

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

1.1 Product identifier

Commercial Product Name	FBS EN
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Unique Formulation Identifier	5Y30-F0HC-500D-827A
(UFI)	

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

Relevant identified uses	One-component polyurethanic foam - Fire protection
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 Telephone: +44 01491 827 920 FAX: +44 01491 827 950 Internet: www.fischer.co.uk

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

tion (EC) No. 1272/2008

Classification according to Regula- 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

2.2 Label elements

Hazard pictogram



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	GHS08
Signal word	Danger
Hazardous component(s) to be in- dicated on label	Diphenylmethanediisocyanate, 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)	 P280: Wear protective gloves/protective clothing/eye protection/face protection. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P501: Dispose of contents/container to special waste treatment . P201: Obtain special instructions before use. P260: Do not breathe dust/fume/gas/mist/vapours/spray. P284: (In case of inadequate ventilation) wear respiratory protection. P302+P352: IF ON SKIN: Wash with plenty of water. 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.
Further information	EUH204: Contains isocyanates. May produce an allergic reaction. Persons already sensitised to diisocyanates may develop allergic reac- tions 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 un- less a protective mask with an appropriate gas filter (i.e. type A1 accord- ing to standard EN 14387) is used.
2.3 Other hazards	
Health hazard	No information available.
Particular information pertaining specific risk for human / environ- ment	No information available.
Indication of danger	No information available.
Hazard precautions	No information available.



SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Ingredient	CAS No.	Classification (EC) 1272/2008	Concentration
cyanate, isomers and ho- mologues	EC-No.: 618-498-9 REACH No.: The substance	H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2;	10.0 - 30.0 %

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	Take off immediately all contaminated clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Wear personal protection equipment (refer to section 8).	
If inhaled	Provide fresh air. In case of respiratory tract irritation, consult a physician.	
In case of skin contact	After contact with skin, wash immediately with plenty of water and soap. Do NOT use solvents or thinners.	
In case of eye contact	Remove contact lenses. In case of contact with eyes flush immediately with plenty of flowing wa- ter for 10 to 15 minutes holding eyelids apart and consult an ophthalmol- ogist.	
If swallowed	If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting.	
4.2 Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
4.3 Indication of any immediate medical attention and special treatment needed		
Immediate medical attention	If unconscious place in recovery position and seek medical advice.	
Special medical treatment	Treat symptomatically.	



SECTION 5: Firefighting measures

5.1 Extinguishing media

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Suitable extinguishing media	spray mist, (water), Water spray jet, alcohol resistant foam, carbon diox- ide, Extinguishing powder
Extinguishing media which must not be used for safety reasons	Full water jet

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising	Heating or fire can release toxic gas.
from the substance or prepara-	Fight fire with normal precautions from a reasonable distance.
tion itself, its combustion prod-	
ucts, or released gases	

5.3 Advice for firefighters

Special protective equipment for firefighting	In case of fire: Wear self-contained breathing apparatus. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).
Additional information on fire- fighting	Suppress (knock down) gases/vapours/mists with a water spray jet. Do not allow water used to extinguish fire to enter drains, ground or wa- terways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	For non-emergency personnel
	Accidental release measures:
	Wear personal protection equipment (refer to section 8).
	Remove all sources of ignition.
	Ensure adequate ventilation, especially in confined areas.
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6.2 Environmental precautions

Environmental precautions	The product should not be allowed to enter drains, water courses or the
	soil.
	Prevent spread 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	Allow stiffening. Take up mechanically.	
	Treat the recovered material as prescribed in the section on waste dis-	
	posal.	

6.4 Reference to other sections

Reference to other sections Reference to other sections : 7 / 8 / 13

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	Keep container tightly closed. Hygiene measures: When using do not eat, drink or smoke. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse.				
Advice on protection against fire and explosion	No special measures are necessary.				
7.2 Conditions for safe storage, including any incompatibilities					
Storage space and container re- quirements	Keep/Store only in original container. Keep container tightly closed and dry.				

quirements	Keep container tightly closed and dry. Store in accordance with local regulations.
Unsuitable materials for contain- ers	Keep only in original container.
Hints on storage assembly	Keep away from food, drink and animal feedingstuffs.
German storage class	2B (TRGS 510)
Recommended storage tempera- ture	+5 - 25 °C

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	In case of inadequate ventilation wear respiratory protection.	
Hand protection	In case of contact through splashing:	
Suitable material	attached disposable gloves	
Remarks	Use gloves once only.	
Note	The attached gloves are intended as protection against short-term use.	
	In case of full contact:	
Suitable material	Protective gloves complying with EN 374. Butyl caoutchouc (butyl rubber), NBR (Nitrile rubber), Fluorinated rubber, CR (polychloroprene, chloro- prene rubber)	
Unsuitable material	PVC or rubber gloves are not recommended.	
Material thickness	>= 0,5 mm (adjust to application and duration of use)	

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Break through time	>120 min
Remarks	Replace when worn.
Note	Request information on glove permeation properties from the glove sup- plier Be aware that in daily use the durability of a chemical resistant pro- tective glove can be notably shorter than the break through time mea- sured according to EN 374, due to the numerous outside influences (e.g. temperature).
Eye protection	Wear closely fitting protective glasses in case of splashes. Safety glasses with side-shields conforming to EN166
Skin and body protection	Long sleeved clothing
Note	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
General protective and hygiene measures	Do not eat, drink or smoke when using this product. Avoid contact with the skin and the eyes. Wash hands and face before breaks and after work and take a shower if necessary.
	Keep away from food, drink and animal feedingstuffs.
	Use protective skin cream before handling the product.
Information on environmental protection regulations	

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
Melting point [°C] / Freezing point [°C]	No data available
Boiling point [°C]	No data available
Flash point [°C]	Not applicable.
Evaporation rate [kg/(s*m ²)]	No data available
Flammability (solid, gas)	No data available
Explosion limits [Vol-%]	
Lower limit	No data available
Upper limit	No data available

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< 0,0001
No data available
1,3
insoluble in: Water
No data available
No data available
No data available
not auto-flammable
No data available
No data available
No

SECTION 10: Stability and reactivity

10.1 Reactivity

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Reactivity	No hazardous reaction when handled and stored according to provisions. No decomposition if stored and applied as directed.			
10.2 Chemical stability				
Chemical stability	Stable when applying the recommended regulations for storage and han- dling. Further information on correct storage: refer to section 7.			
10.3 Possibility of hazardous reactions				
Hazardous reactions	No hazardous reaction when handled and stored according to provisions.			
10.4 Conditions to avoid				
Conditions to avoid	The mixture is chemically stable under recommended conditions of stor- age, use and temperature.			
10.5 Incompatible materials				
Materials to avoid	Strong acids and oxidizing agents			
10.6 Hazardous decomposition products				
Hazardous decomposition prod- ucts	No known hazardous decomposition products.			
SECTION 11: Toxicolog	ical information			

11.1 Information on toxicological effects

Oral toxicity [mg/kg]

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Hazardous ingredients

Diphenylmethanediisocyanate, isomers and homologues					
Value Test criterion Test species Source					
> 10000	LD50	Rat	Company data		

Dermal toxicity [mg/kg]

Hazardous ingredients

Diphenylmethanediisocyanate, isomers and homologues				
Value	Test criterion	Test species	Remarks	Source
> 9400	LD50	Rabbit	OECD 402	Company data

Inhalative toxicity [mg/l]

Hazardous ingredients

Diphenylmethanediisocyanate, isomers and homologues				
Value Test criterion Note Exposure dura- tion Source				
0,49	LC50	OECD 403	4 h	Company data

Irritant effect on skin

Causes skin irritation.

Irritant effect on eyes Causes serious eye irritation.

Irritant effect on the respiratory tract Hazardous ingredients

Hazardous ingredients			
Diphenylmethanediisocyanate, isomers and homologues			
Value	Source		
Irritant	Company data		

Sensitization	Respiratory or skin sensitisation
Carcinogenic effects	Limited evidence of a carcinogenic effect.
Mutagenicity	Based on available data, the classification criteria are not met.
Reproduction toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity (sin- gle exposure) [mg/kg]	
Remarks	May cause respiratory irritation.
Specific target organ toxicity (re- peated exposure) [mg/kg]	
Specific effects	May cause damage to organs through prolonged or repeated exposure.

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SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish [mg/l] Hazardous ingredients

Diphenylmethanediisocyanate, isomers and homologues					
Value	Test criteri- on	Test species	Measuring method	Exposure duration	Source
> 1000	LC50	Brachydanio rerio (ze- bra-fish)	OECD Test Guideline 203	96 h	Company da- ta

Toxicity to daphnia [mg/l]

Hazardous ingredients

Diphenylmethanediisocyanate, isomers and homologues					
Value	Test criteri- on	Test species	Exposure duration	Measuring method	Source
> 1000	EC50	Daphnia magna (Wa- ter flea)	24 h	OECD Test Guideline 202	Company da- ta

Toxicity to algae [mg/l]

Hazardous ingredients

Diphenylmethanediisocyanate, isomers and homologues				
Value	Test criterion	Test species	Exposure dura- tion	Source
> 1640	ErC50:	Scenedesmus subspicatus	72 h	Company data

NOEC (daphnia) [mg/l]

Hazardous ingredients

Diphenylmethanediisocyanate, isomers and homologues				
Value	Test species	Measuring method	Exposure dura- tion	Source
> 10	Daphnia magna (Big water flea)	OECD 202	21 d	Company data

12.2 Persistence and degradability

Biodegradability

Remarks

Poorly biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation

Remarks

There are no data available on the mixture itself.

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12.4 Mobility in soil

Mobility

Mobility

There are no data available on the mixture itself.

12.5 Results of PBT and vPvB assessment

Results of PBT characteristics determination

Hazardous ingredients		
Diphenylmethanediisocyanate, isomers and homologues		
Value	Source	
This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.	Company data	

Results of PBT and vPvB assess- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. ment

12.6 Other adverse effects

Further information on ecology Should not be released into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations	Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Empty remaining contents. Empty packaging: Where possible recycling is preferred to disposal or in- cineration. Product: Can be disposed of as a solid waste or burned in a suitable in- stallation subject to local regulations.
Waste Code	According to the European Waste Catalogue, Waste Codes are not prod- uct specific, but application specific. The following Waste Codes are only suggestions: Product 080501 - waste isocyanates cured material 200000 - MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.1 UN-No	Not applicable.	Not applicable.	Not applicable.
14.2 Description of the	No dangerous good accord-	No dangerous good accord-	No dangerous good accord-
goods	ing to ADR	ing to IMDG	ing to IATA
14.3 Transport hazard	Not applicable.	Not applicable.	Not applicable.
class(es)			

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		Marine transport IMDG	Air transport ICAO/IATA
14.4 Packaging group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not applicable.	Not applicable.	Not applicable.
UN proper shipping name		Non dangerous good	Non dangerous good

14.6 Special precautions for user

Precautions

No special measures are necessary.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to not applicable Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

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

Decopaint regulation	not relevant
Carcinogenic hazardous sub- stance as per Annex II GefStoffV	No
Restriction of occupation. 15.2 Chemical safety assessme	Persons already sensitised to diisocyanates may develop allergic reac- tions 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 un- less a protective mask with an appropriate gas filter (i.e. type A1 accord- ing to standard EN 14387) is used.
Safety assessment	For this preparation a chemical safety assessment has been carried out. This safety data sheet contains more than one ES in an integrated form. Contents of the exposure scenarios have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.
Additional regulations	This Safety Data Sheet is prepared according to Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evalua- tion, Authorisation and Restriction of Chemicals (REACH)

SECTION 16: Other information

Relevant H-phrases	H315: Causes skin irritation.
	H317: May cause an allergic skin reaction.
	H319: Causes serious eye irritation.
	H332: Harmful if inhaled.

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	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 ex- posure .	
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 accord- ing to regulation (EC) 1272/2008 [CLP]	Classification	Evaluation
	Acute Tox. 4; H332	Calculated
	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.