Safety data sheet

according to 1907/2006/EC, Article 31

Trade name FORSHIELD-2KWB Comp B.

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

1.1 Product identifier

Trade name FORSHIELD-2KWB, Comp. B Article number: 202010.02

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Forcrete Ltd 6 Fitzmaurice Court Industrial Estate, Valley Side, Wymondham NR18 ONN Tel: +441603455962 Mob: +447472483348 Information department: Product Safety department: George Hunt Tel: +447472483348 E-Mail: sales@forcrete.co.uk 1.4 Emergency telephone number: Tel: +447472483348 sales@forcrete.co.uk

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

Hazard pictograms



Signal word Warning

Safety data sheet

according to 1907/2006/EC, Article 31

Trade name FORSHIELD-2KWB Comp B. Hazard-determining components of labelling:

aliphatic polyisocyanate aliphatic polyisocyanate

aliphatic polyisocyanate

Hazard statements

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled

H335 May cause respiratory irritation

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of the substances listed below with harmless additions.

Dangerous components:		
CAS: 28182-81-2	aliphatic polyisocyanate	60-80%
NLP: 500-060-2	Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3,	
Reg.nr.: 01-2119488934-20-XXXX	H335	
CAS: 666723-27-9	aliphatic polyisocyanate	10-20%
	Acute Tox. 3, H331; Skin Sens. 1, H317; STOT SE 3,	
	H335; Aquatic Chronic 3, H412	
CAS: 28182-81-2	aliphatic polyisocyanate	2.5-5%
NLP: 500-060-2 Reg.nr.: 01-	Acute Tox. 3, H331; Skin Sens. 1, H317; STOT SE 3,	
2119488177-26-XXXX	H335	

Additional information For the wording of the listed hazard phrases refer to section 16.

Safety data sheet

according to 1907/2006/EC, Article 31

Trade name FORSHIELD-2KWB Comp B.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Call a doctor immediately.

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation

Supply fresh air and call for doctor for safety reasons. In case of unconsciousness bring patient into stable side position for transport.

After skin contact

If skin irritation continues, consult a doctor. Wash immediately with water and soap and rinse thoroughly.

After eye contact Rinse opened eye for several minutes under running water.

After swallowing Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

symptomatic treatment

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents Carbon dioxide Foam Fire-extinguishing powder

Use fire fighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture

May be released in case of fire Carbon monoxide (CO) Carbon dioxide Nitrogen oxides (NOx) Hydrogen cyanide (HCN) (Traces) further harmful conflagration gases and fumes

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

Wear full protective suit.

Put on breathing apparatus.

Additional information

Cool endangered containers with water spray jet.

Collect contaminated fire fighting water separately. It must not enter drains.

Trade name FORSHIELD-2KWB Comp B.

Ensure adequate means of retaining the water used for extinguishing

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources

Ensure adequate ventilation

6.2 Environmental precautions:

Do not allow to enter the ground/soil.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well ventilated areas.

Ensure good ventilation, if necessary extract air in work places.

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

Information about protection against explosions and fires:

Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Store only in the original container.

Prevent any penetration into the ground.

Information on storage in a common storage facility:

Suitable material for containers and pipes: Light metals and their alloys.

Further information about storage conditions:

Store container in a well ventilated position.

Protect from humidity and keep away from water.

Protect from frost.

Keep container tightly closed

Trade name FORSHIELD-2KWB Comp B.

7.3 Specific end use(s) No further relevant information available

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

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

Additional information: The lists that were valid during compilation were used as a basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

Use skin protection cream for preventive skin protection. Keep away from food, beverages and animal feed. Immediately remove soiled, saturated clothing. Wash hands before pauses and after work.

Respiratory equipment:

Respiratory protection recommended.

Filter A/P2.

Only use ambient air independent respiratory equipment in pits, shafts and silos.

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

Protection of hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several

substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Face protection

Trade name FORSHIELD-2KWB Comp B.

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties		
General Information		
Appearance:		
Form: Fluid		
Colour: Clear		
Odour: Odourless		
Odour threshold: Not determined.		
pH-value: Not determined.		
Change in condition		
Melting point/freezing point: Not determined		
Initial boiling point and boiling range: Not determined.		
Flash point: ca. 185c		
Inflammability (solid, gaseous) Not applicable.		
Ignition temperature: ca. 445° c		
Decomposition temperature: ca. 181°c		
Self-inflammability: Product is not self-igniting.		
Explosive properties: Product is not explosive.		
Explosive Limits:		
Lower: Not determined.		
Upper: Not determined.		
Vapour pressure at 20c: ca. 5 hPa		
Density at 20 °C: ca. 1.15 g/cm ³		
Relative density: Not determined.		
Vapour density: Not determined.		
Evaporation rate: Not determined.		
Solubility in / Miscibility with Water: Not miscible or difficult to mix		
Distribution coefficient (n-octanol/water): Not determined.		
Viscosity:		
Dynamic at 20c: 570-730 mPas		
Kinematic: Not determined.		
Organic separation test: < 3%		
VOC EU: <140g/l		
9.2 Other information No further relevant information available.		

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if handled and stored according to specifications.

10.3 Possibility of hazardous reactions Danger of bursting

Trade name FORSHIELD-2KWB Comp B.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials:

Amines

Alcohols

10.6 Hazardous decomposition products:

None if used properly.

None if stored properly.

SECTION 11: Toxicological information

11.1 Information on toxicological effects Acute toxicity: Harmful if inhaled

LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

Inhalative LC50/4 h 7.19 mg/l

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation:

May cause an allergic skin reaction.

Additional toxicological information:

Special characteristics/effects of isocyanates: In case of over-exposure - especially when spraying isocyanate based varnishes without protective measures - there is a danger of a concentration-dependent, irritating effect on eyes, nose, throat, and respiratory tract. The delayed appearance of symptoms and the development of hypersensitivity (trouble breathing, cough, asthma) are possible. For hypersensitive persons, reactions may be triggered by very low isocyanate concentrations, also below the TLV value. In case of prolonged contact with skin, tanning and irritating effects are possible.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure:

May cause respiratory irritation.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

Trade name FORSHIELD-2KWB Comp B. General notes:

Do not allow product to reach ground water, bodies of water or sewage system.

Do not allow undiluted or larger quantities of the product to reach ground water, bodies fo water or

sewage system 12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

Recommendation

Not hardened material must be disposed of as hazardous waste according to official regulations. Hardened product remains may be disposed of as building rubble or put into household garbage. The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

European waste catalogue

08 05 01*- waste isocyanates

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number	This product is not dangerous according to ADR, ADN, IMDG, IATA.
ADR, IMDG, IATA UN3082	VOID
14.2 UN proper shipping name	VOID
ADR	
IMDG	
IATA	
14.3 Transport hazard class(es)	VOID
ADR, IMDG, IATA	
Class	
14.4 Packing group	
ADR, IMDG, IATA	VOID
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of	Not applicable.
Marpol and the IBC Code	
UN "Model Regulation":	VOID

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Trade name FORSHIELD-2KWB Comp B.

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations

Other regulations, limitations and prohibition ordinances

From the European Committee of the Associations for varnish, printing ink and artistry paint producers - CEPE - the following information is given for isocyanate based coating materials: Readyto-use coating materials that contain isocyanates may have an irritating effect on mucous membranes - especially on respiratory organs - and cause hypersensitivity reactions. There is a risk of sensitization if vapours or sprayed mist are inhaled. When handling isocyanate based coating materials, all measures for solvent based coating materials must be strictly observed. Sprayed mist and vapours especially should not be inhaled. Persons with allergies or asthma who have a tendency for respiratory tract ailments should not be allowed to work with isocyanate based coating materials.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Delivery specifications are found in the respective Technical Information Sheets.

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

Relevant phrases

H317 May cause an allergic skin reaction.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Department issuing data specification sheet: Product Safety department / EHS

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Trade name FORSHIELD-2KWB Comp B.

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3