

SAFETY DATA SHEET

Elements Fix-MD

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

1.1. Product identifier

Product name Elements Fix-MD

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

Adhesive

1.3. Details of the supplier of the safety data sheet

Supplier Abacus Direct Limited,
 Abacus House,
 Jubilee Court,
 Copgrove,
 Harrogate,
 United Kingdom,
 HG3 3TB
 Tel: 0345 850 50 40

1.4. Emergency telephone number Tel: 0345 850 50 40

SECTION 2: Composition/Information on ingredients

2.1. Classification of the substance or mixture Classification (EC 1272/2008)

Hazardous Ingredients	CAS No. EINECS/ ELINCS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9 258-207-9	0.1 – 1.0	Xi;N	36-51/53 (1)
trimethoxyvinylsilane	2768-02-7 220-449-8	1 - 20	Xn	10-20-65 (1)
dibutylbis(pentane-2,4-dionatov O,O')tin	22673-19-4 245-152-0	0.1 – 1.0	Xi;N	36/38-48/22-51/53 (1)

(1) For R-phrases in full: see heading 16

SECTION 3: Hazards Identification

- No hazard classification according to Directive 67/548/EEC and 1999/45/EC

SECTION 4: First aid measures

4.1 Eye contact:

- Rinse immediately with plenty of water
- Seek medical advice

4.2 Skin contact:

- Rinse immediately with plenty of water
- If irritation persists: seek medical advice

4.3 After inhalation:

- Remove the victim into fresh air
- Seek medical advice

4.4 After ingestion:

- Never give water to an unconscious person
- Do not induce vomiting
- Seek medical advice

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Polyvalent foam
- Dry chemical powder
- Carbon dioxide

5.2. Special hazards arising from the substance or mixture

- None

5.3. Special exposure hazards:

- Not easily Combustible
- On burning: release of carbon monoxide and carbon dioxide

5.4. Instructions

- No specific firefighting instructions required

5.5. Special protective equipment for firefighters

- Heat/fire exposure: compressed air/oxygen apparatus

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- See headings 8.1/8.3/10.3

6.2. Environmental precautions

- - Use appropriate containment to avoid environmental contamination

6.3. Methods and material for containment and cleaning up

- Cover the solid spill with sand/kieselguhr
- Scoop solid spill into closing containers
- Clean contaminated surfaces with an excess of water

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Observe normal hygiene standards

7.2. Conditions for safe storage, including any incompatibilities

- Keep container tightly closed
- Store in a dry area

7.3. Specific end use(s)

- See information supplied by the manufacturer

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SECTION 8: Exposure Controls/personal protection

8.1. Control parameters Occupational exposure limits

TLV-TWA	:	not listed
TLV-STEL	:	not listed
TLV-Ceiling	:	not listed
OES-LTEL	:	not listed
OES-STEL	:	not listed
MEL-LTEL	:	not listed
MEL-STEL	:	not listed
MAK	:	not listed
TRK	:	not listed
MAC-TGG 8 h	:	not listed
MAC-TGG 15 min.	:	not listed
MAC-Ceiling	:	not listed
VME-8 h	:	not listed
VLE-15 min.	:	not listed
GWBB-8 h	:	not listed
GWK-15 min.	:	not listed
Momentary value	:	not listed
EC	:	not listed
EC-STEL	:	not listed

8.2. Exposure controls

8.2.1 Occupational exposure controls: - Use only in well ventilated area

8.2.2 Environmental exposure controls: see heading 13

8.3 Personal protection:

8.3.1 respiratory protection: - In case of insufficient ventilation: respiratory protection with filter type A

8.3.2 hand protection: - Gloves

8.3.3 eye protection: - Safety glasses

8.3.4 skin protection: - Suitable protective clothing

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance (at 20°C)	:	Paste
Odour	:	Almost odourless
Colour	:	Grey

9.2. Important health, safety and environmental information:

pH value	:	N.D.
Boiling point/boiling range	:	N.D. °C
Flashpoint	:	N.D. °C
Explosion limits	:	N.D.
Vol% Vapour pressure (at 20°C)	:	N.D.
hPa Vapour pressure (at 50°C)	:	N.D.
hPa Relative density (at 20°C)	:	1.7
Water solubility	:	Insoluble
Soluble in	:	Organic solvents
Relative vapour density	:	N.D.
Viscosity (at 20°C)	:	N.D. Pa.s
Partition coefficient n-octanol/water	:	N.D.
Evaporation rate ratio to		
butyl acetate	:	N.D.
ratio to ether	:	N.D.

9.3. Other information

SECTION 10: Stability and reactivity

10.1 Conditions to avoid/reactivity: -

- Stable under normal conditions
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10.2 Materials to avoid: -

- None
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10.3 Hazardous decomposition products: -

- On burning: release of carbon monoxide, carbon dioxide and formation of small quantities of hydrogen chloride and nitrous vapours

SECTION 11: Toxicological information

11.1. Acute toxicity:

bis(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE:

LD50 oral rat	:	3700	mg/kg
LD50 dermal rat	:	> 2000	mg/kg
LD50 dermal rabbit	:	> 3100	mg/kg
LC50 inhalation rat	:	N.D.	mg/l/4 h
LC50 inhalation rat	:	N.D.	ppm/4 h

TRIMETHOXYVINYL SILANE:

LD50 oral rat	:	7120	mg/kg
LD50 dermal rat	:	N.D.	mg/kg
LD50 dermal rabbit	:	3434	mg/kg
LC50 inhalation rat	:	16	mg/l/4
LC50 inhalation rat	:	2714	ppm/4 h

11.2 Chronic toxicity:

EC carc. cat.	:	not listed
EC muta. cat.	:	not listed
EC repr. cat.	:	not listed
Carcinogenicity (TLV)	:	not listed
Carcinogenicity (MAC)	:	not listed
Carcinogenicity (VME)	:	not listed
Carcinogenicity (GWBB)	:	not listed
Carcinogenicity (MAK)	:	not listed
Mutagenicity (MAK)	:	not listed
Teratogenicity (MAK)	:	not listed
IARC classification	:	not listed

11.3 Routes of exposure : ingestion, inhalation, eye and skin

11.4 Acute effects/symptoms: - Unlikely to cause harmful effects

11.5 Chronic effects: - Unlikely to cause harmful effects

SECTION 12: Ecological Information

12.1 Ecotoxicity:

bis(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE: -

- LC50 (96 h) : 4.4 mg/l (BRACHYDANIO RERIO) –
- EC50 (24 h) : 17 mg/l (DAPHNIA SP.)
- EC50 (72 h) : 1.9 mg/l (SCENEDESMUS SUBSPICATUS)

TRIMETHOXYVINYL-SILANE: -

- LC50 (96 h) : ≥ 100 mg/l (BRACHYDANIO RERIO) –
- EC50 (48 h) : 168.7 mg/l (DAPHNIA MAGNA)

12.2 Mobility: -

- Volatile organic compounds (VOC) : 2 % -
- Insoluble in water
- Substance sinks in water
- For other physicochemical properties see section 9

12.3 Persistence and degradability:

- biodegradation BOD5 : N.D. % ThOD –
- water : No data available
- soil : T $\frac{1}{2}$ N.D. days

12.4 Bioaccumulative potential: -

- log Pow : N.D.
- BCF : N.D.

12.5 Other adverse effects:

- WGK : 1 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999) –
- Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC) –
- Greenhouse effect : No data available –
- Effect on waste water purification : No data available

SECTION 13: Disposal considerations

13.1 Provisions relating to waste: -

- Waste material code (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 10 (waste adhesives and sealants other than those mentioned in 08 04 09)

13.2 Disposal methods: -

- No data available

13.3 Packaging: -

- Waste material code packaging (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 02 (plastic packaging)

SECTION 14: Transport information

14.1 Classification of the substance in compliance with UN Recommendations

UN number : -
CLASS : NOT SUBJECT
SUB RISKS :
PACKING :
PROPER SHIPPING NAME :

14.2 ADR (transport by road)

CLASS : NOT SUBJECT
PACKING :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :

14.3 RID (transport by rail)

CLASS : NOT SUBJECT
PACKING :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :

14.4 ADNR (transport by inland waterways)

CLASS : NOT SUBJECT
PACKING :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :

14.5 IMDG (maritime transport)

CLASS : NOT SUBJECT
SUB RISKS :
PACKING :
MFAG :
EMS :
MARINE POLLUTANT :

14.6 ICAO (air transport)

CLASS : NOT SUBJECT
SUB RISKS :
PACKING :
PACKING INSTRUCTIONS PASSENGER AIRCRAFT :
PACKING INSTRUCTIONS CARGO AIRCRAFT :

14.7 Special precautions in connection with transport : Not restricted for any mode of

SECTION 15: Regulatory information

Labelling in accordance with EC directives 67/548/EEC and 1999/45/EC

LABELLING NOT REQUIRED ACCORDING TO AVAILABLE INFORMATION

SECTION 16: Other information

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

N.A. = NOT APPLICABLE

N.D. = NOT DETERMINED

* = INTERNAL CLASSIFICATION

Exposure limits:

TLV : Threshold Limit Value - ACGIH US 2004

OES : Occupational Exposure Standards - United Kingdom 2004

MEL : Maximum Exposure Limits - United Kingdom 1999

MAK : Maximale Arbeitsplatzkonzentrationen - Germany 2001

TRK : Technische Richtkonzentrationen - Germany 2001

MAC : Maximale aanvaarde concentratie - the Netherlands 2004

VME : Valeurs limites de Moyenne d'Exposition - France 1999

VLE : Valeurs limites d'Exposition à court terme - France 1999

GWBB : Grenswaarde beroepsmatige blootstelling - Belgium 1998

GWK : Grenswaarde kortstondige blootstelling - Belgium 1998

EC : Indicative occupational exposure limit values - directive 2000/39/EC

I : Inhalable fraction = T : Total dust = E : Einatembarer Aerosolanteil

R : Respirable fraction = A : Alveolengängiger Aerosolanteil/Alveolar dust

C : Ceiling limit

a: aerosol r: rook/Rauch (fume) d: damp (vapour) st: stof/Staub (dust) du: dust ve: vezel (fibre) fa: Faser (fibre)

va: vapour fi: fibre om: oil mist fu: fume on: olienevel/Ölnebel (oil mist) p: poussière (dust) part: particles

Chronic toxicity: K : List of the carcinogenic substances and processes - The Netherlands 2002

Full text of any R-phrases referred to under heading 2:

R10 : Flammable

R20 : Harmful by inhalation

R36 : Irritating to eyes

R36/38 : Irritating to eyes and skin

48/22 : Harmful: danger of serious damage to health by prolonged exposure if swallowed

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R65 : Harmful: may cause lung damage if swallowed