SAFETY DATA SHEET
(Conforming to 1907/2006/EC)

Product Name:	**WHITE-KNIGHT™ PLUS**	**SDS Reference**	
Version No. 3	**Previous issue date** October 2012	**Revision date**	01-06-2015

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

1.1 Product Name **White-Knight™ Plus (Product No. 7828)**

1.2 Relevant Use(s)/misuse(s) Paint

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
Asp. Tox. H304
Eye Irrit. 2 H319

2.1.2 Additional information

See section 16 for full text of H statements.

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2.2 LABELLING ELEMENTS

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

Pictogram(s):

Signal word

DANGER

Hazard statement(s)	H226	FLAMMABLE LIQUID AND VAPOUR.
	H304	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS
	H319	CAUSES SERIOUS EYE IRRITATION.
Precautionary statement(s)	P210	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOTSURFACES. — NO SMOKING.
	P280	WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION.
	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.
	P501	DISPOSE OF CONTENTS/CONTAINER TO HAZARDOUS OR SPECIAL WASTE COLLECTION SITE IN ACCORDANCE WITH LOCAL / REGIONAL / NATIONAL OR INTERNATIONAL REGULATIONS

2.3 OTHER HAZARDS

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation MIXTURE

Chemical name	CAS-No	EINECS/ELINCS	Classification	Concentration
N- BUTYL ACETATE	23-86-4	204-658-1	FLAM. LIQ. 3 H226; STOT SE 3 H336; EUH066	1-5%
CALCIUM CARBONATE	1317-65-3	215-279-6	NOT CLASSIFIED	10-30%
ISOPHORONE DI-ISOCYANATE	4098-71-9	223-861-6	ACUTE TOX. 3 H331; SKIN IRRIT. 2 H315; EYE IRRIT. 2 H319; SKIN SENS. 1 H317; RESP. SENS. 1 H334; STOT SE 3 H335; AQUATIC CHRONIC 2 H411	<1%
ISOPHORONE DIISOCYANATE HOMOPOLYMER	NOT ASSIGNED	NOT ASSIGNED	EYE IRRIT. 2 H319	10-30%
PETROLEUM NAPHTHA, LIGHT AROMATIC	64742-95-6	265-199-0	FLAM. LIQ. 3 H226; ASP. TOX. 1 H304	10-30%
TITANIUM DIOXIDE	13463-67-7	236-675-5	NOT CLASSIFIED	5-10%

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

Eye contact Immediately 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.

4.3 Immediate/special treatment Treatment as described above.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media To suit local surroundings (e.g. foam, carbon dioxide, dry powder). Do not use water jet.

5.2 Special hazards Avoid run-off water entering the drains (e.g. use barriers). Carbon monoxide (CO). Carbon dioxide (CO_2). Hydrocarbons are released in a fire. May travel considerable distance to source of ignition and flash back

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	Keep containers tightly closed and in cool, dry, well-ventilated areas.
7.3. Specific end use(s)	Paint

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Controls parameters

LTEL (8 hour TWA):	10	mg/m^3	WEL data for calcium carbonate
LTEL (8 hour TWA):	10	mg/m^3	WEL data for titanium dioxide
LTEL (8 hour TWA):	724	mg/m^3	WEL for N-butyl acetate
LTEL (8 hour TWA):	150	ppm	WEL for N-butyl acetate
STEL (15 min)	966	mg/m^3	WEL for N-butyl acetate
STEL (15 min)	200	ppm	WEL for N-butyl acetate

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 Those with a history of sensitisation should take appropriate protective measures 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	White		
Odour	Hydrocarbon		
Odour threshold	Not determined		
pH	Not determined		
Boiling pt / range	153.3 - 254.4° ºC		
Melting pt / range	Not determined ºC		
Flash point	37.7° - 48.9°C (Closed cup).		
Flammability	0.7% (lower)	10.7% (higher)	
Thermal decomposition	Not applicable		
Evaporation rate	Not determined		
Explosion limits	Not determined	Lower:	Upper:
Auto-ignition temperature	Not determined		
Decomposition temp.	Not applicable		
Specific gravity	1.13		
Vapour pressure	2.0 mm Hg @ 20°C		
Vapour density	7.0		
Viscocity	Not determined		
Water solubility	Insoluble		
Explosive properties	Not determined		
Oxidising properties	Not determined		
Partition coeff. $Log_{Oct/water}$	Not determined		
9.2 Other information	Volatile By Vol. (%): 16% Volatile Organic Compound (VOC): 163 g/l g/litre		

10. STABILITY AND REACTIVITY

10.1 Reactivity	Strong oxidising substances. Alcohol Amines. Bases. Water
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. Alcohols. Amines. Bases. Water.
10.6 Hazardous decomposition products	In case of fire, toxic gases (CO, CO2, NOx) may be formed. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

11.1 information on toxicological effects

Acute toxicity	LD_{50} rat (oral)	12.2	ml/kg	N-butyl acetate **
	LC_{50} rabbit (derm)	>16	ml/kg	N-butyl acetate **
	LD_{50} rat (oral)	4814	mg/kg	isophorone di-isocyanate **
	LC_{50} rabbit (derm)	>7000	mg/kg	isophorone di-isocyanate **
	LD_{50} rat (oral)	>5000	mg/kg	petroleum naphtha, light aromatic**
	LC_{50} rabbit (derm)	>2000	mg/kg	petroleum naphtha, light aromatic**

** REACH dossier information

Dermal compatibility No data available. May cause skin sensitisation

Mucous membrane compatibility No data available. May cause eye irritation

Further information Vapours may cause irritation and possibly sensitisation

12. ECOLOGICAL INFORMATION

12.1 Toxicity

LC_{50}	Fish (zebra fish)	>72	mg/l	isophorone di-isocyanate, 96 hrs
EC_{50}	Daphnia magna	27	mg/l	isophorone di-isocyanate, 48 hrs
LL_{50}	Fish (fat-head minnow)	8.2	mg/l	petroleum naphtha, light aromatic** 96 h
EL_{50}	Daphnia magna	27	mg/l	petroleum naphtha, light aromatic** 48 h

** REACH dossier information

12.2 Degradability Not determined

12.3 Bioaccumutive 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.

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. TRANSPORT INFORMATION

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.
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.
H331: Toxic 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.
H411: Toxic to aquatic life with long lasting effects,

EUH066: Repeated exposure may cause skin dryness or cracking

Sources of data Other suppliers' safety data sheets

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Safety Data sheet prepared by Rising HS&E Services.