



**19906-XXXX****SAFETY DATA SHEET – LETRASET MARKER RANGE**

1.1 Product identifier	<b>Letraset Marker Range</b>  Bottled Alcohol Based Inks Tria Marker Pens Promarker Pens Flexmarker Pens Blender solvent base Tria Cartridges
1.2 Relevant identified uses of the substance or mixture and uses advised against	Intended use: Ink for marker pen refill
1.3 Details of the supplier of the SDS	Letraset Ltd Kingsnorth Ind Estate Wotton Road Ashford Kent TN23 6FL UK  SDS compiler: enquiries@letraset.com
1.4 Emergency telephone number:	+44 (0)1233624421 (Monday – Friday 9.00 – 17.00 hrs)
SDS Issue 1:	07/07/2011

2.1 Classification of the substance or mixture	GHS classification: Flammable liquids, hazard category 2 Serious eye damage/eye irritation, Hazard Category 2  H225 Highly flammable liquid and vapour H319 Causes serious eye irritation  Not classified as dangerous for the environment  Classification to DPD (1999/45/EC) and CHIP: F;R11, Highly Flammable
<i>see section 16 for full text of H-and R- phrases</i>	
2.2 Label elements	Labelling in accordance with GHS – reduced labelling requirements for receptacles ≤125 ml    DANGER WARNING
2.3 Other hazards	With a one-off skin contact, dryness may occur but irritation is unlikely. Prolonged or repeated skin contact may cause irritation possibly leading to dermatitis. Very high vapour levels (above exposure limits), if inhaled, may cause irritation of nose/throat and produce headache, nausea and dizziness

<b>SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS</b>					
3.2 Mixtures					
Hazardous Ingredients:	CAS No.	REACH registration No.	GHS Classification	DSD Classn.	concn. %
Ethanol	64-17-5	01-2119457610-43	Flamm. L.iq. 2; H225	F; R11	60-70
Methyl lactate	547-64-8	17-2119410619-40	Flamm. L.iq. 3; H226 Eye Irrit. 2; H319 STOT SE 3; H335	R10 Xi R36/37	10-15
Benzyl Alcohol	100-51-6	01-2119492630-38	Acute Tox. 4 *; H332 Acute Tox. 4 *; H302	Xn. R20/22	<4
<i>see section 16 for full text of classification phrases</i>					
Exposure limit values exist for the following constituent(s) Ethanol; Dipropylene glycol monomethyl ether; Benzyl alcohol					

<b>SECTION 4 - FIRST AID MEASURES</b>	
4.1 Description of first aid measures	Inhalation: Get casualty to breathe fresh air. Get medical attention if breathing difficulties occur Skin contact: Wash with soap and water Eye contact: If substance has got into eyes, immediately irrigate the eye for a minimum of 15 minutes under running water. Seek medical attention. Ingestion: Do not induce vomiting. Seek medical advice.
4.2 Most important symptoms and effects, both acute and delayed	No ill effects known
4.3 Indication of immediate medical attention and special treatment needed, if necessary	Eye contact: immediately wash out with plenty of water

<b>SECTION 5 - FIREFIGHTING MEASURES</b>	
5.1 Extinguishing media	Dry powder or carbon dioxide extinguisher
5.2 Specific hazards arising from the substance or mixture	Product is highly flammable
5.3 Advice for fire-fighters	Product is highly flammable

<b>SECTION 6 - ACCIDENTAL RELEASE MEASURES</b>	
6.1 Personal precautions, protective equipment and emergency procedures	Clean up any spillages immediately with a cloth. The very small quantities involved are unlikely to present any significant risk.
6.2 Environmental precautions	Do not pour inks or blenders into drains or sinks. Prevent entry into drains and water courses
6.3 Methods and material for containment and cleaning up	Denatured Alcohol (Methylated Spirits) may be used in small quantities to remove any residue, taking account of the precautions in section 7
6.4 Reference to other sections	Personal protective equipment: See section 8

<b>SECTION 7 - HANDLING AND STORAGE</b>	
7.1 Precautions for safe handling	DO NOT BREATHE VAPOUR USE ADEQUATE VENTILATION DO NOT USE FOR PROLONGED PERIODS IN CONFINED SPACES HIGHLY FLAMMABLE – KEEP AWAY FROM SOURCES OF IGNITION
7.2 Conditions for safe storage, including any incompatibilities	KEEP AWAY FROM CHILDREN STORE AWAY FROM SOURCES OF HEAT OR IGNITION
7.3 Specific end use(s)	Intended for use as ink for marker pen refill and colour medium

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 Control parameters	Workplace Exposure Limits (WEL): Ethanol: LTEL 8hr TWA: 1000 ppm Dipropylene glycol monomethyl ether: LTEL 8hr TWA: 100ppm Benzyl alcohol: LTEL 8hr TWA: 100 ppm
8.2 Exposure controls	Use adequate ventilation especially if use is prolonged or there are several users For occasional use, it is very unlikely that the WEL levels will be exceeded.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties (Inks and Blenders)	
Appearance	tinted liquid
Odour	alcohol
Odour threshold	no data available
pH	neutral
Melting Point/Freezing point (°C)	no data available
Initial boiling point/boiling range	no data available
Flash Point (°C)(closed cup)	16
Evaporation rate	no data available
Flammability	no data available
Upper/lower flammability limits	no data available
Vapour pressure (mbar @ 20°C)	no data available
Vapour density	no data available
Relative Density (@15.5°C)	no data available
Solubility in water	partially soluble
Solubility in fat / solvent	not miscible
Partition coefficient (log Pow)	no data available
Autoignition temperature (°C)	no data available
Decomposition temperature	no data available
Viscosity (mPa.s @ 40°C)	no data available
Explosive properties	no data available
Oxidising properties	none
9.2 Other information	None

**SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity	No dangerous reactions known
10.2 Chemical stability	Stable under normal conditions of use
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	Avoid high temperatures and exposure to sunlight (colour change may occur)
10.5 Incompatible materials	None known
10.6 Hazardous decomposition products	None known

<b>SECTION 11 - TOXICOLOGICAL INFORMATION</b>		
<b>11.1 Information on toxicological effects</b>		
Acute Toxicity		
-oral		No toxic components present at levels to cause classification.
-inhalation		No toxic components present at levels to cause classification.
-dermal		Unlikely to cause harm on brief or occasional contact
Corrosivity/Irritation		
-eye		Causes serious eye irritation
-skin		No components present that are classified as skin irritants but may cause irritation due to de-fatting effect on skin
-respiratory tract		Possible slight mucosal irritation
Sensitisation		
-skin		No evidence of sensitisation effects
-respiratory		No evidence of sensitisation effects
Repeated-dose toxicity		A minor component is classified as toxic by repeated skin contact
Mutagenicity		No evidence of mutagenicity
Carcinogenicity		No evidence of carcinogenicity
Reproductive toxicity		No evidence of reproductive toxicity

<b>SECTION 12 - ECOLOGICAL INFORMATION</b>	
12.1 Toxicity	Not classified as dangerous for the environment. No ecotoxic chemicals present
12.2 Persistence and degradability	The majority of components are readily biodegradable
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	Partially soluble in water
12.5 Results of PBT and vPvB assessment	No PBT or vPvB chemicals present
12.6 Other adverse effects	None known

<b>SECTION 13 - DISPOSAL CONSIDERATIONS</b>	
<b>13.1 Waste treatment methods</b>	
Waste Residue:	Do not pour inks or blenders into drains or sinks. Large amounts are classified as "Dangerous Waste" (EWC 08 03 12* waste ink containing dangerous substances) Disposal should be in accordance with local or national legislation via an authorised waste disposal contractor to an approved waste disposal site
Packaging:	Dispose of through authorised waste contractor

<b>SECTION 14 - TRANSPORT INFORMATION</b>	
Classified as dangerous goods for carriage under ADR/RID/ADN/IMDG/ICAO/IATA regulations	
14.1 UN Number	UN 1993
14.2 UN Proper shipping name	Flammable Liquids, N.O.S. (contains ethanol)
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	Not classified as Environmentally Hazardous Substance / Marine Pollutant
14.6 Special precautions for user	See section 8 for safe handling
	Note that Bottled Alcohol Based Inks packed in 20 ml. bottles may be carried under the Limited Quantities or Excepted Quantities rules of the ADR/RID/ADN/IMDG/ICAO/IATA regulations

**SECTION 15 REGULATORY INFORMATION**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Supply regulations: Classified as hazardous under DPD/GHS/CLP criteria (DPD: Dangerous Preparations Directive; GHS: Globally Harmonised system of classification and labelling of chemicals; CLP: Classification, Labelling and Packaging regulations)

Transport regulations: Classified as Dangerous Goods for Carriage under ADR/RID/IMDG/ICAO/IATA regulations

15.2 Chemical Safety Assessment

No formal chemical safety assessment has been carried out

**SECTION 16 OTHER INFORMATION**

Full text of classification data in sections 2 and 3

Flamm. Liq. 2: H225	Flammable liquids, Hazard Category 2; Highly flammable liquid and vapour
Flamm. Liq. 3: H226	Flammable liquids, Hazard Category 3; Flammable liquid and vapour
Eye Irrit. 2: H319	Serious eye damage/eye irritation. Hazard Category 2; Causes serious eye irritation
STOT SE 3 : H335	Specific target organ toxicity — Single exposure. Hazard Category 3. Respiratory tract irritation; May cause respiratory irritation
Acute Tox. 4 *: H332	Acute toxicity (inhal.). Hazard Category 4; Harmful if inhaled.
Acute Tox. 4 *: H302	Acute toxicity (oral). Hazard Category 4; Harmful if swallowed
<i>F: R11</i>	<i>Highly flammable</i>
<i>R10</i>	<i>Flammable</i>
<i>Xi: R36/37</i>	<i>Irritant; Irritating to eyes and respiratory system</i>
<i>Xn: R20/22</i>	<i>Harmful; Harmful by inhalation and if swallowed</i>

Contact Martin Gibbs (Managing Director) for further information