



CP0002 / 1

Materials Safety Data Sheet

Positive Photoresist

Stock Number: 514-470

Section 1. Identification of the Substance / Preparation and Company.	
Product Name:	Positive Photoresist.
Supplier:	RS Components Ltd., P.O. Box 99, Corby, Northants. NN17 9RS (+44) 0(1)536-402888.
Section 2. Composition / Information on Ingredients.	
<u>Ingredient</u>	<u>%range</u> <u>Sym/let</u> <u>Risk phrases</u>
Dimethyl ether	40 — —
Acetone	30-35 — —
Butyl acetate	10-15 — —
2-Ethoxyethanol	9 Xn May cause birth defects.
Section 3. Hazards Identification.	
Extremely Flammable & Harmful. Inhalation of high vapour concentrations may have narcotic effects. May be irritating to skin and eyes. There is a slight risk of dermatitis on prolonged or repeated skin contact. If ingested, may have narcotic effects and cause liver and kidney damage. 2-Ethoxyethanol may cause birth defects and is readily absorbed through the skin.	
Section 4. First Aid Measures.	
Inhalation:	Move casualty to fresh air and keep at rest.
Skin Contact:	Wash off with soap and water. Skin conditioning cream should also be used to prevent any dryness.
Eye Contact:	Immediately flush with water for 10 minutes.
Ingestion:	Give plenty of water to drink, do not induce vomiting. Seek medical attention.
Medical Notes:	If any adverse symptoms persist seek immediate medical attention.
Section 5. Fire-Fighting Measures.	
Suitable Extinguishing Media:	Foam, dry chemical, CO ₂ , water fog.
Do not use:	Water in a jet.
Exposure hazards:	Highly flammable. Containers may burst upon heating.
Protective Measures:	Keep fire endangered containers cool with water spray. Call fire brigade for large fires. Wear breathing apparatus if fighting fire.
Section 6. Accidental Release Measures.	
Personal precautions:	Refer to Section 8; Personal Protection.
Environmental precautions:	Refer to Section 13; Disposal.
Methods of clearing up:	Remove any sources of ignition. Wear appropriate protective clothing. Mop up with absorbent material and transfer to suitable disposal container.

Section 7. Handling and Storage.			
Handling:	Use only in a well ventilated area. Avoid contact with skin and eyes. Do not breathe spray. In accordance with good industrial hygiene practices, do not eat, drink or smoke when handling this material.		
Storage:	Keep away from all sources of ignition. Take precautionary measures against static discharges. Keep in a cool, well ventilated place, out of direct sunlight and below 45°C.		
Section 8. Exposure Controls / Personal Protection.			
Engineering Measures:	Mechanical extraction is recommended. If this is not available then ensure there is good ventilation.		
Personal protection:	Gloves and eye protection are recommended.		
Section 9. Physical and Chemical Properties.			
Form:	Green liquid, with fairly strong odour	Relative Density:	0.88
Flash point °C:	-48 (Dimethyl ether)	Boiling point °C:	56 (Acetone)
Melting point °C:	<-76	Vapour pressure @ 20°C:	320 kPas(Acetone)
Vapour density (air=1):	2.10 (Dimethyl ether)	Solubility in water:	Immiscible
Explosive limits (%vol):	<u>Lower</u> <u>Upper</u> 0.6 8.3 (Acetone)	Autoignition temp °C:	>235
Section 10. Stability and Reactivity.			
Stability:	Stable. Vapour / Air mixture may be explosive.		
Conditions to Avoid:	High temperatures.		
Materials to Avoid:	Oxidising materials. All sources of ignition.		
Hazardous Decomp- osition Products:	Oxides of carbon.		
Section 11. Toxicological Information.			
<u>Toxic effects arising from exposure based on experimental / non-experimental data.</u>			
2-Ethoxyethanol:	Found to have teratogenic and mutagenic effects in animals.		
LD ₅₀ (Oral rat):	8.5ml / kg (Acetone) 14.1g / kg (n-Butyl acetate) 1.4–5g / kg (2-Ethoxyethanol)		
LD ₅₀ (Dermal rabbit):	3.3g / kg (2-Ethoxyethanol)		
LC ₅₀ (Inh. mice):	1820 ppm / 7 hrs (2-Ethoxyethanol)		
Section 12. Ecological Information.			
<u>Possible environmental effects and behaviour / ODP / aquatic toxicity</u>			
Product is expected to be biodegradable (ThOD >68%, fresh water, 10 days). Unlikely to bioaccumulate. Non hazardous to aquatic species.			
Section 13. Disposal Considerations.			
<u>Safe disposal of product, its residues and packaging materials:</u>			
Do not pierce or burn even when empty. Dispose of according to Local Regulations. See also Sections 7 & 8 for handling precautions and personal protection where applicable			

Section 14.	Transport Information.
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Product Trade Name:	Positive Photoresist	Contains:	2-Ethoxyethanol
Proper Shipping Name:	Aerosols, flammable, n.o.s.	U.N. Number:	1950
I.A.T.A. Class:	2.1	Packing Group:	–
I.M.D.G. No.:	9022	I.M.D.G. Class:	9
A.D.R./ R.I.D. Class	2	A.D.R./ R.I.D. No.:	10° (b) 2

Section 15.	Regulatory Information.
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<u>Labelling Information.</u>			
Indication of Danger:	Flame Symbol, Extremely Flammable. Black St. Andrew's Cross, Harmful.		
Contains:	2-Ethoxyethanol.		
Risk phrases:	May cause birth defects.		
Safety phrases:	Keep away from all sources of ignition - No smoking. Avoid contact with skin. Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use.		
Other labelling:	Keep out of reach of children. Do not breathe spray. Use only in well ventilated areas. Do not spray on a naked flame or any incandescent material. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn even when empty.		
<u>Occupational Exposure Limits:</u>	Long-term exposure limit (8 hour TWA)		Short-term exposure limit (15 min period)
<u>Substance</u>	ppm	mg/m ³	ppm mg/m ³
Dimethyl ether (Sup)	1000	—	— —
Butyl acetate	150	710	200 950
*2-Ethoxyethanol	50	37	— —
* May be absorbed through the skin. (Sup)=Supplier's data. Ref: HSE Guidance notes EH40 / 94			

Section 16.	Other Information.
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Recommended uses and restrictions:	Use only as directed.
Publication refs:	Compiled in accordance with CHIP Regulations 1993. HSC Approved Code of Practice, document L37.

Section 17.	Section Revision and Dates.
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<u>Section:</u>	
<u>Change:</u>	
<u>Date:</u>	
<u>Legend.</u>	
N.A. = Not Applicable or Not Available.	
N.D. = Not Determined or Not Determinable.	
Est = Estimated.	

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The above information has been compiled from that provided by our suppliers and other sources. None of the original information relating to hazards or potential hazards has been omitted, and so the absence of a particular reference merely implies either that such information has not been determined or that it is not applicable. Should amendments become necessary, these will be published in future issues and forwarded to your organisation.