

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

1.1. Product identifier

F 865 Plus

UFI: U7VX-HA45-G98V-KGWF

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

Use of the substance/mixture

Cleaner for commercial dishwashers: Special aluminium detergent

1.3. Details of the supplier of the safety data sheet

Company name: Winterhalter Gastronom GmbH
 Street: Winterhalterstrasse 2 - 12
 Place: D-88074 Meckenbeuren
 Telephone: +49 7542 4020
 E-mail: info@winterhalter.com
 Contact person: Business Unit Chemicals
 E-mail: sds@winterhalter.com
 Internet: www.winterhalter.com

1.4. Emergency telephone number:

International emergency number (Chemtrec): +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Met. Corr. 1; H290
 Skin Corr. 1; H314
 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Potassium hydroxide
 Silicic acid, potassium salt (MR ≤ 1.6)
 Disodium metasilicate

Signal word: Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.

Precautionary statements

P280 Wear protective gloves and eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 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.

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 2 of 11

Precautionary statements

P501 Dispose of waste according to applicable legislation.

2.3. Other hazards

There is no information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Relevant ingredients**

| CAS No | Chemical name | | | Quantity |
|-----------|---|--------------|------------------|---------------|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 1310-58-3 | Potassium hydroxide | | | 5 - < 10 % |
| | 215-181-3 | 019-002-00-8 | 01-2119487136-33 | |
| | Acute Tox. 4, Skin Corr. 1A; H302 H314 | | | |
| 1312-76-1 | Silicic acid, potassium salt (MR ≤ 1.6) | | | 5 - < 10 % |
| | 215-199-1 | | 01-2119456888-17 | |
| | Met. Corr. 1, Skin Corr. 1B, Eye Dam. 1; H290 H314 H318 | | | |
| 6834-92-0 | Disodium metasilicate | | | 5 - < 10 % |
| | 229-912-9 | 014-010-00-8 | 01-2119449811-37 | |
| | Skin Corr. 1B, STOT SE 3; H314 H335 | | | |
| 497-19-8 | Sodium carbonate | | | 0.3 - < 2.5 % |
| | 207-838-8 | 011-005-00-2 | 01-2119485498-19 | |
| | Eye Irrit. 2; H319 | | | |
| 7173-51-5 | Didecyldimethylammonium chloride | | | 0.1 - < 0.3 % |
| | 230-525-2 | 612-131-00-6 | 01-2119945987-15 | |
| | Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2; H301 H314 H318 H400 H411 | | | |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|-----------|--|---|---------------|
| | Specific Conc. Limits, M-factors and ATE | | |
| 1310-58-3 | 215-181-3 | Potassium hydroxide | 5 - < 10 % |
| | oral: LD50 = 333 mg/kg Skin Corr. 1A; H314: ≥ 5 - 100 Skin Corr. 1B; H314: ≥ 2 - < 5 Skin Irrit. 2; H315: ≥ 0,5 - < 2 Eye Irrit. 2; H319: ≥ 0,5 - < 2 | | |
| 1312-76-1 | 215-199-1 | Silicic acid, potassium salt (MR ≤ 1.6) | 5 - < 10 % |
| | dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg | | |
| 497-19-8 | 207-838-8 | Sodium carbonate | 0.3 - < 2.5 % |
| | oral: LD50 = 4090 mg/kg | | |
| 7173-51-5 | 230-525-2 | Didecyldimethylammonium chloride | 0.1 - < 0.3 % |
| | oral: LD50 = 238 mg/kg Aquatic Acute 1; H400: M=10 | | |

Labelling for contents according to Regulation (EC) No 648/2004

15 % - < 30 % phosphates, < 5 % amphoteric surfactants, < 5 % cationic surfactants.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. Medical treatment necessary.

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 3 of 11

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink 1 glass of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

For cleaning small quantities (drop leakage): Flush down the drain with plenty of water.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 4 of 11

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Unsuitable container/equipment material: Metal.

Hints on joint storage

Do not store together with: Acid.

7.3. Specific end use(s)

Cleaner for commercial dishwashers: Special aluminium detergent

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****DNEL/DMEL values**

| CAS No | Name of agent | Exposure route | Effect | Value |
|--------------------------|----------------------------------|----------------|----------|------------------------|
| 1310-58-3 | Potassium hydroxide | | | |
| Worker DNEL, long-term | | inhalation | local | 1 mg/m ³ |
| Consumer DNEL, long-term | | inhalation | local | 1 mg/m ³ |
| 497-19-8 | Sodium carbonate | | | |
| Worker DNEL, long-term | | inhalation | local | 10 mg/m ³ |
| Consumer DNEL, long-term | | inhalation | local | 5 mg/m ³ |
| 7173-51-5 | Didecyldimethylammonium chloride | | | |
| Worker DNEL, long-term | | inhalation | systemic | 18,2 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 8,6 mg/kg bw/day |

PNEC values

| CAS No | Name of agent | Value |
|--|----------------------------------|-------------|
| 7173-51-5 | Didecyldimethylammonium chloride | |
| Environmental compartment | | |
| Freshwater | | 0,002 mg/l |
| Marine water | | 0,0002 mg/l |
| Freshwater sediment | | 2,82 mg/kg |
| Marine sediment | | 0,282 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 0,595 mg/l |
| Soil | | 1,4 mg/kg |

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls**Appropriate engineering controls**

Ensure sufficient ventilation, especially in closed rooms.

Individual protection measures, such as personal protective equipment

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 5 of 11

Eye/face protection

Suitable eye protection: goggles (EN 166)

Hand protection

Use of protective gloves (EN ISO 374-1 / Typ B (KPT))

Examples of protective gloves:

- Material: nitrile rubber; material thickness: 0.07 mm; breakthrough time: 30 minutes
- Material: polyvinyl chloride (vinyl); material thickness: 0.06 mm; breakthrough time: 30 minutes

Skin protection

Wear suitable work clothes when working.

Respiratory protection

Not required if handled as intended.

In case of intensive or prolonged exposure wear self-contained breathing apparatus (EN 133).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|---|------------------|----------------------------------|
| Physical state: | Liquid | |
| Colour: | colourless | |
| Odour: | product-specific | |
| Melting point/freezing point: | | not determined |
| Boiling point or initial boiling point and boiling range: | | 100 °C |
| Flammability: | | not applicable not applicable |
| Lower explosion limits: | | not applicable |
| Upper explosion limits: | | not applicable |
| Flash point: | | not applicable |
| Auto-ignition temperature: | | not applicable |
| Decomposition temperature: | | not determined |
| pH-Value (at 20 °C): | | 14 |
| Water solubility: | | easily soluble |
| Solubility in other solvents | | not determined |
| Partition coefficient n-octanol/water: | | not determined |
| Vapour pressure: | | not determined |
| Density (at 20 °C): | | 1,4 g/cm ³ |
| Relative vapour density: | | not determined |

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

| | |
|---------------------------------|----------------|
| Evaporation rate: | not determined |
| Solid content: | not determined |
| Viscosity / dynamic (at 20 °C): | < 10 mPa·s |

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 6 of 11

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactions with metals with hydrogen evolution.
Reacts with water and acids, generating heat.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid

10.4. Conditions to avoid

none

10.5. Incompatible materials

Metal.
Keep away from: Acid

10.6. Hazardous decomposition products

No decomposition when stored and used as directed.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No | Chemical name | | | | |
|-----------|---|------------------|---------|--------------|----------|
| | Exposure route | Dose | Species | Source | Method |
| 1310-58-3 | Potassium hydroxide | | | | |
| | oral | LD50 333 mg/kg | Rat | ECHA | OECD 425 |
| 1312-76-1 | Silicic acid, potassium salt (MR ≤ 1.6) | | | | |
| | oral | LD50 >5000 mg/kg | Rat | Manufacturer | |
| | dermal | LD50 >5000 mg/kg | Rat | Manufacturer | |
| 497-19-8 | Sodium carbonate | | | | |
| | oral | LD50 4090 mg/kg | Rat | IUCLID | |
| 7173-51-5 | Didecyldimethylammonium chloride | | | | |
| | oral | LD50 238 mg/kg | Rat | Manufacturer | |

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage. (On basis of test data)

Serious eye damage/eye irritation: Causes serious eye damage. (On basis of test data)

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 7 of 11

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards**Endocrine disrupting properties**

No information available.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information**12.1. Toxicity**

Based on available data, the classification criteria are not met.

Harmful to aquatic life with long lasting effects.

| CAS No | Chemical name | | | | | |
|-----------|--|----------------|--------|--------------------------------|--------------|--------|
| | Aquatic toxicity | Dose | [h][d] | Species | Source | Method |
| 1312-76-1 | Silicic acid, potassium salt (MR <= 1.6) | | | | | |
| | Acute fish toxicity | LC50 >146 mg/l | 96 h | Leuciscus idus (golden orfe) | Manufacturer | |
| | Acute algae toxicity | ErC50 207 mg/l | 72 h | Scenedesmus subsp icatus | Manufacturer | |
| | Acute crustacea toxicity | EC50 >146 mg/l | 48 h | Daphnia magna (Big water flea) | Manufacturer | |
| 497-19-8 | Sodium carbonate | | | | | |
| | Acute fish toxicity | LC50 300 mg/l | 96 h | Lepomis macrochirus | | |
| | Acute crustacea toxicity | EC50 265 mg/l | 48 h | Daphnia magna | IUCLID | |

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

BCF

| CAS No | Chemical name | BCF | Species | Source |
|-----------|-----------------------------------|-----|---------|--------|
| 7173-51-5 | Didecyltrimethylammonium chloride | 2,1 | | |

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

060205 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of bases; other bases; hazardous waste

List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|--|
| 14.1. UN number or ID number: | UN 1719 |
| 14.2. UN proper shipping name: | CAUSTIC ALKALI LIQUID, N.O.S. (Potassium hydroxide, Disodium metasilicate) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | II |
| Hazard label: | 8 |



| | |
|--------------------------|-----|
| Classification code: | C5 |
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |
| Transport category: | 2 |
| Hazard No: | 80 |
| Tunnel restriction code: | E |

Inland waterways transport (ADN)

| | |
|--|--|
| 14.1. UN number or ID number: | UN 1719 |
| 14.2. UN proper shipping name: | CAUSTIC ALKALI LIQUID, N.O.S. (Potassium hydroxide, Disodium metasilicate) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | II |
| Hazard label: | 8 |



| | |
|----------------------|-----|
| Classification code: | C5 |
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |

Marine transport (IMDG)

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 9 of 11

14.1. UN number or ID number: UN 1719
14.2. UN proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S. (potassium hydroxide, Disodium metasilicate)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard label: 8



Special Provisions: 274
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-A, S-B
 Segregation group: 18 - alkalis

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1719
14.2. UN proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S. (potassium hydroxide, Disodium metasilicate)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard label: 8



Special Provisions: A3 A803
 Limited quantity Passenger: 0.5 L
 Passenger LQ: Y840
 Excepted quantity: E2
 IATA-packing instructions - Passenger: 851
 IATA-max. quantity - Passenger: 1 L
 IATA-packing instructions - Cargo: 855
 IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: strongly corrosive.

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 regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Directive 2010/75/EU on industrial emissions: 0,125 % (1,749 g/l)

Directive 2004/42/EC on VOC in paints and varnishes: 0,125 % (1,749 g/l)

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 10 of 11

Information according to Directive 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This safety data sheet complies with the Regulation amending Annex II ((EC) No 2020/878) to Regulation (EC) No 1907/2006.

Abbreviations and acronyms

Met. Corr: Substance or mixture corrosive to metals

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Eye Dam: Eye damage

Eye Irrit: Eye irritation

STOT SE: Specific target organ toxicity - single exposure

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

F 865 Plus

Revision date: 13.01.2026

Product code: 89300232

Page 11 of 11

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

| Classification | Classification procedure |
|--------------------|--------------------------|
| Met. Corr. 1; H290 | On basis of test data |
| Skin Corr. 1; H314 | On basis of test data |
| Eye Dam. 1; H318 | On basis of test data |

Relevant H and EUH statements (number and full text)

| | |
|------|--|
| H290 | May be corrosive to metals. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)