Dr. Grogg Chemie AG
Gümligentalstrasse 83
CH-3066 Stettlen-Deisswil

Telefon 031 932 11 66
info@grogg-chemie.ch
www.grogg-chemie.ch

COVER SHEET FOR THE SAFETY DATA SHEET

Date of creation of the cover page: 25.11.2026
Cover page version: 1.0
Applies to the safety data sheet in the appendix: 24.04.2026, Version 3.2
Number of pages, including the cover page: 25

Item number: G030

Trade name: Formic acid 85% techn.

Supplier:
Dr. Grogg Chemie AG
Gümligentalstrasse 83
CH-3066 Stettlen-Deisswil
info@grogg-chemie.ch
Tel. +41 31 932 11 66

Emergency number:
24-hour emergency number: 145
Help with poisoning. Tox Info Suisse provides free medical advice round the clock in cases of poisoning or suspected poisoning.

Tox Info Suisse
Freiestrasse 16
8032 Zürich
Tel. +41 (0) 44 251 51 51
www.toxinfo.ch

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006, as amended

FORMIC ACID 85-86%

Version 3.2 Print Date 25.11.2026

Revision date / valid from 24.04.2026

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

1.1. Product identifier

Trade name	:	FORMIC ACID 85-86%
Substance name	:	formic acid
Index-No.	:	607-001-00-0
CAS-No.	:	64-18-6
EC-No.	:	200-579-1
EU REACH-Reg. No.	:	01-2119491174-37-xxxx
UFI	:	D9DQ-F0HU-T002-H563
UFI code notified in	:	Austria, Germany, Denmark, Estonia, Spain, France, Croatia, Ireland, Iceland, Liechtenstein, Lithuania, Luxembourg, Latvia, Malta, Netherlands, Norway, Portugal, Sweden

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

Use of the Substance/Mixture	:	Anti-Freeze and de-icing products, Fertilizers, Laboratory chemicals, Leather tanning, dye, finishing, impregnation and care products, Lubricants, greases, release products, Polymer preparations and compounds, Textile dyes, finishing and impregnating products; including bleaches and other processing aids, Washing and cleaning products (including solvent based products)
Uses advised against	:	At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company	:	Brenntag Schweizerhall AG Elsässerstrasse 231 CH 4002 Basel
Telephone	:	+41 (0)58 344 80 00
Telefax	:	+41 (0)58 344 82 08
E-mail address	:	doku@brenntag.ch
Responsible/issuing person	:	Abteilung Produktsicherheit

1.4. Emergency telephone number

Emergency telephone number	:	Swiss Toxicological Information Centre CH-8032 ZÜRICH Tel.: +41 (0) 44 251 51 51

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	**Hazard category**	**Target Organs**	**Hazard statements**
Flammable liquids	Category 3	---	H226
Corrosive to metals	Category 1	---	H290
Acute toxicity (Inhalation)	Category 3	---	H331
Acute toxicity (Oral)	Category 4	---	H302
Skin corrosion	Sub-category 1B	---	H314
Serious eye damage	Category 1	---	H318

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

Most important adverse effects

Human Health : See section 11 for toxicological information.

Physical and chemical hazards : See section 9/10 for physicochemical information.

Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols :



Signal word : Danger

Hazard statements :

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.

Precautionary statements

Prevention	:	P271	Use only outdoors or in a well-ventilated area.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response	:	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
		P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
		P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
Storage	:	P403 + P235	Store in a well-ventilated place. Keep cool.
Disposal	:	P501	Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling:

EUH071 Corrosive to the respiratory tract.

Hazardous components which must be listed on the label:

• formic acid

2.3. Other hazards

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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical nature : Aqueous solution

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
formic acid			
Index-No. : 607-001-00-0 CAS-No. : 64-18-6 EC-No. : 200-579-1 EU REACH-Reg. No. : 01-2119491174-37-xxxx	>= 85 - < 90	Flam. Liq.3 Met. Corr.1 Acute Tox.4 Oral Acute Tox.3 Inhalation Skin Corr.1A Eye Dam.1	H226 H290 H302 H331 H314 H318
		specific concentration limit Eye Dam. 1; H318 >= 10 % Eye Irrit. 2; H319 2 - < 10 % Skin Corr. 1B; H314 10 - < 90 % Flam. Liq. 3; H226 > 85 % Skin Irrit. 2; H315 2 - < 10 % Skin Corr. 1A; H314 >= 90 %	EUH071
		Acute toxicity estimate Acute oral toxicity: 500 mg/kg Acute inhalation toxicity (vapour): 7,4 mg/l	
		Note B	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Take off all contaminated clothing immediately. If symptoms occur call a physician.

If inhaled : In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position. Call a physician immediately.

In case of skin contact : Wash off immediately with soap and plenty of water. Call a physician immediately.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.

If swallowed : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do

NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Call a physician immediately.

Protection of First Aid Responders : First Aid responders should pay attention to self-protection and use the recommended protective clothing.

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

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

Effects : Extremely corrosive and destructive to tissue. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Watch victim for several hours because of possible delayed signs of poisoning.
Harmful if swallowed. Causes serious eye damage. Toxic if inhaled. Causes severe burns. Corrosive to the respiratory tract.

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

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray, foam, dry powder or CO2.

Unsuitable extinguishing media : High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : Combustible liquid. In case of fire hazardous decomposition products may be produced such as:

Hazardous combustion products : Carbon monoxide, Carbon dioxide (CO2)

5.3. Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.Wear appropriate body protection (full protective suit)

Specific extinguishing methods : Control smoke with water spray.

Further advice : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Keep away unprotected persons. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

6.2. Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up	:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal.
Further information	:	Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	:	Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
Hygiene measures	:	Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in original container.
Advice on protection against fire and explosion	:	Combustible liquid. Keep away from heat and sources of ignition. Vapours may form explosive mixtures with air.

Further information on storage conditions	:	Keep tightly closed in a dry and cool place. Keep in a well-ventilated place.
Advice on common storage	:	Keep away from food, drink and animal feeding stuffs. Corrodes base metals. Incompatible with: Hydrogen peroxide alkalis Bases Oxidizing agents
German storage class	:	3 Flammable Liquids
Storage period	:	<= 36 Months
Storage temperature	:	30 °C
Suitable packaging materials	:	Stainless steel, Polyethylene, glass
Unsuitable packaging materials	:	paper, carbon steel

7.3. Specific end use(s)

Specific use(s)	:	Identified use: See table in front of appendix for a complete overview of identified uses.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component:	**formic acid**	**CAS-No. 64-18-6**
Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)		

DNEL
Workers, Long-term - systemic effects, Inhalation : 9,5 mg/m3

DNEL
Workers, Long-term - local effects, Inhalation : 9,5 mg/m3

DNEL
Consumers, Long-term - systemic effects, Inhalation : 6 mg/m3

DNEL
Consumers, Long-term - local effects, Inhalation : 6 mg/m3

DNEL
Consumers, Long-term systemic effects, Dermal : 3 mg/kg

DNEL
Consumers, Long-term systemic effects, Oral : 3 mg/kg

Predicted No Effect Concentration (PNEC)	
No hazard identified	:

Other Occupational Exposure Limit Values

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
5 ppm, 9 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
5 ppm, 9,5 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
10 ppm, 19 mg/m3

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice	:	Required, if exposure limit is exceeded (e.g. OEL). Required if vapours or aerosol are released. Recommended Filter type: ABEK-P2-filter In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air. Equipment should conform to EN 14387

Hand protection

Advice	:	Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear.

Material	:	Chloroprene rubber (CR)
Break through time	:	>= 8 h
Glove thickness	:	0,5 mm

Material	:	butyl-rubber
Break through time	:	>= 8 h
Glove thickness	:	0,7 mm

Material	:	fluoroelastomer (FKM)
Break through time	:	>= 8 h
Glove thickness	:	0,7 mm

Material	:	Polyethylene - Laminate (PE laminate)
Break through time	:	>= 8 h
Glove thickness	:	0,1 mm

Material	:	Polyvinylchloride
Break through time	:	> 4 h
Glove thickness	:	0,7 mm

Material	:	Natural Rubber
Break through time	:	> 1 h
Glove thickness	:	0,5 mm

Material	:	Nitrile rubber
Break through time	:	> 10 min
Glove thickness	:	0,4 mm

Eye protection

Advice	:	Safety glasses with side-shields Equipment should conform to ISO 16321-1.

Skin and body protection

Protecting Clothes	:	Acid resistant protective clothing.

Environmental exposure controls

General advice	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	:	liquid
Physical state	:	liquid
Colour	:	colourless, yellow
Odour	:	stinging
Odour Threshold	:	not determined
Freezing point/range	:	-19 - -10 °C 85% solution
Boiling point/boiling range	:	107,3 °C
Flammability (solid, gas)	:	Not applicable
Upper explosion limit / Upper flammability limit	:	47,6 %(V)
Lower explosion limit / Lower flammability limit	:	14,9 %(V)
Flash point	:	65 °C Method: DIN 51755
Auto-ignition temperature	:	500 °C Method: DIN 51794
Decomposition temperature	:	Decomposes on heating.
Self-Accelerating decomposition temperature (SADT)	:	No data available
pH	:	2,2 (20 °C) Concentration: 100 %
Viscosity		
Viscosity, dynamic	:	1,7 mPa.s (20 °C)
Viscosity, kinematic	:	1,42 mm2/s (20 °C)
Flow time	:	No data available
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	Solvent: organic solvent miscible
Dissolution Rate	:	No data available
Partition coefficient: n-octanol/water	:	log Pow: -1,9 (23 °C) pH: 5 calculated on the pure substance
Dispersion Stability	:	No data available

Vapour pressure	:	24,2 hPa (20 °C)
		112,5 hPa (50 °C)
Relative density	:	No data available
Density	:	1,19 g/cm3 (20 °C)
		1,2 g/cm3 (15 °C)
		1,173 g/cm3 (40 °C)
		1,161 g/cm3 (50 °C)
		1,15 g/cm3 (55 °C)
Bulk density	:	No data available
Relative vapour density	:	No data available
Particle characteristics Particle size	:	Not applicable

9.2 Other information

Explosives	:	Not explosive
Oxidizing properties	:	not oxidising
Flammability (liquids)	:	Flammable liquid and vapour.
Corrosion to metals	:	May be corrosive to metals.
Evaporation rate	:	No data available
Molecular weight	:	46,03 g/mol

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Decomposes on heating.

10.3. Possibility of hazardous reactions

Hazardous reactions : Materials to avoid: Hydrogen peroxide alkalis Bases Oxidizing agents Risk of explosion with: peroxides, for example hydrogen peroxide

10.4. Conditions to avoid

Conditions to avoid	:	Heat, flames and sparks.Exposure to sunlight.
Thermal decomposition	:	Decomposes on heating.

10.5. Incompatible materials

Materials to avoid	:	Bases, non-coated metals, base metals

10.6. Hazardous decomposition products

Hazardous decomposition products	:	In case of fire hazardous decomposition products may be produced such as: Carbon oxides

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Data for the product		
Acute toxicity		
Oral		
Acute toxicity estimate	:	555,55 - 588,23 mg/kg) (Calculation method)Classified based on the calculation method according to CLP regulation.
Inhalation		
Acute toxicity estimate	:	8,22 - 8,70 mg/l (4 h; vapour) (Calculation method)Classified based on the calculation method according to CLP regulation.
Dermal		
		No data available
Irritation		
Skin		
Result	:	Classified based on the calculation method according to CLP regulation.
Eyes		
Result	:	Classified based on the calculation method according to CLP regulation.
Sensitisation		
Result	:	Not classified based on the calculation method according to CLP regulation.
CMR effects		
CMR Properties		
Carcinogenicity	:	Not classified based on the calculation method according to CLP

regulation.

Mutagenicity	:	Not classified based on the calculation method according to CLP regulation.
Teratogenicity	:	Not classified based on the calculation method according to CLP regulation.
Reproductive toxicity	:	Not classified based on the calculation method according to CLP regulation.

Specific Target Organ Toxicity

Single exposure

Remarks	:	Not classified based on the calculation method according to CLP regulation.

Repeated exposure

Remarks	:	Not classified based on the calculation method according to CLP regulation.

Other toxic properties

Repeated dose toxicity

No data available

Aspiration hazard

Not applicable,

Component:	**formic acid**	**CAS-No. 64-18-6**

Acute toxicity

Oral

Acute toxicity estimate	:	500 mg/kg) (Acute toxicity estimate according to Regulation (EC) No. 1272/2008)

Inhalation

Acute toxicity estimate	:	7,4 mg/l (vapour) (Acute toxicity estimate according to Regulation (EC) No. 1272/2008)vapour

Dermal

Study scientifically not justified.

Irritation

Skin

Result	:	corrosive effects (Rabbit) (OECD Test Guideline 404)

Eyes

Result	:	corrosive effects (OECD Test Guideline 405)

Sensitisation

Result	:	not sensitizing (Buehler Test; Guinea pig) (OECD Test Guideline 406)

CMR effects

CMR Properties

Carcinogenicity	:	Animal testing did not show any carcinogenic effects. Information given is based on data obtained from similar substances.
Mutagenicity	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Not mutagenic in Ames Test
Teratogenicity	:	Did not show teratogenic effects in animal experiments. Information given is based on data obtained from similar substances.
Reproductive toxicity	:	Animal testing did not show any effects on fertility. Information given is based on data obtained from similar substances.

Reproductive toxicity

NOAEL Parent	:	676 mg/kg
NOAEL F1	:	676 mg/kg (Rat, male)(Oral)(OECD Test Guideline 416)Fertility and developmental toxicity tests did not reveal any effect on reproduction.

Specific Target Organ Toxicity

Single exposure

Remarks	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard
Not applicable,

Further information		
Other relevant toxicity information	:	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.
Experience with human exposure	:	Chronic exposure damages the brain and the central nervous system.,

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties		
Assessment Endocrine Disrupting Properties	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	formic acid	CAS-No. 64-18-6
Endocrine disrupting properties		
Assessment Endocrine Disrupting Properties	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1. Toxicity

Component:	formic acid	CAS-No. 64-18-6
Acute toxicity		
Fish		
LC50	:	130 mg/l (Brachydanio rerio; 96 h) (static test; OECD Test

		Guideline 203)Data based on test results or data from a comparable product.
LC50		68 mg/l (Leuciscus idus (Golden orfe); 96 h) (static test; DIN 38412)

Toxicity to daphnia and other aquatic invertebrates		
EC50	:	365 mg/l (Daphnia magna; 48 h) (static test; OECD Test Guideline 202)Data based on test results or data from a comparable product.
EC50		32,19 mg/l (Daphnia magna; 48 h) (static test)

algae		
EC50	:	1,240 mg/l (Scenedesmus capricornutum (fresh water algae); 72 h) (static test; OECD Test Guideline 201)Data based on test results or data from a comparable product.
EC50		32,64 mg/l (Scenedesmus subspicatus; 72 h) (static test; End point: Growth rate; DIN 38412)

Bacteria		
EC10	:	> 500 mg/l (activated sludge, domestic, non-adapted; 3 h) (OECD Test Guideline 209)aerobic

Chronic toxicity		
Aquatic invertebrates		
NOEC		>= 102 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; OECD Test Guideline 211)

12.2. Persistence and degradability

Component:	**formic acid**	**CAS-No. 64-18-6**
Persistence and degradability		
Persistence		
Result	:	The substance is slowly degraded in air by photochemical processes

Biodegradability		
Result	:	100 % (aerobic; activated sludge; Related to: Dissolved organic

carbon (DOC); Exposure Time: 9 d)(OECD Test Guideline 301E)Readily biodegradable.

12.3. Bioaccumulative potential

Component:	formic acid	CAS-No. 64-18-6
Bioaccumulation		

Result : log Kow -1,9 (23 °C; pH 5)
: Bioaccumulation is not expected.

12.4. Mobility in soil

Component:	formic acid	CAS-No. 64-18-6
Mobility		

Water : The substance will not evaporate into the atmosphere from the water surface.
Soil : Not expected to adsorb on soil.

12.5. Results of PBT and vPvB assessment

Data for the product
Results of PBT and vPvB assessment

Result : 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.

Component:	formic acid	CAS-No. 64-18-6
Results of PBT and vPvB assessment		

Result : Not persistent, bioaccumulative, and toxic (PBT)., Not very persistent and very bioaccumulative (vPvB).

Results of PMT and vPvM assessment

Result : Not persistent, mobile, and toxic (PMT).
Not very persistent and very mobile (vPvM).

12.6. Endocrine disrupting properties

Data for the product		
Assessment Endocrine Disrupting Properties	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	formic acid	CAS-No. 64-18-6
Assessment Endocrine Disrupting Properties	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Component:	formic acid	CAS-No. 64-18-6
Biochemical Oxygen Demand (BOD)		
Result	:	86 mg/g
Chemical Oxygen Demand (COD)		
Result	:	348 mg/g
Additional ecological information		
Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Harmful effects to aquatic organisms due to pH-shift.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
Contaminated packaging	:	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations.
European Waste Catalogue Number	:	No waste code can be defined for this product in accordance with the Ordinance on the Movement of Waste (VeVA), as the intended use dictates the assignment. The waste code is established in consultation with a regional waste disposer,

such as:

Brenntag Schweizerhall AG
Lohnmatte 1
4573 Lohn-Ammannsegg
Switzerland
Phone: +41 58 344 84 00
infolohn@brenntag.ch

SECTION 14: Transport information

14.1. UN number or ID number

1779

14.2. UN proper shipping name

ADR : FORMIC ACID
RID : FORMIC ACID
IMDG : FORMIC ACID

14.3. Transport hazard class(es)

ADR-Class	: 8
(Labels; Classification Code; Hazard Identification Number; Tunnel restriction code)	8, 3; CF1; 83; (D/E)
RID-Class	: 8
(Labels; Classification Code; Hazard Identification Number)	8, 3; CF1; 83
IMDG-Class	: 8
(Labels; EmS)	8, 3; F-E, S-C

14.4. Packaging group

ADR : II
RID : II
IMDG : II

14.5. Environmental hazards

Environmentally hazardous according to ADR	: no
Environmentally hazardous according to RID	: no
Marine Pollutant according to IMDG-Code	: no

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Data for the product

EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended	:	Point Nos.: , 3; Listed Point Nos.: , 40; Listed Point Nos.: , 75; Listed
CPID	:	972393-00
Threshold quantity MAO	:	2.000 kg (2015 determined by law SR814.012 Ann. 1 ch. 4)
Ordinance protection of air	:	LRV (CH): chapter 72 - class 1
Ordinance on Chemical Risik Reduction: Annex	:	Annex 1.11: Hazardous liquids
Other regulations	:	Article 4 paragraph 1bis, Article 4 paragraph 4 of the Youth Employment Protection Ordinance (SR 822.115); articles 5 and 6 of the EAER Ordinance on Hazardous Work for Young People (SR 822.115.2): Young people undergoing basic vocational training may only work with this product (substance/preparation) if the relevant training ordinance makes provision for them to do so with a view to enabling them to achieve their training objectives and if the preconditions for the training plan have been met and the applicable age restrictions have been complied with. Young people who are not undergoing any basic vocational training are not permitted to work with this product (substance/preparation). Young people with a Federal vocational education and training (VET) Certificate or a Federal VET Diploma may carry out hazardous work with this product (substance/preparation) within the profession they have learned. Male and female employees who are under 18 years old are classed as young people. The product belongs to group 2 according to the Swiss Chemicals Ordinance (ChemO 813.11).

Component:	**formic acid**	**CAS-No. 64-18-6**

EU. Chemicals Subject to Export Notification: Annex 1, Part 1, Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; Not listed
EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended	:	Point Nos.: , 75; Listed Point Nos.: , 40; Listed Point Nos.: , 3; Listed
EU. Allowed Preservatives: Annex V, Regulation 1223/2009/EC on Cosmetic Products, as amended	:	Reference number: 14; Listed

Notification status formic acid:

Regulatory List	Notification	Notification number
VN INVL	YES	
TH INV	YES	2915.11
TH INV	YES	55-1-05130
AU AIICL	YES	
TSCA	YES	
EINECS	YES	200-579-1
DSL	YES	
KECI (KR)	YES	KE-17233
ENCS (JP)	YES	(2)-670
PICCS (PH)	YES	
ISHL (JP)	YES	(2)-670
NZIOC	YES	HSR000979
IECSC	YES	
ONT INV	YES	
INSQ	YES	
TCSI	YES	

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.

Full text of the Notes referred to under section 3.

Note B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: "nitric acid ...%". In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration

LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
UK REACH Auth. No.:	UK REACH Authorisation Number
UK REACH AuthAppC. No.	UK REACH Authorisation Application Consultation Number
UK REACH-Reg.No	UK REACH Registration Number
STOT	specific target organ toxicity
SPM	Synthetic Polymer Microparticles
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory
vPvB	very persistent and very bioaccumulative

Further information

Key literature references and sources for data	:	Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for product classification	:	The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	:	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety

Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.

The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

|| Indicates updated section.