Safety Data Sheet
According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II

Trade name :	**CAF 4**	Revision date :	07.05.2015
Part number :	**214-233**	Date of print :	22.01.2020
		Version :	5.1

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

1.1 Product Identifier

Product name: Sealing material CAF 4

1.2 Relevant identified uses of the substance or mixture and uses advised against relevant identified uses (Product categories [PC]

Identified uses: Used for making joints, sealing and gluing.

Uses advised against: none known.

1.3 Details of the supplier of the safety data sheet

Supplier:	INFICON AG
Street:	Alte Landstrasse 6
Postal code/city:	LI-9496 Balzers
Phone:	00423 / 388 3111
E-Mail:	reach.liechtenstein@inficon.com

1.4 Emergency Telephone Number (worldwide)

Tox Info Suisse +41 44 251 51 51 (24 hours)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended:

Xn; R48/20

Classification according to Regulation (EC) No. 1272/2008 as amended:

Health Hazards:

Specific Target Organ Toxicity - Repeated Exposure	Category 1	Causes damage to organs through prolonged or repeated exposure.

Hazard summary:

Physical Hazards: No specific recommendations.

Health Hazards:

Inhalation: Quartz : When encapsulated in a polymer, is not expected to pose a health hazard when processed under normal conditions of use. Although classified according to EC criteria, this product is exempt from labelling according to article 23 and Annex 1 (section 1.3.4.1) of regulation (CE) n°1272/2008.

Eye contact: No specific symptoms noted.

Skin Contact: No specific symptoms noted.

Ingestion: No specific symptoms noted.

Other Health Effects: No other information noted.

Environmental hazards: Not regarded as dangerous for the environment.

2.2 Label elements

Safety data sheet available on request

2.3 Other hazards

No data available

Chemical name	Concentration	CAS-No.	EC No.	Reach Registration No.	INDEX No.
Acetic acid…%	<2%	64-19-7	200-580-7		#
Butan-1-ol n-Butanol	<0.002%	71-36-3	200-751-6		#

3 Composition/information on ingredients

3.1 Mixtures

General information:

Mixture of Polyorganosiloxanes, fillers, additives

Chemical name	Concentration	CAS-No.	EC No.	REACHT Registration No.	Notes
Quartz (SiO2)	<25%	14808-60-7			#
Methylsilantriyltriacetat	<2%	4253-34-3			
Triacetoxyethylsilan	<2%	17689-77-9			
Acetic acid…%	<1%	64-19-7	200-580-7		#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
#: This substance has workplace exposure limit(s).
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

Classification:

Chemical name	Classification		Notes
Quartz (SiO2)	DSD:	Xn; R48/20	
	CLP:	STOT RE 1;H372	
Methylsilantriyl triacetate	DSD:	C;R34 Xn; R22	
	CLP:	Acute Tox. 4;H302, Skin Corr. 1B;H314	
Triacetoxyethylsilan	DSD:	R14 C; R34 Xn; R22	
	CLP:	Acute Tox. 4;H302, Skin Corr. 1B;H314	
Acetic acid…%	DSD:	R10 C; R35	
	CLP:	Flam. Liq. 3;H226, Skin Corr. 1A ;H314	

DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008:

The full text for all R- and H-phrases is displayed in section 16.

4 First aid measures

General information

Get medical attention if symptoms occur. Contaminated clothing to be placed in closed container until disposal or decontamination.

4.1 Description of first aid measures

After inhalation

Move into fresh air and keep at rest.

In case of skin contact

Remove contaminated clothing and shoes. Wash with soap and water.

After eye contact

In the event of contact with the eyes, rinse thoroughly with clean water. Continue to rinse for at least 15 minutes.

After ingestion

Do not induce vomiting. Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed

None known

4.3 Indication of any immediate medical attention and special treatment needed

Hazards:

No specific recommendations.

Treatment:

No specific recommendations.

5 Firefighting measures

General Fire Hazards:

No specific recommendations.

5.1 Extinguishing media

Suitable extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

Do not use water as an extinguisher.

5.2 Special hazards arising from the substance or mixture

For further information, refer to Section 10 “Stability and Reactivity”.

5.3 Advice for firefighters

Special fire fighting procedures:

Water spray should be used to cool containers.

Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Do not breathe vapor. See Section 8 of the MSDS for Personal Protective Equipment. Ventilate the area.

6.2 Environmental precautions

Collect spillage. Do not discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent.(cf. : § 9) Flush area with plenty of water. Incinerate in suitable combustion chamber.

6.4 Notification Procedures

Caution: Contaminated surfaces may be slippery. For waste disposal, see section 13 of the MSDS.

7 Handling and storage

7.1 Precautions for safe handling

Adequate ventilation should be provided so that exposure limits are not exceeded.

7.2 Conditions for safe storage, including any incompatibilities

Avoid discharge into drains, water courses or onto the ground. Store in tightly closed original container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Avoid contact with oxidizing agents. Vulcanises at room temperature on contact with moisture in the air. For further information, refer to Section 10: "Stability and Reactivity". Suitable containers: Steel drums coated with epoxy-resin.

7.3 Specific end use(s)

No data available.

8 Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits:

None of the components have assigned exposure limits.
Quartz: When encapsulated in a polymer, is not expected to pose a health hazard when processed under normal conditions of use.

Additional exposure limits under the conditions of use

Chemical name	Type	Exposure Limit Values		Source
Acetic acid…%	TWA	10 ppm	25 mg/m³	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU (12 2009)
	STEL	20 ppm	50 mg/m³	Switzerland. SUVA Grenzwerte am Arbeitsplatz (2009)
	TWA	10 ppm	25 mg/m³	Switzerland. SUVA Grenzwerte am Arbeitsplatz (2009)
Butan-1-ol n-Butanol	STEL	50 ppm	150 mg/m³	Switzerland. SUVA Grenzwerte am Arbeitsplatz (2009)
	TWA	50 ppm	150 mg/m³	Switzerland. SUVA Grenzwerte am Arbeitsplatz (2009)

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Use engineering controls to reduce air contamination to permissible exposure level.

Personal protection equipment

General information
Provide sufficient ventilation during operations which cause vapor formation.

Eye / face protection

Safety Glasses

Skin protection

Hand protection:

Rubber gloves are recommended.

Other:

It is a good industrial hygiene practice to minimize skin contact.

Wear suitable protective clothing.

Respiratory protection

If ventilation is insufficient, suitable respiratory protection must be provided. Use respiratory equipment with gas filter, type E.

Hygiene measures:

Provide eyewash station and safety shower.

Environmental Controls:

No data available.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical State:	Paste
Form:	Viscous.
Colour:	Off-white
Odor:	Vinegar.
Odor Threshold:	No data available.
pH:	Not applicable
Melting Point:	No data available.
Boiling Point:	No data available.
Flash Point:	150 °C (No data recorded.)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)–:	No data available.

Flammability Limit - Lower (%)–:	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Relative density:	1,13 (20 °C) Approximate
Solubility(ies):	
Solubility in Water:	Practically Insoluble
Solubility (other):	Acetone.: Insoluble
	Ethanol.: Insoluble
	Petrol.: Dispersible
	White-spirit.: Dispersible
	Aromatic hydrocarbons.: Dispersible
	Chlorinated solvents.: Dispersible
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	Approximate 180 mm2/s (25 °C)
Explosive properties:	No data available.
Oxidizing properties:	According to the data on the components not considered as oxidizing. (evaluation by structure-activity relationship)

10 Stability and reactivity

10.1 Reactivity

Vulcanises at room temperature on contact with moisture in the air.

10.2 Chemical stability

Stable at room temperature provided it is not on contact with air.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No other information noted

10.5 Incompatible materials

Strong oxidizing agents. Water.

10.6 Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Amorphous silica.

11 Toxicological information

11.1 Information on likely routes of exposure

Inhalation: No data available.

Ingestion: No data available.

Skin Contact: No data available.

Eye contact: No data available.

11.2 Information on toxicological effects

Acute Toxicity:

Oral:

Product: Not classified for acute toxicity based on available data.

Dermal:

Product: Not classified for acute toxicity based on available data.

Inhalation:

Product: Composition/information on ingredients

Specified substance(s):

acetic acid...% LC 50 (Rat, 4 h): 11,4 mg/l

Repeated Dose Toxicity:

Product: No data available.

Skin Corrosion/Irritation:

Product: Composition/information on ingredients

Specified substance(s):

acetic acid...% Strongly irritating.

Serious Eye Damage/Eye Irritation:

Product: Composition/information on ingredients

Specified substance(s):

acetic acid...% Eye irritation has been noted at a concentration below 10 ppm.

Respiratory or Skin Sensitization:

Product: No data available.

Germ Cell Mutagenicity:

In vitro:

Product: No data available.

In vivo:

Product: No data available.

Carcinogenicity:

Product: No data available.

Reproductive Toxicity:

Product: No data available.

Reproductive Toxicity (Fertility):

Product: No data available.

Developmental Toxicity (Teratogenicity):

Product: No data available.

Specific Target Organ Toxicity - Single Exposure:

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure:

Product: No data available.

Aspiration Hazard:

Product: No data available.

12 Ecological information

12.1 Toxicity

Acute toxicity:

Fish:

Product: Composition/information on ingredients

Specified substance(s):

Triacetoxyethylsilane LC 50 (Zebra danio (Danio rerio), 96 h): 251 mg/l
acetic acid...% LC 50 (Oncorhynchus mykiss, 96 h): > 300,82 mg/l

Aquatic Invertebrates:

Product: Composition/information on ingredients

Specified substance(s):

acetic acid...% EC 50 (Water flea (Daphnia magna), 48 h): 300,82 mg/l

Chronic Toxicity:

Fish:

Product: No data available.

Aquatic Invertebrates:

Product: No data available.

Toxicity to Aquatic Plants:

Product: Composition/information on ingredients

Specified substance(s):

Triacetoxyethylsilane LC 50
(Algae (Pseudokirchneriella subcapitata), 72 h): 73 mg/l

12.2 Persistence and degradability

Biodegradation

No data available

BOD /COD Ratio

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available

13 Disposal considerations

13.1 Waste treatment methods

General information:

The user's attention is drawn to the possible existence of local regulations regarding disposal.

Disposal methods:

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate.
Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

14 Transport information

This material is not subject to transport regulations.

14.1 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

Not applicable.

Other information:

No special precautions.

15 Regulatory Information

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

National regulations

15.2 Chemical safety assessment

No data available.

16 Other informations

Revision Information:
Not relevant.

Key abbreviations or acronyms used:
No data available.

Key literature references and sources for data:
No data available.

Wording of the R-phrases and H-statements in section 2 and 3:

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H372	Causes damage to organs through prolonged or repeated exposure.
R10	Flammable.
R14	Reacts violently with water.
R22	Harmful if swallowed.
R34	Causes burns.
R35	Causes severe burns.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Training information:
No data available.

Inventory Status

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory

Issue Date: 07.05.2015

SDS No.:

Disclaimer:

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.