Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name : KAY-5 SANITIZER

Product code 112043E

Use of the

Substance/Mixture

Sanitizer

: Mixture Substance type:

For professional users only.

Product dilution information : 0.3 %

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

Identified uses : Surface disinfectant - Manual process, without PPE

Recommended restrictions

on use

: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : KAY BV

Havenlaan 4

B-3980 Tessenderlo, Belgium +32 13 67 06 90 (Belgium)

BEKAYcustomerservice@ecolab.com

Ecolab Ltd.

PO Box 11; Winnington Avenue

Northwich, Cheshire, United Kingdom CW8 4DX

+ 44 (0)1606 74488 ccs@ecolab.com

1.4 Emergency telephone number

Emergency telephone : +441618841235

number +32-(0)3-575-5555 Trans-European

telephone number

Poison Information Centre : For medical professionals only: 0344 892 0111

Date of Compilation/Revision : 04.07.2022 Version 1.3

Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

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Product AS SOLD

Eye irritation, Category 2 H319 Chronic aquatic toxicity, Category 2 H411

Product AT USE DILUTION

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Product AS SOLD

Hazard pictograms





Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard

Statements

: EUH031

Contact with acids liberates toxic gas.

Precautionary Statements : **Prevention:**

P273 Avoid release to the environment.
P280e Wear eye protection/face protection.

Product AT USE DILUTION

Not a hazardous substance or mixture.

2.3 Other hazards

Product AS SOLD

Mixing this product with acid or ammonia releases chlorine gas.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Product AS SOLD Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration : [%]
Sodium Carbonate	497-19-8 207-838-8 01-2119485498-19	Eye irritation Category 2; H319	>= 10 - < 20
Sodium dichloro-s- triazinetrione dihydrate	51580-86-0 220-767-7 01-2119489371-33	Acute toxicity Category 4; H302 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H335 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410	>= 5 - < 10

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Specific target organ toxicity - single exposure Category 3 H335 >= 10 %

EUH031 >= 10 %

Specific target organ toxicity - single exposure Category 3 H335 >= 10 %

EUH031 >= 10 %

Product AT USE DILUTION

Remarks : No hazardous ingredients

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section: 4. FIRST AID MEASURES

4.1 Description of 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.

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.

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.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Section: 5. FIREFIGHTING MEASURES

Product AS SOLD

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: None known.

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5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Exposure to decomposition products may be a hazard to health.

Hazardous combustion

products

: Depending on combustion properties, decomposition products

may include following materials:

Carbon oxides

nitrogen oxides (NOx)

metal oxides Hydrogen chloride

5.3 Advice for firefighters

for firefighters

Special protective equipment : Use personal protective equipment.

Further information : 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

6.1 Personal precautions, protective equipment and emergency procedures

Product AS SOLD

Advice for non-emergency

personnel

: Ensure clean-up is conducted by trained personnel only. Refer to

protective measures listed in sections 7 and 8.

Advice for emergency

responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable

materials.

Product AT USE DILUTION

Advice for non-emergency

personnel

: Refer to protective measures listed in sections 7 and 8.

Advice for emergency

responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable

materials.

6.2 Environmental precautions

Product AS SOLD

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

Product AT USE DILUTION

Environmental precautions : No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Product AS SOLD

Methods for cleaning up : Sweep up and shovel into suitable containers for disposal.

Product AT USE DILUTION

Methods for 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

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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.

6.4 Reference to other sections

See Section 1 for emergency contact information.

For personal protection see section 8.

See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Product AS SOLD

Advice on safe handling : Avoid contact with skin and eyes. Use only with adequate

ventilation. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of

product, wear full Personal Protective Equipment (PPE).

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.

Product AT USE DILUTION

Advice on safe handling : Wash hands after handling. In case of mechanical malfunction, or

if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). For personal protection see section

8.

Hygiene measures : Wash hands before breaks and immediately after handling the

product.

7.2 Conditions for safe storage, including any incompatibilities

Product AS SOLD

Requirements for storage

areas and containers

: Keep out of reach of children. Keep container tightly closed. Store

in suitable labeled containers.

Storage temperature : 0 °C to 40 °C

Product AT USE DILUTION

Requirements for storage

areas and containers

: Keep out of reach of children. Keep container tightly closed. Store

in suitable labeled containers.

7.3 Specific end uses

Product AS SOLD

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Product AS SOLD

Contains no substances with occupational exposure limit values.

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DNEL

DINLL		
Sodium Carbonate	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 10 mg/m3
		End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 10 mg/m3

8.2 Exposure controls

Product AS SOLD Appropriate engineering controls

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations

below occupational exposure standards.

Individual protection measures

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.

Eye/face protection (EN 166) : Safety glasses with side-shields

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection

(EN 14605)

: No special protective equipment required.

Respiratory protection (EN

143, 14387)

: When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:P

Product AT USE DILUTION Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands before breaks and immediately after handling the

product.

Eye/face protection (EN

166)

: No special protective equipment required.

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection : No special protective equipment required.

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(EN 14605)

Respiratory protection (EN

143, 14387)

None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified

respiratory protection equipment meeting EU

requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods

10.5

or procedures of work organization.

Environmental exposure controls

General advice : Consider the provision of containment around storage vessels.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Product AS SOLD Product AT USE DILUTION liquid **Appearance** : powder Colour white colourless Odour : Chlorine Chlorine

Hq : 9.5 - 10.0. 1 %

Flash point : Not applicable., Does not sustain combustion.

Odour Threshold : Not applicable and/or not determined for the mixture Melting point/freezing point : Not applicable and/or not determined for the mixture

Initial boiling point and

boiling range

: Not applicable and/or not determined for the mixture

Evaporation rate : Not applicable and/or not determined for the mixture Flammability (solid, gas) Not applicable and/or not determined for the mixture Upper explosion limit Not applicable and/or not determined for the mixture Lower explosion limit Not applicable and/or not determined for the mixture Vapour pressure : Not applicable and/or not determined for the mixture Relative vapour density : Not applicable and/or not determined for the mixture

: 1.25 - 1.35 Relative density Water solubility : soluble

Solubility in other solvents : Not applicable and/or not determined for the mixture Partition coefficient: n-

octanol/water

: Not applicable and/or not determined for the mixture

Auto-ignition temperature : Not applicable and/or not determined for the mixture : Not applicable and/or not determined for the mixture Thermal decomposition Viscosity, kinematic : Not applicable and/or not determined for the mixture Explosive properties : Not applicable and/or not determined for the mixture

Oxidizing properties : Yes

9.2 Other information

Not applicable and/or not determined for the mixture

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Section: 10. STABILITY AND REACTIVITY

Product AS SOLD

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Mixing this product with acid or ammonia releases chlorine gas.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Acids

10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) metal oxides Hydrogen chloride

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product AS SOLD

exposure

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

Product

Acute oral toxicity : Acute toxicity estimate : > 2,000 mg/kg

Acute inhalation toxicity : There is no data available for this product.

Acute dermal toxicity : There is no data available for this product.

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye

irritation

: There is no data available for this product.

Respiratory or skin

sensitization

: There is no data available for this product.

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Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

Components

Acute oral toxicity : Sodium Carbonate LD50 rat: 2,800 mg/kg

Sodium dichloro-s-triazinetrione dihydrate LD50 rat: 1,823 mg/kg

Components

Acute dermal toxicity : Sodium dichloro-s-triazinetrione dihydrate LD50 rat: > 5,000

mg/kg

Potential Health Effects

Product AS SOLD

Eyes : Causes serious eye irritation.

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.

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, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

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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.

Section: 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product AS SOLD

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

Product AT USE DILUTION

Environmental Effects : This product has no known ecotoxicological effects.

Product AS SOLD

Product

Toxicity to fish : no data available Toxicity to daphnia and other : no data available

aquatic invertebrates

: no data available

Toxicity to algae

Components

Toxicity to fish : Sodium Carbonate96 h LC50 Lepomis macrochirus (Bluegill

sunfish): 300 mg/l

Sodium dichloro-s-triazinetrione dihydrate96 h LC50 Oncorhynchus mykiss (rainbow trout): 0.24 mg/l

Components

aquatic invertebrates

Toxicity to daphnia and other : Sodium Carbonate48 h EC50 Ceriodaphnia (water flea): 213.5

mg/l

Sodium dichloro-s-triazinetrione dihydrate48 h EC50 Daphnia

magna (Water flea): 0.196 mg/l

Components

Toxicity to algae : Sodium dichloro-s-triazinetrione dihydrate72 h EC50 Skeletonema

costatum (marine diatom): > 100 mg/l

12.2 Persistence and degradability

Product

no data available

Components

Biodegradability : Sodium CarbonateResult: Not applicable - inorganic

Sodium dichloro-s-triazinetrione dihydrateResult: Poorly

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biodegradable

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product

Assessment : This substance/mixture contains no components considered to be

either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or

higher.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

Product AS SOLD

Product : 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 contents/container in accordance with local regulations

Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : 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.

Guidance for Waste Code

selection

: Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and

assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC)

and local regulations.

Product AT USE DILUTION

Product : Diluted product can be flushed to sanitary sewer if regulations

permit.

Contaminated packaging : Dispose of in accordance with local, state, and federal regulations.

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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 (ADR/ADN/RID)

14.1 UN number : 3077

14.2 UN proper shipping : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

name N.O.S.

(Sodium dichloroisocyanurate dihydrat)

14.3 Transport hazard : 9

class(es)

14.4 Packing group : III14.5 Environmental hazards : Yes

14.6 Special precautions for : None

user

Air transport (IATA)

14.1 UN number : 3077

14.2 UN proper shipping : Environmentally hazardous substance, solid, n.o.s.

name

(Sodium dichloroisocyanurate dihydrat)

14.3 Transport hazard : 9

class(es)

14.4 Packing group : III 14.5 Environmental hazards : Yes

14.6 Special precautions for :

user

: None

Sea transport (IMDG/IMO)

14.1 UN number : 3077

14.2 UN proper shipping : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

name N.O.S.

(Sodium dichloroisocyanurate dihydrat)

14.3 Transport hazard : 9

class(es)

14.4 Packing group : III 14.5 Environmental hazards : Yes

14.6 Special precautions for : None

user

14.7 Transport in bulk : Not a according to Annex II of

MARPOL 73/78 and the IBC

Code

: Not applicable.

Section: 15. REGULATORY INFORMATION

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

according to Detergents : 5 % or over but less than 15 %: Chlorine-based bleaching agents

Regulation EC 648/2004 Contains: Disinfectants

Seveso III: Directive : ENVIRONMENTAL HAZARDS E2

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2012/18/EU of the European Parliament and of the Council on the control of majoraccident hazards involving dangerous substances.

Lower tier: 200 t Upper tier: 500 t

Candidate List of Substances : Not applicable. of Very High Concern for

Authorisation

National Regulations

Take note of Dir 94/33/EC on the protection of young people at work.

Other regulations : The Chemicals (Hazard Information and Packaging for Supply)

Regulations.

The Control of Substances Hazardous to Health Regulations.

Health and Safety at Work Act.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

Classification	Justification
Eye irritation 2, H319	Calculation method
Chronic aquatic toxicity 2, H411	Calculation method

Full text of H-Statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
11446	

H410 Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from

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Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

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.

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