

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006
(amended by Regulation (EU) 2020/878)

Q-FLASH ret (L)

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

1.1. Product identifier

Product name	Q-FLASH ret (L)
Product code	-
Unique formula identifier (UFI)	FAME-0R1J-RU17-8U4A

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

Use of the Substance/Mixture	Construction. Additive for the production of concrete
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1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification	Concretum Construction Science AG Breitloostrasse 7 8154 Oberglatt Switzerland Phone: +41 44 445 13 46 info@concretum.com
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1.4. Emergency telephone number	145 (Tox Info Suisse) International: +41 44 251 51 51 Concretum Construction Science AG: +41 44 445 13 46 (08:00 - 16:00) www.concretum.com
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Version	1.1 (Previous versions: 1.0)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Serious eye damage/eye irritation, Cat. 2, H319
Specific target organ toxicity (single exposure, inhalation), Cat. 3, H335

Additional information For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements



Signal Word Warning

Hazard Statements H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Precautionary statements P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264: Wash skin thoroughly after handling.
P280: Wear protective gloves, eye protection and face protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/ attention.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Supplemental information None.

Product identifier citric acid, CAS-No. 77-92-9, EC-No. 201-069-1

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Components	Weight %	CLP Classification	Product identifier
citric acid	20% - 50%	Eye Irrit. 2 H319, STOT SE 3 H335	CAS-No.: 77-92-9 EC-No.: 201-069-1 Index-No: 607-750-00-3

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If breathing is difficult, give oxygen. Consult a physician for severe cases.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If easy to do, remove contact lens, if worn. Protect unharmed eye. Consult an ophthalmologist.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Prevent vomiting if possible. Consult a physician for severe cases. Consult a physician if necessary.

4.2. Most important symptoms and effects, both acute and delayed Anticipated acute effects: Superficial burning sensation. Blurred vision. Symptoms of poisoning may only appear several hours later.

4.3. Indication of any immediate medical attention and special treatment needed None known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry extinguishing agent or carbon dioxide.

Unsuitable extinguishing media High volume water jet.

5.2. Special hazards arising from the substance or mixture During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.3. Advice for firefighters

Special protective equipment for firefighters Standard procedure for chemical fires. In the event of fire, wear self-contained breathing apparatus. Complete suit protecting against chemicals.

Specific methods Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours/dust.
For emergency responders	Use personal protective equipment. Do not breathe vapours/dust. Ventilate the area. Keep people away from and upwind of spill/leak.

6.2. Environmental precautions Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up Keep in suitable and closed containers for disposal (Plastic container of HDPE). Clean up promptly by sweeping or vacuum.

6.4. Reference to other sections See chapter 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling When using, do not eat, drink or smoke. Wash hands and exposed skin before eating, drinking or smoking and after work. Plan first aid action before beginning work with this product. Wear personal protective equipment. Do not breathe vapours/dust. Avoid contact with skin and eyes. Wash contaminated clothing before re-use.

7.2. Conditions for safe storage, including any incompatibilities Store in a place accessible by authorized persons only. Keep container tightly closed. Store in original container. Keep in a well-ventilated place.

7.3. Specific end use(s) Additive for the production of concrete

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s) No data is available on the product itself.

8.2. Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Regular cleaning of equipment, work area and clothing.

Personal protection equipment

Respiratory protection Do not inhale aerosol. Do not breathe dust or spray mist. In case of insufficient ventilation wear suitable respiratory equipment. Respirator with combination filter for vapour/particulate (EN 14387).

Hand protection The selected protective gloves have to satisfy the specifications of

Regulation (EU) No. 2016/425 and the standard EN 374 derived from it. Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Gloves made of Nitril.

<i>Eye protection</i>	Safety glasses with side-shields conforming to EN166.
<i>Skin and body protection</i>	Long sleeved clothing.
<i>Thermal hazards</i>	No special measures required.
Environmental exposure controls	Prevent product from entering surface water or sewage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Characteristic.
Melting point/ freezing point:	Not determined.
Boiling point or initial boiling point / range:	ca. 100 °C
Flammability:	Not determined.
Lower and upper explosion limit:	Not determined.
Flash point:	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	> 170 °C
pH:	0.5 - 2.5 (20 °C)
Kinematic viscosity:	Not determined.
Solubility:	completely miscible (Water)
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density:	1.23 (20 °C)
Relative vapour density:	Not determined.
Particle characteristics:	Not applicable.

9.2. Other information

9.2.1 Information with regard to physical hazard classes	No information available.
9.2.2 Other safety characteristics	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	Attacks many metals with liberation of hydrogen which is flammable
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	and forms explosive mixture with air.
10.2. Chemical stability	No decomposition if used as directed. Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	Attacks many metals with liberation of hydrogen which is flammable and forms explosive mixture with air.
10.4. Conditions to avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight. See sections 10.5..
10.5. Incompatible materials	Strong oxidizing agents. Strong acids and strong bases. Can corrode base metals.
10.6. Hazardous decomposition products	None under normal use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met. No data is available on the product itself. Toxicology data for the components citric acid (CAS 77-92-9) Dermal LD50 Rat > 2000 mg/kg (EU_CLH) Oral LD50 Rat = 3 g/kg (NLM_CIP)
Skin corrosion/irritation	Based on available data, the classification criteria are not met. May irritate skin.
Serious eye damage/eye irritation	Causes serious eye irritation. citric acid caused severe irritation to eyes in animal experiments.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - Single exposure	May cause respiratory irritation.
Specific target organ toxicity - Repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Human experience	No data available.

11.2. Information on other hazards

Endocrine disrupting properties	Contains no endocrine disrupting chemicals.
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Other information No data available.

SECTION 12: Ecological information

12.1. Toxicity	Based on available data, the classification criteria are not met. May change pH of waters. No data is available on the product itself. Toxicology data for the components
citric acid (CAS 77-92-9)	
EU - Ecolabel (66/2010) - Detergent Ingredient Database - Aerobic Degradation	Readily biodegradable according to OECD guidelines.
EU - Ecolabel (66/2010) - Detergent Ingredient Database - Anaerobic Degradation	Biodegradable under anaerobic conditions.
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	LC50 96 h Lepomis macrochirus 1516 mg/L (OECD_SIDS)
12.2. Persistence and degradability	Neutralization is normally necessary before waste water is discharged into water treatment plants. Expected to be biodegradable.
12.3. Bioaccumulative potential	Bioaccumulation is unlikely.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	This mixture does not contain any substances classified as PBT, vPvB or endocrine disruptors at a concentration above 0.1%.
12.6. Endocrine disrupting properties	Contains no endocrine disrupting chemicals.
12.7. Other adverse effects	No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

14.1. UN number or ID number	Not applicable.
14.2. UN proper shipping name	Not applicable.

14.3. Transport hazard class(es)	Not applicable.
14.4. Packing group	Not applicable.
14.5. Environmental hazards	Not applicable.
14.6. Special precautions for user	Not applicable.
14.7. Maritime transport in bulk according to IMO instruments	Not applicable.
UN Model Regulations	
ADR/RID	Not regulated.
IMDG	Not regulated.
IATA	Not regulated.
Further Information	Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Regulatory Information citric acid (CAS 77-92-9)	None.
EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	Use restricted. See entry 75.
EU - REACH (1907/2006) - List of Registered Substances	Present
UNEP (United Nations Environment Programme) - Basel Convention - Hazardous Wastes - Annex I	"Y34 (solid or solution, listed under Acidic solutions or acids in solid form)" As Acids [RR-08658-8]
15.2. Chemical safety assessment	Not required.

SECTION 16: Other information

Key or legend to abbreviations and acronyms	CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS) MAK: Occupational exposure limit. OEL: Occupational Exposure Limits for Hazardous Agents in the Workplace STEL: Short Term Exposure Limit TLV: Threshold limit value TWA: time weighted average VOC: Volatile organic compounds (VOC) content WEL: workplace exposure limit
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Key literature references and sources for data

According to information supplied by the manufacturer. Sources of key data used to compile the Safety Data Sheet: REACH, ECHA.

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 .
Calculation method .

Full text of phrases referred to under sections 2 and 3

H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Disclaimer

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.