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SAFETY DATA SHEET - REGULATIONS 1994 (CHIP 2)

Technispray Paints Limited urges the customer receiving this Material Safety Data Sheet to study it carefully to become aware of hazards, if any, of the product involved.

In the interests of safety you should:

- 1) notify your employees, agents and contractors of the information on this sheet,
- 2) furnish a copy to each of your customers for the product, and
- 3) request your customers to inform their employees and customers as well.

1) Identification and Company

Date revised: 10 08 06

Revision No:1 Compiler: Mr D.A. Kershaw

Company:

TECHNISPRAY PAINTS LIMITED

Product Name:

Kolorbond[®] K2 Hardener

Chemical Characterisation:

Solvent based hardener for coatings

Form

Liquid - 1 kg, 5 kg cans

Colour

Clear

Odour

Characteristic odour

2) Composition

Material	CAS No: % (weight)	EINECS no.	Symbol	Risk Phrases
Tosyl-isocyanate	4083-64-1 0.1 – <0.2 %	223-810-8	Xn	36/37/38, 42, 14
Mesitylene	108-67-8 0.2- <0.5 %	203-604-4	Xi, N	37, 51/53,10
1:2:4-Trimethylbenzene	95-63-6 0.5-<1.0 %	202-436-9	Xn, N	20, 36/37/38,51/53 10
Solvent Naptha (petroleum) light aromatic	64742-95-6 1.0-<2.0 %	265-199-0	Xn	65
2-methoxyl-methylethyl acetate	108-65-6 5,0 – <7,0 %	203-603-9	Xi	10-36
Butylglycol acetate / 2-butoxyethyl acetate	112-07-2 7.0 – <10.0 %	203-933-3	Xn	20/21
N-butyl acetate	123-86-4 30.0-<40.0 %	204-658-1		66, 67, 10
Hexane-1;6-di-isocyanate; homopolymer	28182-81-2 40.0-<50 %	500-060-2	Xn	42/43

The texts of the R phrases are listed in 15)

3) Hazards Identification

Physical

Flammable. Harmful

Adverse Human Effects

Can enter the body by inhalation, ingestion, or through the skin.

Irritates the eyes, skin and respiratory tract.

May cause lung damage if swallowed

Vapours may cause drowsiness and dizziness.

Environmental Effects

Harmful to aquatic organisms.

May cause long term damage to an aquatic environment

in accordance with EU Directives

4) First Aid Measures

Inhalation	Move the exposed person to fresh air at once. Get medical attention immediately. For breathing difficulties oxygen may be necessary. If rapid recovery does not follow, apply artificial respiration.
Ingestion	Do not induce vomiting. Obtain medical attention immediately.
Skin	Wash the skin immediately with soap and water. Do not use solvents or thinners Use a moisturiser.
Eye	Get medical attention if any discomfort continues. Flush with plenty of water for several minutes holding eyelids apart. Make sure to remove any contact lenses before rinsing. Continue to rinse for at least 15 minutes. If irritation persists, refer for medical attention.

5) Fire Fighting Measures

Extinguishing Media	Use a dry chemical powder, foam or carbon dioxide extinguisher, sand or earth. Do not use water in a jet.
Special Fire Fighting Procedures	Containers close to fire should be removed or cooled with water. Use water to keep fire-exposed containers cool.
Unusual Fire & Explosion Hazards	Risk of explosion if heated. Fire fighting run off must not enter drains or water courses

6) Accidental Release Measures

Spillage/Leakage/Gas Leakage	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Wear the necessary protective equipment. Prevent the liquid from spreading with sand or sawdust. Shovel up and remove to a safe place. Flush contaminated area with water. If leakage cannot be stopped evacuate area. Ventilate well. Do not contaminate water sources or sewer. Shovel up and remove to a safe place. Extinguish naked flames. Ensure adequate ventilation. Wear protective clothing and breathing apparatus as outlined below.
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7) Handling and Storage

Handling Precautions	Ensure adequate positive ventilation to keep concentrations well below hazard levels. Keep away from heat, sparks and open flames.
Storage Precautions	Containers must not be exposed to direct sunlight or temperatures above 50°C. Store away from oxidising agents. Avoid exposure to sources of heat or ignition. Avoid exposure to humidity or water as CO ² will be formed and may pressurise container. Keep containers tightly closed. Avoid build up of static electricity.

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8) Exposure Controls and Personal Protection

Name	CAS No.	STD	LT EXP (8 hrs)	ST EXP (15 min)
N-butyl acetate	123-86-4	OES	150 ppm (SK)	200 ppm (SK)
Hexane1;6-di-isocyanate; homopolymer	28182-81-2	OES	0.02 mg/m ³ (SEN)	0.07 mg/m ³ (SEN)
Mesitylene	108-67-8	OES	25ppm (SK)	-
Tosyl-isocyanate	4083-64-1	OES	0.02 mg/m ³ (SEN)	0.07 mg/m ³ (SEN)
1:2:4-trimethylbenzene	95-63-6	OES	25ppm (SK)	-
2-methoxy-1-methylethyle acetate	108-65-6	OES	50ppm (SK)	100ppm (SK)
Butylglycol acetate / 2-Butoxyethyl acetate	112-07-2	OES	20ppm (SK)	50ppm (SK)
Comments		OES = Occupational Exposure Standard SUP = Supplier's Recommendation SK = Can be absorbed through skin SEN=Capable of causing occupational asthma		

Protective Equipment	Wear goggles giving complete protection to eyes. Wear nitrile rubber gloves. Wear overalls. Avoid contact with liquid. Wear an approved breathing apparatus when concentrations above 100 ppm are present.
Ventilation	Provide adequate general and local exhaust ventilation.
Respirators	No specific recommendation made, but respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL).
Protective Gloves	Use protective nitrile rubber gloves.
Eye Protection	Use approved safety goggles or face shield.
Protective Clothing	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Industrial Hygiene Work Routine	DO NOT SMOKE IN WORK AREA. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. No eating or drinking while working with this material.

9) Physical and Chemical Properties

Appearance	Liquid - various size containers.
Specific gravity (20°C)	1.0 g/cm ³
Colour	Clear
Change in Physical State	Melting point below : n.d.a Boiling point : n.d.a.
Vapour density	> air
Viscosity	(20°C) <30secs ISO2431 (6mm)
Solubility in water	immiscible
pH Value	(20°C) not applicable
Flash Point	23°C =<~<32°C ISO 3679
Vapour pressure (20°C)	8mm Hg
Explosion limits, lower (vol %)	0.7 (solvent naphtha)
Upper (vol %)	10.0 (2-methoxy-1-methlethyl acetate).

in accordance with EU Directives

10) Stability and Reactivity

Thermal Decomposition Hazardous Decomposition Products	Thermal decomposition will occur. Fire creates: Vapours / Gases / Carbon Monoxide (CO) & Carbon dioxide (CO ₂) Fumes
Hazardous Reactions	No hazardous decomposition products when stored and used correctly.
Conditions To Avoid	Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents, strong alkali, and strong mineral acids. Exothermic reaction may occur with amines and alcohols Reacts slowly with water to produce CO ₂ producing the risk of bursting closed containers.

11) Toxicological Information

Health Hazards, General	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Gas or vapour in high concentrations may irritate respiratory system leading to an asthmatic condition. Gas or vapour displaces oxygen available for breathing (asphyxiant).
Skin	Product has a de-fatting effect on the skin. Prolonged or repeated exposure may cause severe irritation and possible harmful effects to the blood
Eyes	Irritating to the eyes. Spray and vapour in the eyes may cause irritation and smarting.
Route of entry	May cause severe irritation to eyes. Inhalation. Skin and /or eye contact.

12) Ecological Information

Do not allow escape into water, wastewater drains or soil.

13) Disposal Considerations

Empty containers must not be burned because of explosion hazard.
Dispose of in accordance with the Local Authority requirements.
Contact specialist disposal companies.

in accordance with EU Directives

14) Transport Information

LITRES:

ADR:

ADR: UN Number	1263
ADR: Proper Shipping Name	Paint
ADR: Class	3
ADR: Packing Group	III
ADR: Classification Code	F1
ADR: Transport Category	111
ADR: Hazard Identification Number	30

Shipping:

IMDG: UN Number	1263
IMDG: Proper Shipping Name	Paint
IMDG: Class	3
IMDG: Packing Group	III
IMDG: EmS	F-E, S-E

Air Transport:

IATA: UN Number	1263
IATA: Proper Shipping Name	Paint
IATA: Class	3
IATA: Packing Group	III
IATA: Packing Instruction	309 Passenger (max 60 L) 310 Cargo (max 220 L)

15) Regulatory Information

Risk Phrases

R-10	Flammable
R-11	Highly flammable
R-20	Harmful by inhalation.
R-20/21	Harmful by inhalation and in contact with skin
R-36	Irritating to eyes.
R-36/37	Irritating to eyes and respiratory system
R-37/38	Irritating to respiratory system and skin.
R-43	May cause sensitisation by skin contact.
R-50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R-51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R-65	Harmful: may cause lung damage if swallowed
R-66	Repeated exposure may cause skin dryness or cracking.
R-67	Vapours may cause drowsiness and dizziness.

Safety Phrases

S-2	Keep out of reach of children.
S-16	Keep away from heat and sources of ignition.
S-21	No Smoking.
S-23	Do not breathe vapour/spray.
S-24	Avoid contact with skin.
S-25	Avoid contact with eyes.
S-26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-37	Wear suitable gloves.
S-51	Use only in well ventilated areas.

in accordance with EU Directives

Label

According to the Directive (1999/45/E-C) relating to the classification packaging and labelling of dangerous substances and preparations, the product is labelled as follows:



HARMFUL

CONTAINS:

Hexane-1;6-di-isocyanate; homopolymer

Tosyl- isocyanates : may produce an allergic reaction

16) Other Information

Emergency Action

Notify Police and Fire Brigade immediately.

17) Disclaimer

Disclaimer

The information accumulated herein is believed to be accurate and reliable as of the date above, however TECHNISPRA Y PAINTS LIMITED makes no representation, warranty or guarantee nor assumes any legal responsibility as to its accuracy, reliability or completeness. Ultimate determination of suitability for intended use is the responsibility of the user.

10 12 08 Revision 1

END OF SAFETY DATA SHEET

in accordance with EU Directives