CHEMOFAST®

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CF Quick and Easy transparent

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

1.1. Product identifier

CF Quick and Easy transparent

UFI: UU50-K0Q5-4008-TSYG

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

Use of the substance/mixture

Adhesive, Sealant

1.3. Details of the supplier of the safety data sheet

Company name: Chemofast Anchoring GmbH
Street: Hanns-Martin-Schleyer-Str. 23
Place: D-47877 Willich
Telephone: +49 2154 8123 0 Telefax: +49 2154 8123 333
Internet: www.chemofast.de
Responsible Department: sdb@chemofast.de

1.4. Emergency telephone number:

+49 (0)551-19240 (GIZ-Nord, German und English 24/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1907/2006

Hazard categories:
Aerosol: Aerosol 3
Hazard Statements:
Pressurised container: May burst if heated.

2.2. Label elements

Regulation (EC) No 1907/2006

Signal word: Warning

Pictograms:

Hazard statements

H229 Pressurised container: May burst if heated.

Precautionary statements

P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling of certain mixtures

EUH208 Contains 3-aminopropyltriethoxysilane. May produce an allergic reaction.

2.3. Other hazards

The product releases methanol on contact with water.
Methanol: Highly flammable liquid and vapour. Toxic if swallowed, in contact with skin or if inhaled. Causes damage to organs.
Special danger of slipping by leaking/spilling product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
2768-02-7	Trimethoxyvinylsilane			1 - 5 %
	220-449-8		01-2119513215-52	
	Flam. Liq. 3, Acute Tox. 4; H226 H332			
13822-56-5	3-(Trimethoxysilyl)propylamine			1 - 3 %
	237-511-5		01-2119510159-45	
	Skin Irrit. 2, Eye Dam. 1; H315 H318			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
2768-02-7	220-449-8	Trimethoxyvinylsilane	1 - 5 %
	inhalation: LC50 = 16,8 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 3760 mg/kg; oral: LD50 = 7012 mg/kg		
13822-56-5	237-511-5	3-(Trimethoxysilyl)propylamine	1 - 3 %
	dermal: LD50 = > 10000 mg/kg; oral: LD50 = 3030 mg/kg		

Further Information

The product releases methanol on contact with water.
Contains: silicon dioxide.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off contaminated clothing and wash it before reuse.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin reactions, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician in any case!

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

The product releases methanol on contact with water.
Methanol: Highly flammable liquid and vapour. Toxic if swallowed, in contact with skin or if inhaled. The following symptoms may occur: stomach pain, Vomiting, Headache, Gastrointestinal complaints. May cause drowsiness or dizziness.

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

Treat symptomatically.
The product releases methanol on contact with water.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Dry extinguishing powder, alcohol resistant foam, Carbon dioxide

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Combustible.
In case of fire may be liberated: Silicon dioxide (SiO2), Nitrogen oxides (NOx), Carbon monoxide, Carbon dioxide.
Pressurised container: May burst if heated.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.
Full protection suit.

Additional information

Heating causes rise in pressure with risk of bursting.
Move undamaged containers from immediate hazard area if it can be done safely. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Dispose of waste according to applicable legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Do not breathe mist/vapours/spray. Avoid contact with eyes and skin. Remove all sources of ignition. Provide adequate ventilation.
Wear personal protection equipment (refer to section 8). Take off contaminated clothing and wash it before reuse.

For non-emergency personnel

Prevent spread over a wide area (e.g. by containment or oil barriers).

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

For containment

Take up mechanically, placing in appropriate containers for disposal. 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.

Other information

Special danger of slipping by leaking/spilling product.

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

Provide adequate ventilation as well as local exhaustion at critical locations. Ensure adequate ventilation of the storage area. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store in a dry place. Store in a closed container. Store in a cool dry place. Keep only in original packaging. Protect against direct sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Hints on joint storage

Do not store together with: strong acids or strong bases.
Keep away from: Food and feedingstuffs.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
2768-02-7	Trimethoxyvinylsilane			
Worker DNEL, long-term		dermal	systemic	0,2 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	4,9 mg/m³
Worker DNEL, long-term		inhalation	systemic	2,6 mg/m³
Consumer DNEL, long-term		oral	systemic	0,1 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	0,1 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,1 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	93,4 mg/m³
Consumer DNEL, long-term		inhalation	systemic	0,7 mg/m³
13822-56-5	3-(Trimethoxysilyl)propylamine			
Worker DNEL, long-term		dermal	systemic	8,3 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	17,4 mg/m³
Worker DNEL, long-term		inhalation	systemic	58 mg/m³
Consumer DNEL, long-term		oral	systemic	5,0 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	5,0 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	17,0 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
2768-02-7	Trimethoxyvinylsilane	
Freshwater		0,4 mg/l
Marine water		0,04 mg/l
Freshwater sediment		1,5 mg/kg
Marine sediment		0,15 mg/kg
Micro-organisms in sewage treatment plants (STP)		6,6 mg/l
Soil		0,6 mg/kg
13822-56-5	3-(Trimethoxysilyl)propylamine	
Freshwater		0,33 mg/l
Marine water		0,033 mg/l
Freshwater sediment		1,2 mg/kg
Marine sediment		0,12 mg/kg
Soil		0,045 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye protection/face protection. Wear safety glasses. DIN EN 166

Hand protection

Wear protective gloves. (EN ISO 374)
Recommended material: NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber); Breakthrough time (maximum wearing time): 480 min; Thickness of the glove material : >= 0,5 mm

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless, clear
Odour:	characteristic

Odour threshold:	No data available

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flash point:	not determined

Flammability

Solid/liquid:	not applicable
Gas:	not applicable
Lower explosion limits:	No data available
Upper explosion limits:	not determined
Auto-ignition temperature:	No data available

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	No data available
pH-Value:	not determined
Viscosity / kinematic: (at 40 °C)	>= 7 mm²/s
Water solubility:	No data available

Solubility in other solvents

insoluble in: Water

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	No data available
Density:	1,0 - 1,1 g/cm³
Relative vapour density:	not determined

9.2. Other information

Other safety characteristics

Solid content:	not determined
Evaporation rate:	not determined

Further Information

SECTION 10: Stability and reactivity

10.1. Reactivity

see section 10.3 "Possibility of hazardous reactions"

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

The product releases methanol on contact with water. Pressurised container: May burst if heated.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

10.5. Incompatible materials

strong acids or strong bases.

10.6. Hazardous decomposition products

Methanol

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
2768-02-7	Trimethoxyvinylsilane					
	oral	LD50 mg/kg	7012	Rat		
	dermal	LD50 mg/kg	3760	Rabbit		
	inhalation (4 h) vapour	LC50	16,8 mg/l	Rat		
	inhalation aerosol	ATE	1,5 mg/l			
13822-56-5	3-(Trimethoxysilyl)propylamine					
	oral	LD50 mg/kg	3030	Rat		
	dermal	LD50 mg/kg	> 10000	Rabbit		

Irritation and corrosivity

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

Sensitising effects

Contains 3-aminopropyltriethoxysilane. May produce an allergic reaction.

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
2768-02-7	Trimethoxyvinylsilane						
	Acute fish toxicity	LC50	191 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 mg/l	> 957	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 mg/l	168,7	48 h	Daphnia magna (Big water flea)		
13822-56-5	3-(Trimethoxysilyl)propylamine						
	Acute fish toxicity	LC50 mg/l	> 934	96 h	Brachydanio rerio (zebra-fish)		
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50	331 mg/l	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

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

12.7. Other adverse effects

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Subsequent waste code numbers of the European Waste Catalogue are considered as recommendations.

List of Wastes Code - residues/unused products

160505 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers other than those mentioned in 16 05 04

List of Wastes Code - used product

160505 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers other than those mentioned in 16 05 04

Contaminated packaging

Empty carefully and as completely as possible. Be careful with empty containers. With inflammation Explosion possible.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2

14.4. Packing group: -

Hazard label: 2.2

Classification code: 5A
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0
Transport category: 3
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.2

Classification code: 5A
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2.2
14.4. Packing group: -
Hazard label: 2.2

Special Provisions: 63, 190, 277, 327, 344, 381, 959
Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS, NON-FLAMMABLE
14.3. Transport hazard class(es): 2.2
14.4. Packing group: -
Hazard label: 2.2

Special Provisions: A98 A145 A167 A802

Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0

IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

National regulatory information

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

Abbreviations and acronyms

ADN: Accord européen relativ au transport international des marchandises Dangereuses par voie de Navigation
(European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labeling and Packaging
DMEL: Derived Minimal Effect level
DNEL: Derived No Effect Level
EC50: Effective concentration, 50%
ErC50: EC50 in terms of reduction of growth rate
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA)
IMDG: International Maritime Code for Dangerous Goods
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
NOEC: No Observed Effect Concentration
OECD: Oragnisation for Economic Co-operation and Development
PBT: persistent, bioaccumulative and toxic
vPvB: very persistent and very bioaccumulative
PNEC: Predicted No Effect Concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations Concerning the International Carriage of Dangerous Goods by Rail)
VOC: Volatile organic compound

Acute Tox. 2: Acute toxicity, Category 2
Aquatic Chronic 3: Long-term aquatic hazard, Category 3
Eye Irrit. 2: Serious eye damage/eye irritation, Category 2
Skin Sens. 1: Skin sensitilization, Category 1
STOT SE 3: Specific target organ toxicity (single exposure), Category 3
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
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
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)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
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 GB CLP Regulation

Classification	Classification procedure
Aerosol 3; H229	On basis of test data

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
EUH208	Contains 3-aminopropyltriethoxysilane. May produce an allergic reaction.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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