SAFETY DATA SHEET

POLYURETHANE One Part Clear

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product:	POLYURETHANE ONE PART CLEAR
Article Number:	RS 132-633
Application:	Polyurethane based contact adhesive
Supplier:	RS Components Ltd, Birchington Road, Corby, Northants, NN17 9RS,
Tel: Fax: Email:	+44 (0) 1536 402888 (8am to 8pm) +44 (0) 1536 401588 technical.help@rs-components.com

2 HAZARDS IDENTIFICATION

Highly flammable. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. Irritating to eyes. Possible risk of harm to the unborn child. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

CLASSIFICATION Xn;R48/20. Repr. Cat. 3;R63. Xi;R36. F;R11. R66, R67.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
2-(2H-BENZOTRIAZOL-2YL)-p-CRESOL	219-470-5	2440-22-4	< 1%	R43,R53.
ACETONE	200-662-2	67-64-1	30-60%	Xi;R36. F;R11. R66,R67.
Bisphenol A (Epichlorhydrin) EPOXY RESIN MW < 700 CURRENT		25068-38-6	< 1%	Xi;R36/38. N;R51/53. R43.
BUTANONE	201-159-0	78-93-3	10-30%	F;R11 Xi;R36 R66 R67
TOLUENE	203-625-9	108-88-3	10-30%	F;R11 Repr. Cat. 3;R63 Xn;R48/20,R65 Xi;R38 R67

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

Polyurethane adhesive in flammable solvents

4 FIRST-AID MEASURES

GENERAL INFORMATION

NOTE! Keep affected person away from heat, sparks and flames!

INHALATION

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

DO NOT INDUCE VOMITING! Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Get medical attention.

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide or dry powder.

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

SPECIFIC HAZARDS

Toxic gases/vapours/fumes of Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen chloride (HCl).

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Clean-up personnel should use respiratory and/or liquid contact protection. Absorb in vermiculite, dry sand or earth and place into containers. Do not contaminate water sources or sewer.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

STORAGE CLASS

Flammable liquid storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
ACETONE	WEL	750 ppm	1810 mg/m3	1500 ppm	3620 mg/m3	
BUTANONE	WEL	200 ppm(Sk)	600 mg/m3(Sk)	300 ppm(Sk)	899 mg/m3(Sk)	
TOLUENE	WEL	50 ppm(Sk)	191 mg/m3(Sk)	100 ppm(Sk)	384 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT





ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation. Maintain efficient ventilation/extraction using flameproof equipment where necessary.

RESPIRATORY EQUIPMENT

Respiratory protection must be used if air contamination exceeds acceptable level.

HAND PROTECTION

Use protective gloves.

EYE PROTECTION

Use approved safety goggles or face shield.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOUR	Lightly coloured.
ODOUR	Pungent Organic solvents.
SOLUBILITY	Soluble in water

BOILING POINT (°C)	110	RELATIVE DENSITY	0.85 - 0.88 @ 20 °c
VISCOSITY	3,000- - 3,500 cps @ 23 °c	FLASH POINT (°C)	- 17 CC (Closed cup).
FLAMMABILITY LIMIT - LOWER(%)	1	FLAMMABILITY LIMIT - UPPER(%)	13

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO_2).

11 TOXICOLOGICAL INFORMATION

INHALATION

Harmful: danger of serious damage to health by prolonged exposure through inhalation. Vapours may cause drowsiness and dizziness.

INGESTION

May cause stomach pain or vomiting.

SKIN CONTACT

Repeated exposure may cause skin dryness or cracking.

EYE CONTACT

Irritating to eyes.

ROUTE OF ENTRY

Inhalation. Skin absorption.

MEDICAL SYMPTOMS

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

SPECIFIC EFFECTS

Contains a substance/a group of substances which may cause harm to the unborn child.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment if discharged into watercourses.

MOBILITY

The product contains volatile substances, which may spread in the atmosphere.

BIOACCUMULATION

The product does not contain any substances expected to be bioaccumulating.

DEGRADABILITY

The product is expected to be biodegradable.

ACUTE FISH TOXICITY

Not considered toxic to fish.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION



UK ROAD CLASS	3		
PROPER SHIPPING NAME	ADHESIVES		
UN NO. ROAD	1133	UK ROAD PACK GR.	II
ADR CLASS NO.	3	ADR CLASS	Class 3: Flammable liquids.
ADR PACK GROUP	II	TUNNEL RESTRICTION CODE	(D/E)
HAZARD No. (ADR)	33	ADR LABEL NO.	3
HAZCHEM CODE	3YE	CEFIC TEC(R) NO.	30GF1-I+II, 30GF1-sp
RID CLASS NO.	3	RID PACK GROUP	II
UN NO. SEA	1133	IMDG CLASS	3
IMDG PACK GR.	II	EMS	F-E, S-D
MARINE POLLUTANT	No.	UN NO. AIR	1133
AIR CLASS	3	AIR PACK GR.	II

15 REGULATORY INFORMATION

LABELLING



Harmful



Highly Flammable

CONTAINS TOLUENE

RISK PHRASES

R11	Highly flammable.
R36	Irritating to eyes.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R63	Possible risk of harm to the unborn child.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

SAFETY PHRASES

S16	Keep away from sources of ignition - No smoking.
S25	Avoid contact with eyes.
S36/37	Wear suitable protective clothing and gloves.
P5	Contains epoxy constituents. See information supplied by the manufacturer.
P14	Contains 2-(2H-BENZOTRIAZOL-2YL)-p-CRESOL,Bisphenol A (Epichlorhydrin) EPOXY RESIN MW < 700 CURRENT. May produce an allergic reaction.

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations.

ENVIRONMENTAL LISTING

Control of Pollution (Special Waste Regulations) Act 1980.

EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

NATIONAL REGULATIONS

Control of Substances Hazardous to Health Regulations 2002 (as amended)

16 OTHER INFORMATION

INFORMATION SOURCES

Dangerous Properties of Industrial Materials Report, N.Sax et.al.

REVISION COMMENTS

NOTE: Lines within the margin indicate significant changes from the previous revision.

REVISION DATE	APRIL 2009
REV. NO./REPL. SDS GENERATED	4

RISK PHRASES IN FULL

R11	Highly flammable.
R36	Irritating to eyes.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.
R63	Possible risk of harm to the unborn child.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.