

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name: FBB-UL

Article-No.: 544083

Revision date: 06.09.2019

Version: 1.0/en



Print date: 06.09.2019

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

1.1 Product identifier

Commercial Product Name FBB-UL

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

Relevant identified uses PU foam with flame retardant

Recommended restrictions None under normal processing. Observe technical data sheet.

1.3 Details of the supplier of the safety data sheet

Company designation fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
D-72178 Waldachtal
Telephone: +49(0)7443 12-0
FAX: +49(0)7443 12-4222
Email: info-sdb@fischer.de
Internet: www.fischer.de

Marketer Great Britain: Mrs Mirka Valovicova, fischer Fixing (UK) Ltd, Hithercroft Road, Wallingford, Oxfordshire, OX10 9AT, Tel. 01491 827 920, Fax 01491 827 950 / Singapore: fischer systems Asia Pte. Ltd., 4 Kaki Bukit Ave. 1 #01-06, 417939 Singapore, Tel (65) 6741 0480 Fax (65) 6741 0481
www.fischer.sg
Telephone:
FAX:
Email:
Internet:

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regula- Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317
tion (EC) No. 1272/2008 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373

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2.2 Label elements

Hazard pictogram



GHS08

Signal word

Danger

Hazardous component(s) to be indicated on label

4,4'-methylenediphenyl diisocyanate, isomers and homologues

H-statement(s)

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H351: Suspected of causing cancer .
H373: May cause damage to organs through prolonged or repeated exposure .

P-statement(s)

P201: Obtain special instructions before use.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P284: (In case of inadequate ventilation) wear respiratory protection.
P302+P352: IF ON SKIN: Wash with plenty of water/ .
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P501: Dispose of contents/container to special waste treatment .

Further information

Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.
EUH204: Contains isocyanates. May produce an allergic reaction.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Ingredient	CAS No.	Classification (EC) 1272/2008	Concentration
4,4'-methylenediphenyl diisocyanate, isomers and homologues	CAS No.: 9016-87-9 EC-No.: 618-498-9 REACH No.: The substance does not require registration according to Regulation (EC) No 1907/2006 [REACH].	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373	< 30.0 % by weight

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	If symptoms persist, call a physician. Remove/Take off immediately all contaminated clothing.
If inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
In case of skin contact	IF ON SKIN: Gently wash with plenty of soap and water.
In case of eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If swallowed	If swallowed, seek medical advice immediately and show this container or label. Clean mouth with water and drink afterwards plenty of water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	None known.
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4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention	No data available
Special medical treatment	No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO2) Dry powder Foam Water spray jet
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Extinguishing media which must not be used for safety reasons High volume water jet

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases Heating or fire can release toxic gas.

5.3 Advice for firefighters

Special protective equipment for firefighting In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes.

Additional information on fire-fighting Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Keep containers and surroundings cool with water spray. Container may rupture on heating.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Environmental precautions The product should not be allowed to enter drains, water courses or the soil. Prevent spreading over a wide area (e.g. by containment or oil barriers).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up Use mechanical handling equipment. Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

Reference to other sections See chapter 7/8/13

6.5 Additional information

Other information Dispose of in accordance with local regulations.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	None under normal processing.
Advice on protection against fire and explosion	No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities

Storage space and container requirements	Keep containers tightly closed in a cool, well-ventilated place. Store in accordance with local regulations. Keep only in original container.
Hints on storage assembly	Store in accordance with the particular national regulations.
TRGS 510	LGK 10-13

7.3 Specific end use(s)

Specific use(s)	Further information: see technical data sheet.
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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Respiratory protection	No personal respiratory protective equipment normally required.
Hand protection	
Suitable material	butyl-rubber, Nitrile rubber, Chloroprene
Unsuitable material	PVC disposable gloves
Material thickness	>= 0,5 mm
Break through time	>120 min
Remarks	Replace when worn. Request information on glove permeation properties from the glove supplier. Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).
Eye protection	Tightly fitting safety goggles
Skin and body protection	Wear suitable protective equipment.

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Note	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
General protective and hygiene measures	Smoking, eating and drinking should be prohibited in the application area. Avoid contact with skin, eyes and clothing. Take off all contaminated clothing immediately. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feedingstuffs. Use protective skin cream before handling the product.
Information on environmental protection regulations	No special environmental precautions required.
Engineering measures	Not applicable.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	red brown
Odour	characteristic
Odour threshold	not determined
pH	No data available
Melting point [°C] / Freezing point [°C]	No data available
Boiling point [°C]	no data available
Initial boiling point [°C] and boiling range [°C]	No data available
Flash point [°C]	> 100
Evaporation rate [kg/(s*m ²)]	No data available
Explosion limits [Vol-%]	
Lower limit	No data available
Upper limit	No data available
Lower limit	not determined
Upper limit	not determined
Vapour pressure [kPa]	No data available not determined
Vapour density	No data available
Density [g/cm ³]	1,3

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Solubility [g/l]	No data available
Partition coefficient n-octanol /water (log P O/W)	No data available
Autoignition temperature [°C]	not determined
Autoinflammability	not auto-flammable
Explosive properties	Not explosive
Risk of explosion.	Not explosive

SECTION 10: Stability and reactivity

10.1 Reactivity

Thermal decomposition No decomposition if stored and applied as directed.

10.2 Chemical stability

Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid No decomposition if used as directed.

10.6 Hazardous decomposition products

Hazardous decomposition products No decomposition if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Oral toxicity [mg/kg]

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues				
Value	Test criterion	Test species	Remarks	Source
> 5000	LD50	rat	OECD 423	Company data

Dermal toxicity [mg/kg]

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues			
Value	Test criterion	Test species	Source

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> 5000	LD50	rabbit	Company data
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Inhalative toxicity [mg/l]

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues			
Value	Test criterion	Exposure duration	Source
1,5	LC50	4 h	Company data

Irritant effect on skin

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues	
Value	Source
Irritant	Company data

Irritant effect on eyes

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues	
Value	Source
irritating	Company data

Irritant effect on the respiratory tract

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues	
Value	Source
Irritant	Company data

Sensitization

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues		
Value	Exposure type	Source
sensitising	Dermal	Company data
sensitising	Inhalation	Company data

11.2 Additional information

Other information (chapter 11.) The product itself has not been tested.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish [mg/l]

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues					
Value	Test criterion	Test species	Measuring method	Exposure duration	Source

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> 100	LC50	Brachydanio rerio (zebra fish)	OECD Test Guideline 203	96 h	Company data
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Toxicity to daphnia [mg/l]

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues					
Value	Test criterion	Test species	Exposure duration	Measuring method	Source
> 1000	EC50	Daphnia magna (Water flea)	24 h	OECD Test Guideline 202	Company data

Toxicity to algae [mg/l]

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues				
Value	Test criterion	Test species	Exposure duration	Source
> 1640	ErC50:	Scenedesmus subspicatus	72 h	Company data

NOEC (daphnia) [mg/l]

Hazardous ingredients

4,4'-methylenediphenyl diisocyanate, isomers and homologues				
Value	Test species	Measuring method	Exposure duration	Source
> 10	Daphnia magna (Big water flea)	OECD 202	21 d	Company data

12.2 Persistence and degradability

Elimination and distribution mechanisms There is no data available for this product.

Elimination in purification plant There is no data available for this product.

Biodegradability There is no data available for this product.

12.3 Bioaccumulative potential

Bioaccumulation There is no data available for this product.

Bioconcentration factor (BCF) There is no data available for this product.

12.4 Mobility in soil

Distribution in the environment There is no data available for this product.

Mobility There is no data available for this product.

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12.5 Results of PBT and vPvB assessment

Results of PBT characteristics determination

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Further information on ecology

No information on ecology is available. The product itself has not been tested.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations

The product should not be allowed to enter drains, water courses or the soil.
Dispose of waste according to applicable legislation.

Waste Code

080501 - waste isocyanates
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.2 Description of the goods	No dangerous good according to ADR	No dangerous good according to IMDG	No dangerous good according to IATA
14.2 UN proper shipping name		Non dangerous good	Non dangerous good

14.8 Additional information

Other information (chapter 14.)

Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

SECTION 15: Regulatory information

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

Restriction of occupation.

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

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This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

Water Hazard Class (Ger.) 1

15.2 Chemical safety assessment

Safety assessment Not relevant. Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Modifications since last version Modifications of the previous version are denoted with an asterisk (*).

Relevant H-phrases
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H351: Suspected of causing cancer .
H373: May cause damage to organs through prolonged or repeated exposure .

Wording of the hazard classes
Acute Tox.: Acute toxicity
Skin Irrit.: Skin irritation
Eye Irrit.: Serious eye irritation
Skin Sens.: Skin sensitization
Carc.: Carcinogenicity
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated exposure

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification	Evaluation
Skin Irrit. 2; H315	Calculated
Eye Irrit. 2; H319	Calculated
Resp. Sens. 1; H334	Calculated
Skin Sens. 1; H317	Calculated
Carc. 2; H351	Calculated
STOT SE 3; H335	Calculated
STOT RE 2; H373	Calculated

Recommended restrictions None under normal processing. Observe technical data sheet.

Modifications of the previous version are denoted with an asterisk (*).

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.