winterhalter®

Safety Data Sheet

according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

F 40

UFI: 5QUX-FAYS-N98W-MFE2

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

Use of the substance/mixture

Oxi-Glasswashing 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
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Silica, potassium salt (1.6<MR<=2.6)
Disodium metasilicate
Potassium hydroxide
Sodium chlorite

Signal word: Danger

Pictograms:

Hazard statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

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.

Precautionary statements

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH032	Contact with acids liberates very toxic gas.

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)			
1312-76-1	Silica, potassium salt (1.6<MR<=2.6)			10 - < 25 %
	215-199-1		01-2119456888-17	
	Skin Irrit. 2, Eye Dam. 1, STOT SE 3; H315 H318 H335			
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			
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			
7758-19-2	Sodium chlorite			0.3 - < 2.5 %
	231-836-6		01-2119529240-51	
	Ox. Sol. 1, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 3; H271 H310 H301 H314 H318 H373 H400 H412			
7681-52-9	Sodium hypochlorite			< 0.1 %
	231-668-3	017-011-00-1	01-2119488154-34	
	Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H314 H318 H400 H410 EUH031			

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		
7758-19-2	231-836-6	Sodium chlorite	0.3 - < 2.5 %
	dermal: ATE = 50 mg/kg; oral: LD50 = 248 mg/kg		
7681-52-9	231-668-3	Sodium hypochlorite	< 0.1 %
	Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=1 EUH; EUH031: >= 5 - 100		

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

5 % - < 15 % phosphates, < 5 % polycarboxylates, < 5 % chlorine-based bleaching agents.

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. When in doubt or if symptoms are observed, get medical advice.

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 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.

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.

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 exhaustion at critical locations. Unsuitable container/equipment material: Metal.

Hints on joint storage

Do not store together with: Acid.

7.3. Specific end use(s)

Oxi-Glasswashing detergent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
1312-76-1	Silica, potassium salt (1.6<MR<=2.6)			
Worker DNEL, long-term		inhalation	systemic	5,61 mg/m³
Worker DNEL, long-term		dermal	systemic	1,49 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,38 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,74 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
1310-58-3	Potassium hydroxide			
Worker DNEL, long-term		inhalation	local	1 mg/m³
Consumer DNEL, long-term		inhalation	local	1 mg/m³
7758-19-2	Sodium chlorite			
Worker DNEL, acute		dermal	systemic	0,58 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	0,58 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	0,41 mg/m³
Worker DNEL, long-term		inhalation	systemic	0,41 mg/m³
Consumer DNEL, acute		dermal	systemic	0,29 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,29 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	0,1 mg/m³
Consumer DNEL, long-term		inhalation	systemic	0,1 mg/m³
Consumer DNEL, acute		oral	systemic	0,029 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,029 mg/kg bw/day
7681-52-9	Sodium hypochlorite			
Worker DNEL, long-term		inhalation	systemic	1,55 mg/m³
Worker DNEL, acute		inhalation	systemic	3,1 mg/m³

DNEL/DMEL values

CAS No	Name of agent		
DNEL type	Exposure route	Effect	Value
Worker DNEL, long-term	inhalation	local	1,55 mg/m³
Worker DNEL, acute	inhalation	local	3,1 mg/m³
Worker DNEL, long-term	dermal	local	0,5 %
Consumer DNEL, long-term	inhalation	systemic	1,55 mg/m³
Consumer DNEL, acute	inhalation	systemic	3,1 mg/m³
Consumer DNEL, long-term	inhalation	local	1,55 mg/m³
Consumer DNEL, acute	inhalation	local	3,1 mg/m³
Consumer DNEL, long-term	dermal	local	0,5 %
Consumer DNEL, long-term	oral	systemic	0,26 mg/kg bw/day

PNEC values

CAS No	Name of agent	
Environmental compartment		Value
1312-76-1	Silica, potassium salt (1.6<MR<=2.6)	
Freshwater		7,5 mg/l
Freshwater (intermittent releases)		7,5 mg/l
Micro-organisms in sewage treatment plants (STP)		348 mg/l
7758-19-2	Sodium chlorite	
Freshwater		0,00065 mg/l
Freshwater (intermittent releases)		0,0065 mg/l
Marine water		0,000065 mg/l
7681-52-9	Sodium hypochlorite	
Freshwater		0,00021 mg/l
Freshwater (intermittent releases)		0,00026 mg/l
Marine water		0,000042 mg/l
Secondary poisoning		11,1 mg/kg
Micro-organisms in sewage treatment plants (STP)		4,69 mg/l

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

Eye/face protection

Eye glasses (EN 166)

Hand protection

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

Skin protection

Wear suitable protective clothing.

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:	light yellow	
Odour:	product-specific	
Melting point/freezing point:		< -15 °C
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:		> 100 °C
Auto-ignition temperature:		not determined
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):	1,43 g/cm³
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

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

Chlorine dioxide (ClO2) can be formed with acids.
Hydrogen, in reactions with metals.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

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.
Contact with acids liberates very toxic gas.

ATEmix calculated

ATE (oral) 5146 mg/kg; ATE (dermal) 5000 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
7758-19-2	Sodium chlorite				
	oral	LD50 248 mg/kg	Rat	ECHA	OECD 401
	dermal	ATE 50 mg/kg			

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

May cause respiratory irritation.

STOT-repeated exposure

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

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.

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h][d]	Species	Source	Method
7758-19-2	Sodium chlorite					
	Acute fish toxicity	LC50 106 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	Manufacturer	
	Acute algae toxicity	ErC50 1 mg/l	96 h	Selenastrum capricornutum	Manufacturer	
	Acute crustacea toxicity	EC50 <1 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7758-19-2	Sodium chlorite	-2,7

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

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; 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. (Disodium metasilicate, Potassium hydroxide, Sodium chlorite)

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. (Disodium metasilicate, Potassium hydroxide, Sodium chlorite)

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)

14.1. UN number or ID number: UN 1719

14.2. UN proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S. (Disodium metasilicate, potassium hydroxide, Sodium chlorite)

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. (Disodium metasilicate, potassium

hydroxide, Sodium chlorite)

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 2004/42/EC on VOC in paints and varnishes:	0%
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):	1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Ox. Sol: Oxidising solid
Met. Corr: Substance or mixture corrosive to metals
Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Skin Irrit: Skin irritation
Eye Dam: Eye damage
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated 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).

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
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H271	May cause fire or explosion; strong oxidiser.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Relevant H and EUH statements (number and full text)

EUH031	Contact with acids liberates toxic gas.
EUH032	Contact with acids liberates very toxic gas.

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.)