

Material Safety Data Sheet

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Issue date: August 2011

BALL MARKER INKS

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: BALL MARKER INKS

Manufacturer's Product Code: SK

Use: Marking ink.

DYEPAC LIQUID INKS PTY. LTD.

A.C.N. 009 995 215

A.B.N.94 009 995 215

29 ENTERPRISE STREET

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2. HAZARDS IDENTIFICATION

HAZARDOUS ACCORDING TO ASCC/NOHSC/EU CRITERIA

Hazard Category: Harmful (Xn), Irritant (Xi), Highly Flammable (F)

Hazard Classification: HAZARDOUS SUBSTANCE, DANGEROUS GOODS

RISK PHRASES

R10 Flammable

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin.

SAFETY PHRASES

S7 Keep container tightly closed.

S16 Keep away from sources of ignition - No smoking.

S36/37 Wear suitable protective clothing and gloves.

S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately and show this container or label.

Road Transport (ADR/RID):

UN Number: 1210

Proper Shipping Name: PRINTING INK

Dangerous Goods Class: 3

Packing Group: III

Poison Schedule: None allocated [Aust].

Warning Statement:

Vapour and liquid is harmful by skin, inhalation and if swallowed. Liquid will cause irritation to eyes and skin.

Flammable liquid, avoid all sources of ignition, heat and naked flames.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
2-BUTOXY ETHANOL	30 to < 70 %	111-76-2
ETHANOL	30 to < 60 %	64-17-5
PIGMENTS, RESINS - NON HAZARDOUS	Balance	Mixture
All other ingredients determined not to be hazardous according to ASCC/NOHSC/EU criteria.		

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4. FIRST AID MEASURES

Swallowed:

If swallowed, **DO NOT** induce vomiting. If victim conscious, give 1 to 2 glasses of water to drink. Seek urgent medical assistance.

Eye:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes..

Skin:

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Inhaled:

Remove victim to fresh air. Apply resuscitation if victim is not breathing - Administer oxygen if breathing is difficult. Transport to hospital or doctor immediately.

First Aid Facilities:

Eye wash fountain, safety shower and normal wash room facilities.

Advice to Doctor:

Treat symptomatically.

For advice, contact Poisons Information Centre

In Australia call Tel: 13 1126

In New Zealand Tel: 034747000

5. FIRE-FIGHTING MEASURES

Fire/Explosion Hazard

If safe to do so, move undamaged containers from fire area.

SUITABLE EXTINGUISHING MEDIA: Foam, dry chemical or carbon dioxide.

HAZARDS FROM COMBUSTION PRODUCTS: Decomposes on heating emitting oxides of carbon and noxious smoke.

PRECAUTIONS FOR FIRE FIGHTERS AND SPECIAL PROTECTIVE EQUIPMENT: Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. If possible to do so safely, shut off fuel to fire. Avoid spreading burning liquid with water used for cooling fire exposed containers when using water spray, boil-over may occur when the product temperature reaches the boiling point of water, thereby resulting in re-ignition.

HAZCHEM CODE: 3[Y] [Aust]

FLAMMABILITY

Flammable liquid. Vapours from this product may travel or be moved by air currents and be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge or other ignition sources at locations distant from the point of handling.

Flash Point: < 23°C

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Flammable liquid. Avoid all sources of ignition. Keep unnecessary people away; Isolate hazard area and deny entry. Ventilate area. Wear suitable protective equipment as outlined under personal protection in this MSDS.

Methods and Materials for Containment and Clean Up Procedures:

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6. ACCIDENTAL RELEASE MEASURES (continued)

Throw diatomaceous earth onto spill. **DO NOT** use sawdust. **ALLOW TO ABSORB**. Use non-sparking tools or HEPA vacuum system to pick up. Place into labelled drum(s) for later disposal. If risk of fire, blanket the spill with foam or use water fog to disperse vapour clouds. Consult an expert regarding disposal of this product.

Emergency information(Transport):

Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:2004)

For **LIQUIDS** - Flammable, Guide No: 15

7. HANDLING AND STORAGE

Precautions for Safe Handling:

CAUTION! Product is flammable. Wear neoprene or nitrile gloves and goggles when opening and dispensing the product. Do not breathe vapours. For further information please refer to the Engineering Controls of this MSDS.

Conditions for Safe Storage:

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids, combustibles and oxidizing agents. All equipment must be earthed. Store in original packages as approved by manufacturer. For further information please refer to the Engineering Controls of this MSDS.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards

No exposure standards are available for this product, however, the following exposure standards have been assigned by [NOHSC] to the following components of the product:

2-BUTOXY ETHANOL

[NOHSC]

[TWA] 25 ppm 121 mg/m³

Notices: Sk

References: H;R

Sk Notices:

The adopted national exposure standards listed only consider absorption via inhalation. In some instances, special measures may be required to prevent absorption through the skin. Chemical compounds requiring such precautions are specified by the notation 'Sk'.

ETHANOL

[NOHSC]

[TWA] 1,000 ppm 1,880 mg/m³

References: H

Engineering Controls

Flammable liquid. Maintain adequate ventilation at all times. Prevent accumulation of vapours in hollows or sumps. Eliminate any sources of ignition.

Personal Protection Equipment

GLOVES: Neoprene or nitrile.

EYES: Chemical goggles or spectacles with side shields to protect eyes.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

RESPIRATORY PROTECTION: Avoid breathing of vapours. Filter capacity and respirator type depends on exposure levels and type of contaminant. Select and use respirators in accordance with AS/NZS 1715. When vapours exceed the exposure standards and there is no suitable ventilation systems then the use of a half-face respirator fitted with an organic vapour cartridge is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Various coloured liquid with characteristic odour.
Boiling Point:	166 - 174°C
Vapour Pressure:	Not available.
Specific Gravity:	0.931
Flash Point:	< 23°C
Flammability Limits:	Not available.
Solubility in Water:	Immiscible.

Other Properties

Not available.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:

Stable under normal conditions of use.

CONDITIONS TO AVOID:

Ignition sources and mixing with incompatibles.

INCOMPATIBLE MATERIALS:

Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposes on heating emitting oxides of carbon and noxious smoke.

HAZARDOUS REACTIONS:

Will not occur.

11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected, if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms and effects that may arise if the product is mishandled and overexposure occurs are:

ACUTE HEALTH EFFECTS

Swallowed:

Harmful if swallowed. May cause irritation to mouth, throat and stomach with effects including pains in the stomach, which may lead to nausea, vomiting and diarrhoea. Swallowing large quantities of 2-butoxy ethanol may result in metabolic acidosis, hypokalemia, hemoglobinuria, and possibly coma.

Eye:

May cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision.

Skin:

Harmful by skin contact. May cause irritation to the skin, with effects including; Redness and itchiness. 2-butoxy ethanol may be absorbed through the skin with resultant toxic effects in blood system, spleen and testes.

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11. TOXICOLOGICAL INFORMATION (continued)

Inhaled:

Harmful if inhaled. Mists or vapours will cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache, coughing, loss of co-ordination and chest pains. 2-butoxy ethanol may affect the central nervous system.

Chronic:

Prolonged or repeated skin contact may lead to dermatitis. Product may also be absorbed through the skin with resultant toxic effects. Prolonged or repeated exposure may lead to irreversible damage to health. Prolonged or repeated exposure or deliberately concentrating and inhaling the vapour may result in lung function incapacity or death.

2-Butoxy ethanol:

Oral LD50(rat): 470 mg/kg

Inhalation LC50(rat): 450 ppm/4Hr

Dermal LD50(rabbit): 220 mg/kg

Ethanol:

Oral LDLo(Human): 1,400 mg/kg

Reaction: Stupor, sleepiness, headache.

Oral LD50(rat): 7,060 mg/kg

12. ECOLOGICAL INFORMATION

No information is available for this product, however, large quantities should not be discharged to waterways, sewers or drains.

13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise flammable nature. If large amounts of the product enter waterways, sewers or streams, immediately contact the Environmental Protection Agency or your Local Waste Management Authority.

14. TRANSPORT INFORMATION

Road Transport (ADR/RID)

UN Number: 1210

Proper Shipping Name: PRINTING INK

Dangerous Goods Class: 3

Packing Group: II

Air Transport (IATA)

UN Number: 1210

Proper Shipping Name: PRINTING INK

Dangerous Goods Class: 3

Packing Group: II

Sea Transport (IMDG)

UN Number: 1210

Proper Shipping Name: PRINTING INK

Dangerous Goods Class: 3

Packing Group: II

EmS: F-E,S-D

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15. REGULATORY INFORMATION

Poison Schedule: None allocated [Aust]

Inventory Status:

Australia (AICS)	Y
United States (TSCA)	Y
Europe (EINECS/ELINCS)	Y

Y = all ingredients are on the inventory.

EU Label: Harmful (Xn), Irritant (Xi), Flammable

16. OTHER INFORMATION

Date of Preparation:

Issue date: August 08, 2011

Supersedes: August 21, 2008

Reasons for Update:

1. Review of fields and data, promoting uniformity of MSDS.
2. Changes to Sections 2, 4, 6, 8, 11, 15 & 16, based upon SUSDP first aid information.

Key Legend Information:

NOHSC - National Occupational Health & Safety Commission {Formerly Worksafe}[Aust]

ASCC - Australian Safety and Compensation Council [Aust]

SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons [Aust]

TWA - Time Weighted Average [Int]

STEL - Short Term Exposure Limit [Int]

AICS - Australian Inventory of Chemical Substances

Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:2004) [Aust]

EPA - Environmental Protection Agency [Int]

NIOSH - National Institute for Occupational Safety and Health [US]

TSCA - Toxic Substances Control Act [US]

OSHA - Occupational Safety and Health Administration [US]

AS/NZS 1715 - Selection, use and maintenance of respiratory protective devices. [Aust/NZ]

AS/NZS 1716 - Respiratory protective devices. [Aust/NZ]

Hazchem Code - Fire fighters designation [Aust]

IATA - International Aviation Transport Authority [Int]

ICAO - International Civil Aviation Organization [Int]

IMO - International Maritime Organisation. [Int]

IMDG - International Maritime Dangerous Goods [Int]

United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals. [Int]

EINECS - European Inventory of Existing Commercial Chemical Substances. [Int]

ELINCS - European List of Notified Chemical Substances. [Int]

EU - European Union [Int]

ADR/RID - European Road & Rail Transport Union - [Int]

EU Directives: The classification criteria used, are adopted from the European Community's (EC) legislation for classifying dangerous substances. The criteria are taken from:

EC Council Directive 67/548/EEC

EC Council Directive 1999/45/EC

[Aust/NZ] = Australian New Zealand

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16. OTHER INFORMATION (continued)

[Int] = International

[US] = United States of America

Principal References:

Information supplied by manufacturer, reference sources including the public domain.

Disclaimer

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END OF MSDS