



since 1895

SAFETY DATA SHEET

(Conforming to 1907/2006/EC)

Product Name:	WHITE-KNIGHT™ FR BASE COAT	SDS Reference	
Version No. 6	Previous issue date September 2012	Revision date	01-06-2015

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

1.1 Product Name	White-Knight™ FR Base Coat (Product No. 7833)		
1.2 Relevant Use(s)/misuse(s)	Two component isocyanate based sealant.		
1.3 SDS Supplier	The Garland Company UK Ltd Unit 5 Glevum Works Upton Street, Gloucester GL1 4LA, UK	Telephone: 01452 330646 Mobile: 07887 923 121 Website: www.garlandukltd.co.uk	
1.4 Emergency Telephone	44 (0)1452 330646 (Office hours)	Competent person e-mail: trevor@rising-hsande.co.uk	

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE MIXTURE

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)

Flam Liq. 3 H226
Skin Irrit. 2 H315
Eye Irrit. 2 H319
STOT SE 3 H335

2.1.2 Additional information

See section 16 for full text of H statements.

2.2 LABELLING ELEMENTS

2.2.1 Labelling in accordance with EC Regulation No 1272/2008 (CLP/GHS)

Pictogram(s):



Signal word

WARNING

Hazard statement(s)

H226 FLAMMABLE LIQUID AND VAPOUR.
H315 CAUSES SKIN IRRITATION.
H319 CAUSES SERIOUS EYE IRRITATION.
H335 MAY CAUSE RESPIRATORY IRRITATION.

Product Name:

WHITE-KNIGHT™ FR BASE COAT

SDS Reference

Precautionary statement(s)

- P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOTSURFACES. — NO SMOKING.
- P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION.
- P302+352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
- P305+351+338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.
- P308+313 IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION.

2.3 OTHER HAZARDS

THE PREPARATION CONTAINS A SUBSTANCE THAT HAS A WORKPLACE EXPOSURE LIMIT (WEL)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation

MIXTURE

<u>Chemical name</u>	<u>CAS-No</u>	<u>EINECS/ELINCS</u>	<u>Classification</u>	<u>Concentration</u>
STODDARD SOLVENT	8052-41-3	232-489-3	Flam. Liq. 3 H226; Asp. Tox. 1 H304	1-5%
2-METHOXY-1-METHYLETHYL ACETATE	08-65-6	203-603-9	Flam. Liq. 3	10-30%
TOLUENE-DIISOCYANATE	26471-62-5	247-722-4	Skin Irrit. 2 H315; Skin Sens. 1 H317; Eye Irrit. 2 H319; Acute Tox. 2 H330; Resp. Sens. 1 H334; Carc. 2 H351; STOT SE 3 H335; Aquatic Chronic 3 H413	<1%
POLYISOCYANATE RESIN	9057-91-4	Not assigned	Acute Tox. 4 H302; Acute Tox. 4 H312; Acute Tox. 4 H332; Skin Irrit. 2 H315; Eye Irrit. 2 H319; STOT SE 3 H335	10-30%
TRIS(1-CHLORO-2-PROPYL) PHOSPHATE	13674-84-5	237-158-7	Acute Tox. 4 H302	1-5%

4. FIRST AID MEASURES

4.1 Description of measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Skin contact

Immediately clean areas of skin affected with plenty of water. If necessary, seek medical advice.

Eye contact

Wash out eye thoroughly with plenty of water until irritation subsides. If necessary (e.g. irritation persists), consult an eye specialist/ophthalmologist.

Ingestion

Allow the patient to vomit on his own accord. Give copious water to drink; If necessary, seek medical advice.

4.2 Most important effects/symptoms

Vapours may cause drowsiness and dizziness and possibly respiratory sensitisation.

4.3 Immediate/special treatment

Treatment as described above. The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

5. FIRE FIGHTING MEASURES

- 5.1 Extinguishing media** To suit local surroundings (e.g. foam, carbon dioxide, dry powder). Do not use water
- 5.2 Special hazards** Avoid run-off water entering the drains (e.g. use barriers). In case of fire, toxic gases (CO, CO₂, NO_x) may be formed. Vapours may ignite.
- 5.3 Advice for fire fighters** Wear self-contained breathing apparatus. Containers close to fire should be removed immediately or cooled with water.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions** Adhere to personal protective measures.
- 6.2 Environmental precautions** Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once.
- 6.3 Methods and materials for cleaning up** Adhere to personal protective measures. Take up with absorbent material, e.g. sand, sawdust, into tightly closed containers. Label container and dispose of as prescribed
- 6.4 Reference to other sections** See section 8 for personal protective equipment.

7. HANDLING & STORAGE

- 7.1 Precautions for safe handling** Handle in accordance with good hygiene and safety practice. Take precautionary measures against static discharges. Avoid contact with oxidising agents.
- 7.2 Conditions for safe storage** Store in tightly closed original container in a dry, cool and well-ventilated place. Avoid contact with oxidising agents.
- 7.3. Specific end use(s)** Two component isocyanate based sealant.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Controls parameters**
- Occupational Exposure Limits (WELs) have been assigned (EH40/2011).
- | | | | |
|----------------|---------|-----------------------|---|
| LTEL (8hr TWA) | 50 ppm | 274 mg/m ³ | 2-methoxy-1-methylethyl acetate ^{Sk} |
| STEL (15 min) | 100 ppm | 548 mg/m ³ | |
- ^{Sk} Can be absorbed through skin.
- 8.2 Exposure controls**
- Engineering controls** Provide adequate ventilation (e.g. local exhaust ventilation).
Avoid the build-up of electrostatic charges.
- Personal protection** Observe normal standards for handling chemicals.
Do not eat, drink or smoke in the working area
Avoid inhalation of vapours/spray
Wash hands before breaks and after work.
Wear personal protective equipment appropriate to the task (see below)
- Eye protection** Safety goggles (i.e. EN 166 approved)
- Skin protection** Suitable gloves (also consider your own risk assessment; e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken)
- Respiratory protection** If ventilation is insufficient, wear a NIOSH/OSHA respirator
- Other protection** Protective overall



9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Basic physical and chemical properties**

Physical form	Liquid.		
Colour	Grey.		
Odour	Hydrocarbon.		
Odour threshold	Not determined		
pH	Not determined		
Boiling pt / range	140	°C	
Melting pt / range	Not determined	°C	
Flash point	47°C		
Flammability	1.5% (lower)	7.0% (higher)	
Thermal decomposition	Not applicable		
Evaporation rate	0.34 (EtEt=1)		
Explosion limits	Not determined	Lower:	Upper:
Auto-ignition temperature	333°C		
Decomposition temp.	Not applicable		
Specific gravity	1.26		
Vapour pressure	Not determined		
Vapour density	4.6		
Viscosity	90 - 100 KU		
Water solubility	Insoluble		
Explosive properties	Not determined		
Oxidising properties	Not determined		
Partition coeff. $\text{Log}_{\text{Oct/water}}$	Not determined		
9.2 Other information	Volatile Organic Compound (VOC) 325'25 g/litre		

10. STABILITY AND REACTIVITY

10.1 Reactivity	Strong oxidising substances
10.2 Chemical stability	Stable under normal conditions of handling.
10.3 Hazardous reactions	None known
10.4 Conditions to avoid	Avoid contact with strong oxidisers. Avoid heat, flames and other sources of ignition.
10.5 Incompatible material	Strong oxidising substances.
10.6 Hazardous decomposition products	In case of fire, toxic gases (CO, CO ₂ , NO _x) may be formed. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION**11.1 information on toxicological effects**

Acute toxicity	LD ₅₀ rat (oral)	>5000	mg/kg	2-methoxy-1-methylethyl acetate**
	EC ₅₀ rat (inhal)	66	ppm	toluene-diisocyanate **
	LD ₅₀ rat (oral)	>4000	mg/kg	toluene-diisocyanate **
	LD ₅₀ rat (derm)	>9000	mg/kg	toluene-diisocyanate **
	LD ₅₀ rat (oral)	>2000	mg/kg	Stoddard solvent
	LD ₅₀ rat (oral)	>2000	mg/kg	tris(1-chloro-2-propyl) phosphate** ** REACH dossier information
Dermal compatibility	No data available. May cause skin irritation and sensitisation			
Mucous membrane compatibility	No data available. May cause eye irritation			
Further information	Vapours may cause respiratory irritation			

12. ECOLOGICAL INFORMATION

12.1 Toxicity	LC ₅₀ Fish (rainbow trout)	100	mg/l	2-methoxy-1-methylethyl acetate **, 96h
	EC ₅₀ Daphnia magna	>500	mg/l	2-methoxy-1-methylethyl acetate **, 48h
	EC ₅₀ Daphnia magna	12.5	mg/l	toluene-diisocyanate**, 48 hrs
12.2 Degradability	Not determined			
12.3 Bioaccumulative potential	Not determined			
12.4 Mobility in soil	Not determined			
12.5 PBT/vPvB assessment	Not determined			
12.6 Other adverse effects	Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once. ** REACH dossier information			

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment measures**

Advice on disposal	In accordance with national and local authority regulations, e.g. The Hazardous Waste (England & Wales) Regulations 2005. Treat empty containers in the same way as the product or if possible wash out thoroughly and recycle.
---------------------------	---

14. TRANSPORT INFORMATION

14.1 United Nations number ADR, IMDG, IATA	UN1263
14.2 Proper shipping name ADR, IMDG, IATA	PAINT
14.3 Transport class(s) ADR, IMDG, IATA	3
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards ADR, IMDG, IATA	The product should not be marked as a marine pollutant
14.6 Special procedures ADR, IMDG, IATA	None known.
14.7 Transport in bulk ADR, IMDG, IATA	Not applicable



15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations**

The product is classified in accordance with EC Regulation 1272/2008 (CLP), Other regulatory information and provisions are not applicable for this product.

15.2 Chemical safety assessment

Not applicable

16. OTHER INFORMATION**Further information**

The SDS has been revised in accordance with EC Regulation 1272/2008 (CLP)

Hazard statements referred to in sections 2-15

H226 Flammable liquid and vapour.

H302: Harmful if swallowed

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.

H413: May cause long lasting harmful effects to aquatic life.

Sources of data

Other suppliers' safety data sheets

Date of issue

01-06-2015

It is your own responsibility, to examine and confirm if this material meets or suits any regulation or restriction in your country or of your local authority. To the best of our knowledge, the information contained herein is correct and accurate. However, neither JSR nor any of its subsidiaries assumes any liability whatsoever for the correctness or accuracy of the information contained herein. The precautionary items were based on ordinary handling. In case of special handling, safety measures in compliance with the application and usage shall be executed. Final determination of safety and suitability of any material is the sole responsibility of the keeper and user. All materials may present unknown hazards, and therefore should be handled with adequate caution. Although certain hazards are described herein, they may not be the only hazards in relation to the products.