Safety Data Sheet

according to Regulation (EC) No 1907/2006

VELOSIT FH 921

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

1.1. Product identifier

VELOSIT FH 921

Further trade names / Item numbers

x

UFI: KASF-ESYS-HFC9-M8N8

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

Use of the substance/mixture

Binder

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	VELOSIT GmbH & Co.KG	
Street:	Industriepark 7	
Place:	D-32805 Horn-Bad Meinberg	
Telephone:	++49 5233/951-7302	Telefax:++49 5233/951-7301
e-mail:	info@velosit.de	
Internet:	www.velosit.de	
Responsible Department:	Product safety	

1.4. Emergency telephone number:

++49 5233/951-7300 (Mo.-Fr.: 8.00-16.00h)

Further Information

Emergency telephone number:
Austria (A): Vergiftungsinformationszentrale Wien: ++43 1 406 43 43
Belgium (B): Centre Antipoisons: ++32 70 245245

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:
Causes skin irritation.
Causes serious eye irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of Water.
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

If the product is available for everybody, additionally:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

2.3. Other hazards

No information available.

* SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Water, soda water glass, additives

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1344-09-8	Silicic acid, sodium salt - lumps or aqueous solutions of molar ratio MR > 3.2			< 40 %
	215-687-4		01-2119448725-31	
497-19-8	Sodium carbonate			< 10 %
	207-838-8		01-2119485498-19	
	Eye Irrit. 2; H319			
31795-24-1	Potassium methylsilanetriolate			< 3 %
	250-807-9		01-2119517439-34	
	Skin Corr. 1A; H314			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

Wash with plenty of water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water.

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

May cause irritation to eyes and skin.

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.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with eyes and skin.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. To clean the floor and all objects contaminated by this material, use 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

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Binder

* SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
1344-09-8	Silicic acid, sodium salt - lumps or aqueous solutions of molar ratio MR > 3.2			
Worker DNEL, long-term		inhalation	systemic	5.61 mg/m³
Worker DNEL, long-term		dermal	systemic	1.59 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1.38 mg/m³
Consumer DNEL, long-term		dermal	systemic	0.8 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0.8 mg/kg bw/day
497-19-8	Sodium carbonate			
Worker DNEL, long-term		inhalation	local	10 mg/m³
Consumer DNEL, long-term		inhalation	local	10 mg/m³
Consumer DNEL, acute		inhalation	local	10 mg/m³
31795-24-1	Potassium methylsilanetriolate			
Worker DNEL, long-term		inhalation	systemic	11.3 mg/m³
Worker DNEL, long-term		dermal	systemic	1.6 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2 mg/m³
Consumer DNEL, long-term		dermal	systemic	0.6 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0.08 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
1344-09-8	Silicic acid, sodium salt - lumps or aqueous solutions of molar ratio MR > 3.2	
Freshwater		7.5 mg/l
Freshwater (intermittent releases)		7.5 mg/l
Marine water		1 mg/l
Micro-organisms in sewage treatment plants (STP)		348 mg/l
31795-24-1	Potassium methylsilanetriolate	
Freshwater sediment		4.8 mg/kg
Marine sediment		0.48 mg/kg
Micro-organisms in sewage treatment plants (STP)		7.1 mg/l
Soil		0.19 mg/kg

Additional advice on limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2. Exposure controls

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Wear protective gloves. Suitable materials: NR (Natural rubber (Caoutchouc), Natural latex). CR (polychloroprene, chloroprene rubber), Butyl caoutchouc (butyl rubber), NBR (Nitrile rubber), FKM (fluoro rubber)

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

* SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	odourless
pH-Value (at 20 °C):	10-11

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

The product is not explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density (at 20 °C):	1-1.2 g/cm³
Water solubility: (at 20 °C)	completely miscible

Solubility in other solvents

not determined

Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Base metals

10.6. Hazardous decomposition products

No known hazardous decomposition products.

* SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1344-09-8	Silicic acid, sodium salt - lumps or aqueous solutions of molar ratio MR > 3.2				
	oral	LD50 3400 mg/kg	Rat	IUCLID	OECD 401
	dermal	LD50 > 5000 mg/kg	Rat	IUCLID	EPA OPPTS 870.1200
	inhalation (4 h) aerosol	LC50 > 2,06 mg/l	Rat	IUCLID	EPA OPPTS 870.1300
497-19-8	Sodium carbonate				
	oral	LD50 2800 mg/kg	Rat	IUCLID	
	dermal	LD50 > 2000 mg/kg	Rabbit	IUCLID	EPA 16 CFR 1500.40
	inhalation (2 h) aerosol	LC50 2.3 mg/l	Rat	IUCLID	
31795-24-1	Potassium methylsilanetriolate				
	oral	LD50 > 2000 mg/kg	Rat	IUCLID	OECD 423

Irritation and corrosivity

Causes skin irritation.
Causes serious eye irritation.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Aspiration hazard

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

Additional information on tests

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

* SECTION 12: Ecological information

12.1. Toxicity

The product is not ecotoxic.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
497-19-8	Sodium carbonate						
	Acute fish toxicity	LC50	300 mg/l	96 h	freshwater fish	IUCLID	
	Acute crustacea toxicity	EC50	200 mg/l	48 h	freshwater invertebrates	IUCLID	
31795-24-1	Potassium methylsilanetriolate						
	Acute fish toxicity	LC50 mg/l	> 500	96 h	Brachydanio rerio	IUCLID	EU Method C.1
	Acute crustacea toxicity	EC50 mg/l	> 500	48 h	Daphnia magna	IUCLID	EU Method C.2

12.2. Persistence and degradability

The product is an alkali. Before discharge into sewage plants the product normally needs to be neutralised.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
31795-24-1	Potassium methylsilanetriolate			
	OECD 310 and ISO Guideline N 14593	0%	28	IUCLID
	not biodegradable.			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

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.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

* SECTION 15: Regulatory information

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

EU regulatory information

Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils 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

Changes

Section 1, 3, 8, 9, 11, 12, 15

Abbreviations and acronyms

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
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

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

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

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.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Binder	PW, C	-	9a	-	-	-	-	Coating

LCS: Life cycle stages
SU: Sectors of use
PC: Product categories
PROC: Process categories
ERC: Environmental release categories
AC: Article categories
TF: Technical functions

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