

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 22 MULTI-QUAT SANITIZER

Other means of identification : Not applicable

Recommended use : Sanitizer

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Product dilution information : 0.52 % - 0.78 %

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SECTION 2. HAZARDS IDENTIFICATION
GHS Classification
Product AS SOLD

Skin corrosion/irritation : Category 1B

Serious eye damage/eye irritation : Category 1

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 2

Product AT USE DILUTION

Short-term (acute) aquatic hazard : Category 3

GHS label elements
Product AS SOLD

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
Do not breathe dusts or mists. Wash skin thoroughly after handling.

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Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse. Collect spillage.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Product AT USE DILUTION

Hazard Statements : Harmful to aquatic life.

Precautionary Statements : **Prevention:**
Avoid release to the environment.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Product AS SOLD

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride	68424-85-1	3 - 5
Octyl decyl dimethyl ammonium chloride	32426-11-2	1.5 - 2.5
ethanol	64-17-5	1 - 1.5
Didecyl Dimethyl Ammonium Chloride	7173-51-5	1 - 1.5

Product AT USE DILUTION

Chemical name	CAS-No.	Concentration (%)
Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride	68424-85-1	0.0025 - 0.025
Didecyl Dimethyl Ammonium Chloride	7173-51-5	0.0025 - 0.025

SECTION 4. FIRST AID MEASURES

Product AS SOLD

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention immediately.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Product AT USE DILUTION

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Exposure to decomposition products may be a hazard to health.
- Hazardous combustion products : Decomposition products may include the following materials:
Carbon oxides
Nitrogen oxides (NOx)
Halogenated compounds
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.

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Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD

Advice on safe handling : Do not ingest. Avoid contact with skin and eyes. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not get in eyes, on skin, or on clothing. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

Product AT USE DILUTION

Advice on safe handling : Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
ethanol	64-17-5	TWA	1,000 mg/m ³	VN OEL
		STEL	3,000 mg/m ³	VN OEL

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

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Eye protection	: Safety goggles Face-shield
Hand protection	: Wear the following personal protective equipment: Standard glove type. butyl-rubber Nitrile rubber Unsupported neoprene Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. An organic vapor cartridge may be used.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye protection	: No special protective equipment required.
Hand protection	: No special protective equipment required.
Skin protection	: No special protective equipment required.
Respiratory protection	: No personal respiratory protective equipment normally required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: red	light pink
Odor	: Disinfectants	Disinfectants
pH	: 7.7, (100 %)	7.04
Flash point	: Not applicable	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: 100 °C	
Evaporation rate	: No data available	
Flammability (solid, gas)	: Not applicable	

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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 0.998
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Molecular weight	: No data available
VOC	: No data available

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: None known.
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon oxides Nitrogen oxides (NOx) Halogenated compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.

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Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes : Health injuries are not known or expected under normal use.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

Product AT USE DILUTION

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product AS SOLD

Product

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : No data available

Respiratory or skin sensitization : No data available

Carcinogenicity : No data available

Reproductive effects : No data available

Germ cell mutagenicity : No data available

Teratogenicity : No data available

STOT-single exposure : No data available

STOT-repeated exposure : No data available

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Aspiration toxicity : No data available

Components

Acute oral toxicity : Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride

LD50 Rat: 344 mg/kg

Octyl decyl dimethyl ammonium chloride

LD50 Rat: 238 mg/kg

ethanol

LD50 Rat: 10,470 mg/kg

Didecyl Dimethyl Ammonium Chloride

LD50 Rat: 329 mg/kg

Components

Acute inhalation toxicity : Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride

4 h LC50 Rat: 0.054 mg/l Test atmosphere: dust/mist

Octyl decyl dimethyl ammonium chloride

4 h LC50 Rat: 0.07 mg/l Test atmosphere: dust/mist

ethanol

4 h LC50 Rat: 117 mg/l Test atmosphere: vapor

Didecyl Dimethyl Ammonium Chloride

4 h LC50 Rat: 0.07 mg/l Test atmosphere: dust/mist

Components

Acute dermal toxicity : Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride

LD50 Rabbit: 3,340 mg/kg

Octyl decyl dimethyl ammonium chloride

LD50 Rabbit: 2,930 mg/kg

ethanol

LD50 Rabbit: 15,800 mg/kg

Didecyl Dimethyl Ammonium Chloride

LD50 Rabbit: 2,930 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product AS SOLD

Environmental Effects : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Product AT USE DILUTION

Environmental Effects : Harmful to aquatic life.

Product AS SOLD

Product

Toxicity to fish : No data available

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Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

Components

Toxicity to fish : Octyl decyl dimethyl ammonium chloride
96 h LC50 Fish: 1 mg/l

ethanol
96 h LC50 Pimephales promelas: > 100 mg/l

Didecyl Dimethyl Ammonium Chloride
96 h LC50 Fish: > 1 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates : Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride
48 h EC50 Daphnia magna (Water flea): 0.016 mg/l

ethanol
48 h EC50 Aquatic Invertebrate: 857 mg/l

Didecyl Dimethyl Ammonium Chloride
48 h EC50 Daphnia magna (Water flea): 0.029 mg/l

Components

Toxicity to algae : Didecyl Dimethyl Ammonium Chloride
72 h EC50 Pseudokirchneriella subcapitata (algae): 0.062 mg/l

Persistence and degradability

Product AT USE DILUTION

Biodegradable/Eliminated from aquatic environment

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD

Disposal methods : Do not contaminate storm water drains, natural waterways or soil with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

Product AT USE DILUTION

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Disposal methods	: Do not contaminate storm water drains, natural waterways or soil with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
Disposal considerations	: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport

UN number	: 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (quaternary ammonium compound)
Class	: 9
Packing group	: III
Environmentally hazardous	: yes

Sea transport (IMDG/IMO)

UN number	: 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (quaternary ammonium compound)
Class	: 9
Packing group	: III
Marine pollutant	: yes

SECTION 15. REGULATORY INFORMATION

APPLICABLE REGULATIONS, VIETNAM

Toxic chemicals must have the Sale and purchase of toxic chemicals record for transferring and archive.

Chemical Law no. 06/2007 of the 12th National Assembly, 2nd session dated November 21, 2007
Decree No. 71/2019/ND-CP dated August 30, 2019 of the Government providing for penalties for administrative violations in the field of industrial chemicals and explosives

Decree No. 42/2020/ND-CP of the Government issued on April 8, 2020: Regulating the list of dangerous goods, transporting dangerous goods by road motor vehicles and transporting them dangerous goods on inland waterways

Circular No. 32/2017/TT-BCT dated December 28, 2017 of the Ministry of Industry and Trade detailing and guiding the implementation of a number of articles of the Law on Chemicals and Decree No. 113/2017/ND-CP dated 09 October 2017 of the Government detailing and guiding the implementation of a number of articles of the Law on Chemicals

Circular No. 37/2020/TT-BCT dated November 30, 2020 of the Ministry of Industry and Trade stipulating the list of dangerous goods that must be packed in the process of transporting and transporting dangerous goods by mechanical means of transport. road, rail and inland waterways

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National technical regulation on safety in production, trading, use, storage and transportation of dangerous chemicals QCVN 05A:2020/BCT

The ingredients of this product are reported in the following inventories:

United States TSCA Inventory :

All substances listed as active on the TSCA inventory

Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL

Australia. Australian Industrial Chemicals Introduction Scheme (AICIS) :

not determined

New Zealand. Inventory of Chemical Substances :

On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :

not determined

Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) :

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Issuing date	: 29.04.2024
Date of first issue	: 27.05.2016
Version	: 1.4
Prepared by	: Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.