct sunlight, check to see that no leakage from the container occurs. Load the containers so that they may not topple over, fall down, or be damaged, and take measures against collapse of the pile of the containers.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Noxious Liquid ; Cat. Y tetra - Sodium Ethylenediaminetetraacetate Noxious Liquid ; Cat. Z Isopropyl alcohol; 2- (2-Butoxyethoxy) ethanol

15. Regulatory Information

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

16. Other information

GHS classification and labelling

Eye Irrit. 2: H319 Causes serious eye irritation

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2018 TLVs and BEIs. (ACGIH) http://monographs.iarc.fr/ENG/Classification/index.php Supplier's data/information

General Disclaimer

The contents mentioned have been prepared based on the materials, information and data presently available. It therefore, may be revised according to any newly obtained information or knowledge from time to time. It does not guarantee the correctness and perfection of information or performance of any product. Any precautions given therein are for an ordinary handling. If a special handling is to be taken, be sure to provide with suitable safety measure on new use/usage. The notification given therein regarding danger and toxicity may not be sufficient, so handle such item very carefully.

The GHS classification data given here is based on current EU official data (EU CLP published in 01.03.2018).