Express MS

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 15/07/2022 Revision date: 15/07/2022 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Express MS

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

1.2.1. Relevant identified uses

Main use category : Consumer use,Professional use,Industrial use
Use of the substance/mixture : Sealants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße, 1
72178 Waldachtal
Germany
T +49(0)7443 12-0 - F +49(0)7443 12-4222
info-sdb@fischer.de - www.fischer.de

Distributor
fischer fixings UK Ltd.
Whitely Road
Oxon OX10 9AT Wallingford
United Kingdom of Great Britain and Northern Ireland
T +44 14 91 82 79 00 - F +44 14 91 82 79 53
info@fischer.co.uk - www.fischer.co.uk

1.4. Emergency telephone number

Emergency number : +49(0)6132-84463 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Chronic 3 H412

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P273 - Avoid release to the environment.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements : EUH208 - Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, Dioctylzinnbisacetylacetonat, Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, trimethoxyvinylsilane; trimethoxy(vinyl)silane. May produce an allergic reaction.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
N-(3-(trimethoxysilyl)propyl)ethylenediamine	CAS-No.: 1760-24-3 EC-No.: 217-164-6 REACH-no: 01-2119970215-39	< 1	Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335
trimethoxyvinylsilane; trimethoxy(vinyl)silane	CAS-No.: 2768-02-7 EC-No.: 220-449-8 EC Index-No.: 014-049-00-0 REACH-no: 01-2119513215-52	< 1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 (ATE=16.8 mg/l/4h) Skin Sens. 1B, H317
Dioctylzinnbisacetylacetonat	CAS-No.: 54068-28-9 EC-No.: 483-270-6 REACH-no: 01-0000020199-67	< 0.5	Skin Sens. 1, H317 STOT SE 2, H371
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	CAS-No.: 41556-26-7 EC-No.: 255-437-1	< 0.5	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash with plenty of soap and water.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. If possible, show the doctor this safety data sheet. Failing this, show the doctor the packaging or label. Wash out mouth with water and afterwards drink plenty of water.

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

No additional information available

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 : Water spray. Dry powder. Foam. Carbon dioxide (CO2).

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Mechanically recover the product.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Avoid contact with skin, eyes and clothing. Remove dirty clothes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Store in a well-ventilated place. Keep cool.
Storage temperature	:	5 – 25 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Disposable gloves	Nitrile rubber (NBR), Chloroprene rubber (CR), Butyl rubber	3 (> 60 minutes)	-		

8.2.2.3. Respiratory protection

Respiratory protection:
No respiratory protection needed under normal use conditions. In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	Various colours.
Appearance	:	Paste.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Explosive limits	:	Not applicable
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available
pH	:	Not available
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	1.51 g/ml
Relative density	:	Not available
Relative vapour density at 20°C	:	Not applicable
Particle size	:	Not available
Particle size distribution	:	Not available
Particle shape	:	Not available
Particle aspect ratio	:	Not available
Particle aggregation state	:	Not available
Particle agglomeration state	:	Not available
Particle specific surface area	:	Not available
Particle dustiness	:	Not available

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Boiling point	140 – 146 °C
Flash point	120 °C
Vapour pressure	0.75 mm Hg

Dioctylzinnbisacetylacetonat (54068-28-9)	
Flash point	89 °C

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
Boiling point	> 350 °C
Flash point	92 °C
Vapour pressure	0.000001 mm Hg

trimethoxyvinylsilane; trimethoxy(vinyl)silane (2768-02-7)	
Boiling point	123 °C
Flash point	25.5 °C
Auto-ignition temperature	235 °C
Vapour pressure	88 hPa

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
LD50 oral rat	2295 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	1.49 – 2.44 mg/l
ATE CLP (oral)	2295 mg/kg bodyweight
ATE CLP (vapours)	1.49 mg/l/4h

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
ATE CLP (dust,mist)	1.49 mg/l/4h

Dioctylzinnbisacetylacetonat (54068-28-9)	
LD50 oral rat	2500 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat [ppm]	1224 ppm
ATE CLP (oral)	2500 mg/kg bodyweight
ATE CLP (gases)	1224 ppmv/4h

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
LD50 oral rat	2369 – 3920 mg/kg
ATE CLP (oral)	2369 mg/kg bodyweight

trimethoxyvinylsilane; trimethoxy(vinyl)silane (2768-02-7)	
LD50 oral rat	7120 mg/kg (OECD 401 method)
LD50 dermal rabbit	3760 mg/kg
LC50 Inhalation - Rat	16.8 mg/l (OECD 403 method)
ATE CLP (oral)	7120 mg/kg bodyweight
ATE CLP (dermal)	3760 mg/kg bodyweight
ATE CLP (vapours)	16.8 mg/l/4h
ATE CLP (dust,mist)	16.8 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
STOT-single exposure	May cause respiratory irritation.

Dioctylzinnbisacetylacetonat (54068-28-9)	
LOAEL (oral, rat)	4 mg/kg bodyweight
STOT-single exposure	May cause damage to organs.

STOT-repeated exposure : Not classified

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight
NOAEL (dermal, rat/rabbit, 90 days)	≥ 1545 mg/kg bodyweight

Dioctylzinnbisacetylacetonat (54068-28-9)	
LOAEC (inhalation, rat, gas, 90 days)	650 ppm (OECD 413 method)

Aspiration hazard : Not classified

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Viscosity, kinematic	3.1 mm²/s

Dioctylzinnbisacetylacetonat (54068-28-9)	
Viscosity, kinematic	25.1 mm²/s

trimethoxyvinylsilane; trimethoxy(vinyl)silane (2768-02-7)	
Viscosity, kinematic	0.7 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

Not rapidly degradable

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
LC50 - Fish [1]	597 mg/l Brachydanio rerio (zebra-fish)
EC50 - Crustacea [1]	81 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	126 mg/l Desmodesmus subspicatus
ErC50 algae	8.8 mg/l (OECD 201 method)
NOEC chronic algae	20 mg/l

Dioctylzinnbisacetylacetonat (54068-28-9)	
EC50 - Crustacea [1]	58.63 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	300 mg/l

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
LC50 - Fish [1]	0.97 mg/l
EC50 96h - Algae [1]	0.017 mg/l

trimethoxyvinylsilane; trimethoxy(vinyl)silane (2768-02-7)	
LC50 - Fish [1]	> 92.2 mg/l Oryzias latipes (Ricefish)
EC50 - Crustacea [1]	168.7 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	> 957 mg/l Desmodesmus subspicatus
LOEC (chronic)	52.4 mg/l
NOEC (chronic)	28.1 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Partition coefficient n-octanol/water (Log Pow)	-1.67

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
Partition coefficient n-octanol/water (Log Pow)	0.37

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	:	Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.
European List of Waste (LoW) code	:	20 00 00 - MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated

No supplementary information available

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals):
Dioctylzinnbisacetylacetonat (54068-28-9)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number

Abbreviations and acronyms:	
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
EUH208	Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, Dioctylzinnbisacetylacetonat, Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, trimethoxyvinylsilane; trimethoxy(vinyl)silane. May produce an allergic reaction.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H371	May cause damage to organs.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aquatic Chronic 3	H412	Calculation method

The classification complies with : ATP 12

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.