

Safety Data Sheet
according to Regulation (EC)
No. 2015/830



SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier	FG06N850	Revision Date:	31/08/2017
Product Name:	HEAVY DUTY BLOCK PAVING SEALER	Supersedes Date:	New SDS
1.2 Relevant identified uses of the substance or mixture and uses advised against	Monocomponent industrial coating - Industrial use.		
1.3 Details of the supplier of the safety data sheet	<p>Supplier: Fibregrid Unit 2, Civic Industrial Estate, Homefield Road Central, Haverhill, Suffolk, CB9 8QP Phone: 01440 712722 Fax: 01440 712733 Website: www.fibregrid.com Email: sales@fibregrid.com</p> <p>Datasheet Produced by: info@fibregrid.com</p>		
1.4 Emergency telephone number:	CHEMTREC +1 703 5273887 (Outside US) CHEMTREC 1-800-424-9300 (Inside US)		

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Other EU extensions	EUH204
Flammable Liquid, category 3	H226
Aspiration Hazard, category 1	H304
Skin Sensitizer, category 1	H317
Acute Toxicity, Inhalation, category 4	H332
STOT, single exposure, category 3, RTI	H335
STOT, single exposure, category 3, NE	H336
Hazardous to the aquatic environment, Chronic, category 2	H411

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

hexamethylene diisocyanate, oligomers, solvent naphtha (petroleum), light arom.

HAZARD STATEMENTS

Other EU extensions	EUH204	Contains isocyanates. May produce an allergic reaction.
Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Aspiration Hazard, category 1	H304	May be fatal if swallowed and enters airways.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RT1	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P331	Do NOT induce vomiting.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

SECTION 3: Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

CAS-No.	EINEC No.	Name According to EEC	%
64742-95-6	265-199-0	solvent naphtha (petroleum), light arom.	50-75
28182-81-2	500-060-2	hexamethylene diisocyanate, oligomers	10-25
108-67-8	203-604-4	mesitylene	2.5-10
108-65-6	203-603-9	2-methoxy-1-methylethyl-acetate	1.0-2.5
100-41-4	202-849-4	ethylbenzene	0.1-1.0
4083-64-1	223-810-8	tosyl isocyanate	0.1-1.0
71-43-2	200-753-7	benzene	<0.1
98-59-9		tosyl chloride	<0.1

<u>CAS-No.</u>	<u>REACH Reg No.</u>	<u>CLP Symbols</u>	<u>CLP Hazard Statements</u>	<u>M-Factors</u>
64742-95-6		GHS02-GHS07-GHS08-GHS09	H226-304-335-336-411	
28182-81-2	01-2119485796-17	GHS07	H317-332-335	
108-67-8		GHS02-GHS07-GHS09	H226-335-411	
108-65-6	01-2119475791-29	GHS02	H226	
100-41-4		GHS02-GHS07-GHS08	H225-304-315-319-332-373	
4083-64-1		GHS07-GHS08	H315-319-334-335	
71-43-2		GHS02-GHS07-GHS08	H225-304-315-319-340-350-372	
98-59-9				

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice. Remove contaminated clothing and shoes.

AFTER INHALATION: Move to fresh air. Give oxygen or artificial respiration if needed. Consult a physician after significant exposure. Keep respiratory tract clear.

AFTER SKIN CONTACT: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Harmful by inhalation. Do not ingest. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media:

Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Flammable.

5.3 Advice for firefighters

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours may form explosive mixtures with air. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Keep product and empty container away from heat and sources of ignition. Keep away from sources of ignition - No smoking. Do not use sparking tools. Keep working clothes separately. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice for diagnostics.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Direct sources of heat. Strong sunlight for prolonged periods.

STORAGE CONDITIONS: Store in original container. Keep in an area equipped with solvent resistant flooring. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (UK WELS)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
solvent naphtha (petroleum), light arom.	64742-95-6				
hexamethylene diisocyanate, oligomers	28182-81-2			0.07	0.03
mesitylene	108-67-8				
2-methoxy-1-methylethyl-acetate	108-65-6	50	100	548	274
ethylbenzene	100-41-4	100	125	552	441
tosyl isocyanate	4083-64-1				
benzene	71-43-2	1			3.25
tosyl chloride	98-59-9			5	

Name	CAS-No.	OEL Note
solvent naphtha (petroleum), light arom.	64742-95-6	
hexamethylene diisocyanate, oligomers	28182-81-2	
mesitylene	108-67-8	
2-methoxy-1-methylethyl-acetate	108-65-6	Can be absorbed through the skin.
ethylbenzene	100-41-4	Can be absorbed through the skin.
tosyl isocyanate	4083-64-1	
benzene	71-43-2	Can be absorbed through the skin.
tosyl chloride	98-59-9	

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Recommended Filter type: A (Organic substances)Respirator with a vapour filter (EN 141).

EYE PROTECTION: Eye wash bottle with pure water. Safety glasses with side-shields conforming to EN166.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

Chemical Name:

solvent naphtha (petroleum), light arom.

EC No.:
265-199-0

CAS-No.:
64742-95-6

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							11 mg/kg
Inhalation				150 mg/m ³				32 mg/m ³
Dermal				25 mg/kg				11 mg/kg

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	
Fresh water sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment soil (agricultural)	
Air	

Chemical Name:

hexamethylene diisocyanate, oligomers

EC No.:
500-060-2

CAS-No.:
28182-81-2

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation	1 mg/m ³			0.5 mg/m ³				
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.199 mg/l
Fresh water sediments	44551 mg/kg dry weight
Marine water	0.0199 mg/l
Marine sediments	4455 mg/kg dry weight
Food chain	
Microorganisms in sewage treatment soil (agricultural)	100 mg/l
Air	8884 mg/kg dry weight

Chemical Name:

2-methoxy-1-methylethyl-acetate

EC No.:

203-603-9

CAS-No.:

108-65-6

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							1.67 mg/kg bw/day
Inhalation				275 mg/m ³				33 mg/m ³
Dermal				153.5 mg/kg bw/day				54.8 mg/kg bw/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.635 mg/l
Fresh water sediments	3.29 mg/kg
Marine water	0.0635 mg/l
Marine sediments	0.329 mg/kg
Food chain	
Microorganisms in sewage treatment soil (agricultural)	100 mg/l
Air	0.29 mg/kg

SECTION 9: Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

Appearance:	Clear Liquid
Physical State	Liquid
Odor	Aromatic
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	155 - 181
Flash Point, (°C)	41
Evaporation rate	0.21
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.8 - 7
Vapour Pressure	>1
Vapour density	Not determined
Relative density	Not determined
Solubility in / Miscibility with water	Immiscible in water (reacts)
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	>450°C
Decomposition temperature (°C)	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l:	0
Specific Gravity (g/cm ³)	0.900

SECTION 10: Stability and Reactivity**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions. Explosive reaction may occur on heating or burning.

10.2 Chemical stability

Stable under recommended storage conditions. Risk of ignition.

10.3 Possibility of hazardous reactions

No Information

10.4 Conditions to avoid

Direct sources of heat. Strong sunlight for prolonged periods.

10.5 Incompatible materials

Do not store together with oxidizing and self-igniting products.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological Information**11.1 Information on toxicological effects****Acute Toxicity:**

Oral LD50:	No information available.
Inhalation LC50:	No information available.

Irritation: Irritating to the eyes.

Corrosivity: No information available.

Sensitization: Irritant for skin and mucous membranes. May cause sensitisation.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: Harmful by inhalation. May cause sensitisation by inhalation. Vapour concentrations above the recommended exposure levels are irritating to the eyes and respiratory tract, and may cause headaches, dizziness and have other CNS effects.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
64742-95-6	solvent naphtha (petroleum), light arom.	3592 mg/kg	> 3,160 mg/kg	> 6193 mg/m ³
28182-81-2	hexamethylene diisocyanate, oligomers	5000 mg/kg, oral, rat		18500 mg/m ³ /1H inhalation, rat

108-65-6	2-methoxy-1-methylethyl-acetate	8532 mg/kg, oral (rat)	>5000 mg/kg	1105 mg/m ³ /4H
100-41-4	ethylbenzene	3500 mg/kg rat, oral	5510 mg/kg, rabbit	4000 ppm, rat, 4h
4083-64-1	tosyl isocyanate	2600 mg/kg oral, rat		

Additional Information:

No Information

SECTION 12: Ecological Information**12.1 Toxicity:**

EC50 48hr (Daphnia): No information

IC50 72hr (Algae): No information

LC50 96hr (fish): No information

12.2 Persistence and degradability: No information**12.3 Bioaccumulative potential:** No information**12.4 Mobility in soil:** No information**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.**12.6 Other adverse effects:** There is no data available on the product itself. Hazardous for water. Do not allow the product to reach ground water, water bodies or sewage systems. Must not reach sewage water or drainage ditch undiluted or unneutralised. The liquid product may be neutralised with a mixture of ammonia solution (190g/ltr), water and ethanol.

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
64742-95-6	solvent naphtha (petroleum), light arom.			9,2 mg/l
28182-81-2	hexamethylene diisocyanate, oligomers	No information	No information	
108-67-8	mesitylene	No information	No information	
108-65-6	2-methoxy-1-methylethyl-acetate	No information	No information	
100-41-4	ethylbenzene	No information	No information	
4083-64-1	tosyl isocyanate	No information	No information	
71-43-2	benzene	No information	No information	
98-59-9	tosyl chloride	No information	No information	No information

SECTION 13: Disposal Considerations**13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. Dispose of as hazardous waste in compliance with local and national regulations. If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal. The product should not be allowed to enter drains, water courses or the soil.

European Waste Code: No Information
Packaging Waste Code: 150110

SECTION 14: Transport Information

14.1	UN number	1866
14.2	UN proper shipping name	Resin solution, flammable.
	Technical name	Not applicable
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	Not applicable
14.4	Packing group	III
14.5	Environmental hazards	Marine Pollutant
14.6	Special precautions for user	Not applicable
	EmS-No.:	F-E, S-E
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

SECTION 15: Regulatory Information**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:****National Regulations:**

Denmark Product Registration Number:	Not available
Danish MAL Code:	Not available
Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
WGK Class:	Not available
Covered by Directive 2012/18/EC (Seveso III):	Not applicable
Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Not applicable

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information**Text for CLP Hazard Statements shown in Section 3 describing each ingredient:**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
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.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Reasons for revision

No Information

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark;
European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;
European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);
EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

