

## SAFETY DATA SHEET

SDS No: SDS-LDT-06/06  
Revision No: 2  
Date of issue: 8/07/11

### 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Product name : Whiteboard Marker Pen  
Name of the company : LEADERART INDUSTRIES (M) SDN. BHD.  
Contact address : 7, Jalan Kukoh, Tampoi, 80350 Johor Bahru, Johor, Malaysia.  
Tel : (07) 2364011 Fax : (07) 2361793

### 2. HAZARDS IDENTIFICATION

Note 1: <sup>(1)</sup>

Hazard classification of product <sup>(2)</sup> : Not classified as hazardous  
Hazard symbols and signal words <sup>(3)</sup> : Not applicable  
Risk / Safety (R/S) Phrases <sup>(4)</sup> : Not applicable  
Health effect of skin contact with molten polymer, see Section 4.  
Routes of exposure : Health effect of eye contact with ink, see Section 4.  
Symptoms of exposure : Not applicable  
Effects of acute exposure : Not applicable  
Effects of chronic exposure : Not applicable  
Conditions aggravated by exposure : Not applicable

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Note 2: <sup>(5)</sup>

Ingredient name	CAS No.	EINECS No.	Conc' n %	Hazard symbols	R / S Phrases <sup>(6)</sup>	LC50 (Species & route)	LD50 (Species & route)	Exposure limit values
Board Marker Ink Cap-Off								
Ethanol	64-17-5	200-578-6	10 to 20	Flammable	R11 R20/22	Dermal-Rat: 20000 ppm/hour	Oral-Rat: 7060mg/kg	N/A
1-methoxy-2-propanol	107-98-2	203-539-1	2 to 5	Flammable	R10 S24	Inhalation-Rat: >20mg/l /4hours	Oral-Rat: >2000mg/kg Rabbit: >2000mg/kg	N/A
Propan-2-ol	67-63-0	200-661-7	0.5 to 2	Flammable	R11 R36 R37 S7 S16 S24 S25 S26	N/A	Oral-Rat: 5045mg/kg	N/A
Polyethylene	9002-88-4	N/A	30.0	N/A	N/A	N/A	N/A	N/A
Polypropylene	9003-07-0	N/A	40.0	N/A	N/A	N/A	N/A	N/A
Polyester	N/A	N/A	8.0	N/A	N/A	N/A	N/A	N/A

Acrylic	N/A	N/A	1.00	N/A	N/A	N/A	N/A	N/A
<b>4. FIRST AID MEASURES</b>								
	Inhalation :	Not applicable						
	Ingestion :	Not applicable						
	Skin contact :	If contact with molten product, treat as Thermal Burn injury. Thermal burns require immediate medical attention. Ink may cause eye irritation. Immediately flush with water continuously for at least 15 minutes. Seek medical attention as needed.						
	Eye contact :	First aid is normally not required. If swallowed, obtain medical attention.						
	Additional information :							
<b>5. FIRE FIGHTING MEASURES</b>								
	Conditions of flammability :	Excessive heat at 200 Deg C.						
	Suitable extinguishing media :	Alcohol resistant foam, water spray of fog, dry chemical powder, carbon dioxide.						
	Extinguishing media to be avoided :	Do not use water jets since they could help to spread the flames.						
	Special fire fighting procedures :	Not required						
	Special protective equipment for fire fighters :	Respiratory & eye protection.						
	Unusual fire / explosion hazard :	Treat solid that can burn. Molded parts generally burn slowly with a low smoke density & flaming drips. Under certain conditions can burn with a high smoke density.						
	Hazardous combustion products :	Under Oxygen lean condition, Carbon monoxide & irritating smoke may be produced.						
<b>6. ACCIDENTAL RELEASE MEASURES</b>								
	Personal precautions :	Not required						
	Environmental precautions :	Not required						
	Methods for containment and cleaning up :	Pick up & collect in suitable container for disposal.						
	Special indications :	Not required						
<b>7. HANDLING AND STORAGE</b>								
	Handling procedures and equipment :	Not required						
	Conditions for safe storage :	Store in a cool, dry and well ventilated place, away from direct heat or sunlight.						
	Precautions during handling and storage :	Avoid freezing, sparks & open flames. Do not store near strong oxidizing agents.						
<b>8. EXPOSURE CONTROLS / PERSONAL PROTECTION</b>								
	Exposure limit values of product <sup>(7)</sup> :	Not established.						
	Personal protective equipment to be used							
	Gloves / Type :	Not required						
	Respiratory / Type :	Not required						
	Eye / Type :	Not required						
	Footwear / Type :	Not required						

Clothing / Type :	Not required
Other / Type :	Not required
Specific engineering controls to be used :	Not required
Environmental exposure controls to be used :	Not required

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state :	Solid
Appearance and odour :	As per product characteristic
Odour threshold (ppm) :	Not applicable
Colour :	As per product characteristic
pH :	Not applicable
Boiling point :	Not applicable
Freezing point :	Not applicable
Melting point :	> 165 Deg C
Flammability (Solid, Gas) :	Not available
Flash point and method of determination :	Not applicable
Flammable limits	
UFL / UEL :	Not available
LFL / LEL :	Not available
Auto ignition temperature :	Not applicable
Explosion data :	Not applicable
Sensitivity to mechanical impact :	Not applicable
Sensitivity to static discharge :	Not applicable
Vapour pressure (mmHg) :	Not applicable
Specific gravity / Relative density (H <sub>2</sub> O=1) :	Less than 1
Solubility(ies) :	Insoluble
Coefficient of H <sub>2</sub> O / oil distribution :	Not applicable
Viscosity in centistokes or SUS (at 40 deg C or 100 deg F) :	Not applicable
Vapour density (Air = 1) :	Not applicable
Decomposition temperature :	More 250deg C
Evaporation rate (Butyl Acetate=1) :	Not applicable

### 10. STABILITY AND REACTIVITY

Chemical stability :	Product is stable.
Conditions of reactivity :	Excessive heat at 200 Deg C.
Incompatible materials and conditions :	Concentrated oxidizing or reducing agents. Under Oxygen lean condition, Carbon monoxide & irritating smoke may be produced.
Hazardous decomposition products :	
Hazardous polymerisation products :	Polymerization will not occur.

### 11. TOXICOLOGICAL INFORMATION

LC50 / LD50 of product (Species and route) <sup>(8)</sup> :	Not applicable
Irritancy of product :	Ink may cause eye irritation.
Sensitisation to product :	Not a skin sensitiser.

<p><b>Carcinogenicity</b>  <b>Type of carcinogen :</b>  <b>Organisation recognising carcinogen :</b>  <b>Mutagenicity :</b>  <b>Reproductive toxicity :</b>  <b>Teratogenicity / Developmental toxicity :</b>  <b>Toxicologically synergistic products :</b>  <b>Other toxicological information :</b></p>	<p><b>Not carcinogenic</b>  <b>Not available</b>  <b>Not mutagenic</b>  <b>Not available</b>  <b>Not toxic</b>  <b>Not available</b>  <b>Refer Heading 2.</b></p>
<b>12. ECOLOGICAL INFORMATION</b>	
<p><b>Eco-toxicity :</b>  <b>Persistence and degradability in environment :</b>  <b>Environmental fate :</b></p>	<p><b>The product is not toxic.</b>  <b>The product is not biodegradable.</b>  <b>Floats on water.The product is not expected to bioaccumulate.</b></p>
<b>13. DISPOSAL CONSIDERATIONS</b>	
<p><b>Waste disposal method :</b>  <b>Handling of dangerous residues during disposal :</b>  <b>Local / National regulations relating to waste :</b></p>	<p><b>Place in an appropriate disposal facility in compliance with local regulations.</b>  <b>Not ordinally required.</b>  <b>None</b></p>
<b>14. TRANSPORT INFORMATION</b>	
<p><b>Transport classification :</b>  <b>Proper shipping name :</b>  <b>Hazardous material description :</b>  <b>PIN / UN number :</b>  <b>Transport Hazard class :</b>  <b>Packing group :</b>  <b>Marine pollutant :</b>  <b>Other applicable information :</b>  <b>Special precautions during transport :</b></p>	<p><b>Non-hazardous for air, sea and road freight.</b>  <b>Not regulated</b>  <b>Not available</b>  <b>Product is not included in the UN classification of dangerous substances.</b>  <b>Not available</b>  <b>None</b>  <b>No</b>  <b>None</b>  <b>No additional remark.</b></p>
<b>15. REGULATORY INFORMATION</b>	
<p><b>Label information :</b>  <b>National regulations / local recommendations :</b></p>	<p><b>None</b>  <b>Not available</b></p>
<b>16. OTHER INFORMATION</b>	

**Full text of R phrases (Under Headings 2, 3 & 15) :**

**Sections revised in the SDS <sup>(9)</sup> :  
Other important information :**

**R-phrases(s) :**

**R10 Flammable**  
**R11 Highly flammable**  
**R20/22 Harmful by inhalation and if swallowed**  
**R36 Irritating to eyes and skin**  
**R37 Irritating to respiratory system**

**S-phrase(s) :**

**S7 Keep container tightly closed**  
**S16 Keep away from sources of ignition - "No Smoking"**  
**S24 Avoid contact with skin**  
**S25 Avoid contact with eyes**  
**S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice**

**Changed informations in the Section 2 & 3.  
Not for children under 3 years.**

#### FOOTNOTE

(1) Note 1	This section needs information on the product as a whole
(2) Hazard classification of product	International / National / Regional classification
(3) Hazard symbols and signal words	Hazard symbols: Graphical reproduction of the symbols in black and white or the name of the symbol e.g. flame, skull with crossbones. Signal words: Danger, Warning, Caution.... etc.
(4) R/S Phrases	Just specify the R/S phrases...The full explanation of the R/S phrases can be given under Heading 16.
(5) Note 2	The below values should be specific to the individual ingredients...and not the product as a whole.
(6) R / S Phrases	Just specify the R/S phrases...The full explanation of the R/S phrases can be given under Heading 16.
(7) Exposure limit values of product	These values are to be specified for the product as a whole.
(8) LC50 / LD50 of product (Species and route)	These values are to be specified for the product as a whole.
(9) Sections revised in the SDS	This information is needed only when the SDS is revised.