
Safety data sheet

Date of compilation: 28.01.2009
Revision: 09.11.2020

Page 1 of 9

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

1.1 Product identifier

Identification of the mixture: Q-FLASH[®] ret (L)

Article number: 2004-1036

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

Identified uses: Concrete admixture

Not recommended use: Data not available.

1.3 Details of the supplier providing the safety data sheet

Supplier: Concretum Construction Science AG, Steinackerstrasse 56, 8302 Kloten

Person responsible: safety@concretum.com

1.4 Emergency telephone number

Toxicological Information Centre: 145 (within Switzerland)
+41 44 251 51 51 (from abroad)
Concretum Construction Science AG: +41 44 445 13 46
www.concretum.com

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2009 (CLP)

Section	Hazard class	Hazard class and category	Hazard statement
3.3	Serious eye damage / eye irritation	(eye irrit. 2)	H319

2.2 Label elements

Regulation (EC) No 1272/2009 (CLP)

Pictograms

GHS07



Signal word

Hazard

Hazard statements

H319 Causes severe eye damage.

Precautionary statements

P305 + P351 + P338 IN CASE OF CONTACT WITH EYES: Rinse gently with water for several minutes. Remove contact lenses if present and possible. Continue rinsing.

P337+P313 If eye irritation persists: seek medical advice/attention.

Special regulations according to Annex XVII of the REACH Regulation subsequent amendments:

None.

2.3 Other hazards

No ingredient PBT/ vPvB is present

Other risks: no other risks.

SECTION 3: Composition/information on ingredients

3.1 Substances

N.A.

3.2 Mixture

Hazardous ingredients:	CAS-No	Concentration	Molecular formula	Molar mass
	5949-29-1	< 50%	C ₆ H ₈ O ₇ · H ₂ O	210.1 g/mol

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Take off contaminated clothing.

Following inhalation

Fresh air supply. Seek medical advice if symptoms occur.

Following skin contact

Wash skin with soap and plenty of water. Remove contaminated clothing and wash before the next use.

Following eye contact

Rinse opened eyes immediately with plenty of water. Continue rinsing for at least 15 minutes. If irritation persists, consult a doctor.

Following ingestion

Rinse mouth (tooth erosion possible with repeated exposure). Consult a doctor if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

Irritation

4.3 Indication of immediate medical attention and special treatment required

None

SECTION 5: Firefighting measures

5.1 Suitable extinguishing media

Water spray, CO₂, powder, water mist. Adjust firefighting measures to the surrounding area.

5.2 Special hazards arising from the substance or mixture

None.

5.3 Advice for firefighting

None

SECTION 6: Accidental release measures

6.1 Personal precautions

Use personal safety equipment (see also chapter 8).

6.2 Environmental precautions

Do not allow large quantities to enter drains or watercourses.

6.3. Methods for cleaning

Absorb with liquid-binding material (sand, gravel, universal binder, Penta 77).

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid eye and skin contact. The usual precautionary measures when handling chemicals must be taken. Do not eat, drink or smoke while processing the product. Use only in well-ventilated rooms and avoid direct inhalation of vapours.

7.2 Conditions for safe storage taking into account incompatibilities

Store at constant temperatures between 5°C and 30°C in a dry and ventilated place. Avoid direct sunlight and strong heating.

7.3 Specific end uses

Recommendations

No special purpose

Specific solutions for the industrial sector

No special purpose

SECTION 8: Exposure controls / personal protection

8.1 Parameters to be monitored

National limit values

Occupational exposure limit values (Workplace exposure limits)

No data available.

Relevant DNELs/DMELs/PNECs and other threshold levels

Endpoint	Threshold level	Environmental compartment	Exposure time
PNEC	0.44 mg/l	Fresh water	Short term (single instance)
PNEC	0.044 mg/l	Marine water	Short term (single instance)
PNEC	1.00 mg/l	Sewage treatment plant (STP)	Short term (single instance)
PNEC	34.60 mg/l	Fresh water sediment	Short term (single instance)
PNEC	3.46 mg/l	Marine sediment	Short term (single instance)
PNEC	33.10 mg/l	Soil	Short term (single instance)

8.2 Exposure controls and monitoring**Individual protection measures (personal protective equipment)**

Respiratory protection Not necessary with good room ventilation.

Hand protection Wear suitable protective gloves. (Chemical protective gloves tested according to EN374)

Type of material NBR (nitrile rubber)

Material thickness > 0.11 mm

Eye protection Safety goggle with side protection

Body protection Work clothing (personal protective equipment)

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

a) Physical state	liquid
b) Colour	colourless
c) Odour	characteristic
d) Melting point/ freezing point:	N.A.
e) Boiling point:	approx. 100° C
f) Flammability:	N.A.
g) Lower and upper explosive limits:	N.A.
h) Flash point:	N.A.
i) Ignition temperature:	N.A.
j) Decomposition temperature:	> 170 °C
k) pH (value):	0.5 – 2.5 at 20°C.
l) Kinematic viscosity	90 - 120 mm ² /s
m) Solubility:	Fully mixable with water.
n) n-octanol/water:	N.A. Product is a mixture.
p) Density:	1.230 +- 0.05 kg/L at 20 °C.
q) Relative vapour density:	N.A.
r) Particle properties:	N.A.

9.2 Other information

No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Exothermic reaction with: oxidizing agent, reducing agent, bases, metals

10.4 Conditions to avoid

Protect from heat.

10.5 Incompatible materials

Substances to be avoided: oxidising agents, reducing agents, bases

10.6 Hazardous decomposition products

Combustion due to a major fire can lead to the formation of CO.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not to be classified as acutely toxic.

Exposure route	Endpoint	Value	Species	Source
oral	LD50	5.400 mg/l	mouse	ECHA
dermal	LD50	>2.000 mg/l	rat	ECHA

Skin corrosion / irritation

Not to be classified as corrosive / irritant to skin.

Serious eye damage / eye irritation

Causes severe eye damage.

Respiratory or skin sensitisation

Not to be classified as an inhalation or skin sensitizer.

Summary of evaluation of the CMR properties

Is not classified as germ cell mutagen, carcinogenic or toxic for reproduction.

Special target organ toxicity – single exposure

Not to be classified as specific target organ toxicant (single exposure).

Special target organ toxicity – repeated exposure

Not to be classified as specific target organ toxicant (repeated exposure).

Aspiration hazard

Not to be classified as hazardous for aspiration.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

No data available.

If in eyes

Irritating to the eyes

If inhaled

Slightly irritating, but not relevant for classification

Other information

None

SECTION 12: Ecological information

12.1 Toxicity

According to 1272/2008/EC: Not to be classified as hazardous to waters.

(Acute) Aquatic toxicity

Endpoint	Value	Species	Source	Exposure time
LC50	440 mg/l	fish	ECHA	48 h

(Chronic) Aquatic toxicity

Endpoint	Value	Species	Source	Exposure time
LC50	1.535 mg/l	Aquatic invertebrates	ECHA	24 h

12.2 Process of degradability

The substance is easily biodegradable.

Theoretical oxygen demand: 750 mg/g

Theoretical carbon dioxide: 1.257 mg/g

Biochemical oxygen demand: 526 mg/g at 5h

Process	Degradation rate	Exposure time
Biotic / abiotic	98 %	2 d

12.3 Bioaccumulative potential

Does not accumulate significantly in organisms.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Slightly hazardous to water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

RS 814.610 Regulation on the transport of waste (VeVA)

RS 814.600 Technical Regulation on Waste (VeVA)

RS 814.610.1 Regulation of the UVEK on lists for the transport of waste

Recycle if possible. Dispose of in officially approved landfills or incinerators. Proceed according to local and national regulations. Contact a local waste disposal service.

Product

Do not allow waste to enter the sewage system.

Do not contaminate ponds, waterways or ditches with chemicals or used containers.

Send to an authorized disposal service.

Packaging

Completely emptied containers must be sent to a suitable recycling facility (e.g. container recycling).

SECTION 14: Transport information

No dangerous goods according to the transport regulations.

14.1 UN number

N.A.

14.2 UN proper shipping name

N.A.

14.3 Transport hazard class(es)

N.A.

14.4 Packing group

N.A.

14.5 Environmental hazards

N.A.

14.6 Special precautions for user

N.A.

Road and rail transport (ADR-RID)

N.A.

Air transport (IATA)

N.A.

Maritime transport (IMDG)

N.A.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

N.A.

SECTION 15: Regulatory information

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

- **Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)**
Not listed.
- **Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)**
Not listed.
- **Regulation 850/2004/EC on persistent organic pollutants (POP)**
Not listed.
- **Restrictions according to REACH, Titel VIII**
None.
- **List of substances subject to authorisation (REACH, Annex XIV)/SVHC-candidate list**
Not listed.
- **Seveso Directive (2012/18/EU (Seveso III))**
Not assigned.

- **Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)-Annex II**
Not listed.
- **Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**
Not listed.
- **Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**
Not listed.
- **Regulation 98/2013/EU on the marketing and use of precursors to explosives**
Not listed.
- **Regulation 111/2005/ laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Not listed.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this substance.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of abbreviations
ADN	European Agreement concerning the international carriage of dangerous goods
ADR	European Agreement concerning the international carriage of dangerous goods by road
AwSV	Regulation on installations for handling substances hazardous to water
CAS	Database of chemical compounds and their unique key, the CAS Registry Number, Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, mutagenic or toxic to reproduction
DGR	Dangerous Goods Regulations
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International air transport association
IATA/DGR	Dangerous Goods Regulations for the air transport
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
MARPOL	Marine Pollutant
NLP	No-Longer Polymer
PBT	Persistent, bioaccumulative and toxic

PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the international carriage of dangerous goods by rail
SVHC	Substance of Very High Concerns
vPvB	Very Persistent and very Bioaccumulative

The information contained in this safety data sheet is based on our knowledge at the time of publication. The information is intended for a safety and health assessment by a specialist. Regardless of this, the applicable national or local regulations must be complied with. There is no transferability to other products or to other substances which have been mixed with the product described in this safety data sheet.
