HMIS CODES	H	1	F	3	PH	0	PPE	B

Multichem Limited
Whiteboard Ink (WB 600 Series)
All Colours
Safety Data Sheet
(Prepared according to 91/155/EEC)
Emergency Telephone Number (24Hrs) +44 7887 612787

1.0	**Identification of the Substance / Preparation and of the company / undertaking**	
1.1	Product Name	Dry Erase Ink WB 600 Series
1.2	Intended use	Marking ink for use in writing instruments.
1.3	Supplier / Manufacturer Address	Multichem Limited Tyne Mills Industrial Estate Hexham Northumberland England NE46 1XL
1.4	**24Hr Emergency Tel:** Daytime Tel:	**+44 7887 612787** +44 1434 606 085
	Fax Number	+44 1434 601 804
	e-mail	mail@multichem.net

2.0	**Hazards Identification**	
2.1	Preparation Classification	This preparation is dangerous under 67/548/EEC and 1999/45/EC regulations as amended. This preparation requires a safety data sheet in accordance with 91/155/EC as amended. Additional information relating to health and environmental hazards can be found in Sections 11 and 12 of this safety data sheet.
2.2	Danger Symbols:	**F**
2.3	Phrases –R–	**R11**
2.4	Danger Identification	HIGHLY FLAMMABLE

3.0 Composition / Information On Ingredients

Contains:	**EINECS**	**CAS**	**Conc'n %**	**Symbols**	**R-phrases**
De-Natured Ethanol		64-17-5	50-80%	F	R11
Iso-Propanol (Propan-2-ol)	200-661-7	67-63-0	< 15%	F, Xi	R11, R36, R67
Pigments, Resins, Release Agents, Surfactants			15 – 30%		

Note: The complete text of risk –R- phrases can be found in Section 15 and 16

4.0	**First Aid Measures**	
	Route	**First Aid**
4.1	Skin Contact	Remove any contaminated clothing. Wash with soap & flowing water for 15 minutes. If irritation continues consult a physician.
4.2	Eye Contact	Irrigate with a suitable eye solution or water for ten minutes - obtain medical attention.
4.3	Inhalation	Remove from exposure - in severe cases obtain medical attention.
4.4	Ingestion	Give plenty to drink if ingestion is suspected. DO NOT induce vomiting and consult a physician.

5.0	**Fire-Fighting Measures**		
5.1	Hazard	Flash Point: 12°C (Closed Cup) Explosive Limits: Lower limit 3.5% to 19% upper limit.	
5.1	Extinguishing Media	Alcohol resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Water may not be effective initially.	
5.2	Media to avoid	Reacts strongly with oxidisers.	
5.3	Hazardous Combustion Products	Carbon Monoxide (CO) can form with incomplete combustion. Some oxides of nitrogen (NO_X) and sulphur (SO_X) could be formed. Complete combustion will yield primarily carbon dioxide (CO_2) and water.	
5.4	Protective Equipment	Fire fighters should wear proper protective equipment and self-contained breathing apparatus with full face-piece.	
5.5	Additional Information	Vapours may flow along surfaces to distant ignition sources and flash back. Closed containers exposed to heat may explode. Move exposed containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.	
6.0	**Accidental Release Measures**		
6.1	Personal Precautions	Avoid contact with skin and eyes. Ventilate contaminated area thoroughly. Do not breathe vapour. Extinguish naked flames. Remove ignition sources. No smoking. Avoid sparks. Evacuate the area of all non-essential personnel. Shut off leaks, if possible without personal risk.	
6.2	Environmental Precautions	Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.	
6.3	Method of Clean Up	Absorb or contain liquid with sand, earth or spill control material. Collect avoiding possible spark ignition and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum. Solvent is miscible with water. Flush contaminated area with plenty of water. Retain washings as contaminated waste. Refer to Sections 8.0 and 13.0 for additional information on exposure and disposal.	
7.0	**Handling and Storage**		
7.1	Handling	Product is not intended nor should be allowed to maintain prolonged skin contact. Ensure good ventilation or the provision of local exhaust ventilation where possible. Avoid contact with eyes, skin and clothing, avoid ingestion and inhalation. Avoid sources of Ignition.	
7.2	Storage	Keep away from direct sunlight and other sources of heat or ignition. Keep away from oxidising agents. Do not smoke in storage areas. Keep container tightly closed and in a well-ventilated place.	
7.3	Product Transfer	Low flash point; requires attention to equipment used in transport and use so as to avoid sparks and other sources of ignition. Take precautionary measures against static discharges. Earth all equipment. Avoid splash filling. Do not empty into drains. Multichem advise that their inks be stored for at least 24 hours at around 25°C and then agitated prior to assembly into markers or pen products.	
7.4	Shelf Life	12 months from receipt	
8.0	**Exposure Controls / Personal Protection**		
8.1	Exposure Limit Values	Denatured Ethanol	EH40 (UK) OES: 1000 ppm Period: 8 hours OES: 1900 mg/m^3 /period: 8 hours
		Iso-Propanol (Propan-2-ol)	EH40 (UK) LTEL 999mg/m^3 Period: 8 hours STEL: 1250mg.m^3
8.2	Personal Protection		
	Respiratory Protection	Avoid inhalation of the vapours when the product in being used. Local exhaust ventilation (LEV) should be used in conjunction with other control measures as a means of removing material accidentally released. Type approved RPE for organic vapours if required.	
	Hand Protection	Protective butyl rubber gloves.	
	Eye Protection	Safety goggles or face shield.	
	Skin Protection	Overalls and anti static safety shoes.	
	Additional	Do not permit smoking whilst product is used. **Keep away from children.**	
8.3	Environmental Exposure	See Section 12 for detailed information.	

9.0	Physical and Chemical Properties	
	Odour	Characteristic odour of alcohol solvent.
	Appearance	Coloured liquid.
	Volatility	Approx 80%.
	pH	4.0 to 12.0
	Boiling Point / Range	78.3°C
	Flash Point	12°C (Closed Cup)
	Auto-ignition	365°C
	Explosive Properties	This preparation is not considered explosive. The formation of explosive vapour/air mixtures is possible.
	Explosive Limits :	Lower limit 3.5% to 19% Upper limit (volume % in air).
	Vapour Pressure	5.81 kPa at 20°C
	Relative Density	0.82 – 0.86 g/cm^3 (water = 1.0)
	Solubility	Water solubility – solvents miscible with water.
	Viscosity	5 – 14 cP
10.0	**Stability and Reactivity**	
10.1	Conditions to Avoid	Considered a stable product.
10.2	Materials to Avoid	Reacts with strong oxidising agents causing fire and explosion hazards. Can also react with acid chlorides, acid anhydrides, aluminium and copper. It may attack some forms of plastic and rubber.
10.3	Hazardous Decomposition	May give of irritant / toxic fumes if involved in a fire. Primarily forms oxides of carbon during combustion.
11.0	**Toxicological Information**	
11.1	Acute Effects	
	Vapour inhalation	Ataxia, confusion, dizziness, drowsiness, headache, nausea, weakness.
	Skin	De-fatting of skin. Dry skin. Note that dermal absorption of solvents could also contribute substantially to the total body burden.
	Eyes	Lacrimation, redness, pain, blurred vision.
	Ingestion	Abdominal pain, sore throat, drowsiness, headache, nausea.
11.2	Target Organ Effects	The preparation may cause liver and kidney damage if abused.
11.3	Sensitisation	Allergic skin reaction / dermatitis could occur with misuse of this preparation.
12.0	**Ecological Information**	
12.1	Ecotoxicity	Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.
12.2	Mobility	Mobile liquid. Contains approx 80% volatile components. Solvents readily absorbed into soil. Non-volatile content only slightly soluble in water.
12.3	Persistence/Degradability	Solvents are readily biodegradable.
12.4	Bio accumulative Potential	This product shows a low bioaccumulation potential.
13.0	**Disposal Considerations**	
Dispose of spilled material and containers in accordance with state and local regulations for hazardous or 'Special' waste. Consider recycling or incineration. State or local regulations are complex and subject to change so should be consulted by the owner of the waste prior to disposal.		
14.0	**Transport Information**	
UN No:		1993
Proper Shipping Name:		Flammable Liquid n.o.s (Contains Ethanol)
ADR, IATA, IMDG Hazard Class		3
Packing Group		2

15.0	Regulatory Information		
15.1	Hazard Symbols	**F**	
			
		HIGHLY FLAMMABLE	
15.2	-R-phrases		
	R11	HIGHLY FLAMMABLE	
15.3	-S-Phrases		
	S2	KEEP OUT OF THE REACH OF CHILDREN	
	S7	KEEP CONTAINER TIGHTLY CLOSED	
	S16	KEEP AWAY FROM SOURCES OF IGNITION – NO SMOKING	
16.0	**Other information**		
16.1	Select Bibliography	Regulation 67/548/EEC Regulation 91/155/CE Regulation 1999/45/CE Regulation 2001/58/CE Regulation 2001/59/CE Regulation 2001/60/CE	
16.2	HS Tariff No:	321590 10	
16.3	The information contained herein does not constitute the user's own assessment of workplace risk as required by other health and safety legislation. The above information is provided in good faith and is based on our present knowledge. It shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual arrangement.		