

Material Safety Data Sheet

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Issue date: August 2011

INK DOD 800 NP YELLOW

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: INK DOD 800 NP WHITE

Manufacturer's Product Code: IJC101

Use: An ink system developed to be used in conjunction with ink jet coda hardware. Tolerance to be equal to or less than 1 micron specified.

DYEPAC LIQUID INKS PTY. LTD.

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2. HAZARDS IDENTIFICATION

HAZARDOUS ACCORDING TO ASCC/NOHSC/EU CRITERIA

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

Hazard Classification: HAZARDOUS SUBSTANCE, DANGEROUS GOODS

RISK PHRASES

R11 Highly flammable

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness and cracking.

R67 Vapours may cause drowsiness and dizziness.

SAFETY PHRASES

S7 Keep container tightly closed.

S16 Keep away from sources of ignition - No smoking.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S33 Take precautionary measures against static discharge.

Road Transport (ADR/RID):

UN Number: 1210

Proper Shipping Name: PRINTING INK

Dangerous Goods Class: 3

Packing Group: II

Poison Schedule: None allocated [Aust].

Warning Statement:

Irritating to eyes. Prolonged skin contact will lead to skin dryness and cracking. Highly flammable liquid and vapour, avoid all sources of ignition, heat sources and naked flames.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
TITANIUM DIOXIDE	10 to < 30 %	13463-67-7
ETHYL CELLULOSE	1 to < 10 %	9004-57-3
ETHANOL	10 to < 30 %	64-17-5
n-PROPYL ACETATE	10 to < 30 %	109-60-4
ETHOXY PROPANOL	1 to < 10 %	1569-02-4
ETHYL ACETATE	10 to < 30 %	141-78-6

All other ingredients not hazardous according to ASCC/NOHSC/EU Criteria.

4. FIRST AID MEASURES

Swallowed:

If swallowed, **DO NOT** induce vomiting. Give 1 to 2 glasses of water to drink.

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 at least 15 minutes.

Skin:

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

Inhaled:

If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

First Aid Facilities:

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

Advice to Doctor:

Treat symptomatically.

For advice, contact a Poisons Information Centre (**AT ONCE**)

In Australia call Tel: 13 1126

In New Zealand Tel: 0800 764 766

5. FIRE-FIGHTING MEASURES

Fire/Explosion Hazard

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]E [Aust]

FLAMMABILITY

This material is a **HIGHLY FLAMMABLE** liquid. Avoid all sources of ignition, heat and naked flames.

Flash Point:

~ 5°C

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6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Highly 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:

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** - Highly Flammable, Guide No: 14

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Highly flammable liquid. Avoid ignition sources. Do not get in eyes. Avoid direct or prolonged contact with skin. Provide adequate ventilation.

Conditions for Safe Storage:

Keep containers tightly closed, when not using the product. Store in original packages as approved by manufacturer. Store in an area that is dry and well-ventilation away from ignition sources. The floor of the depot should be impermeable. Store away from oxidizing agents. 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:

TITANIUM DIOXIDE

[NOHSC]

[TWA] 10 mg/m³

References: H

ETHANOL

[NOHSC]

[TWA] 1,000 ppm 1,880 mg/m³

References: H

n-PROPYL ACETATE

[NOHSC]

[TWA] 200 ppm 835 mg/m³

[STEL] 250 ppm 1,040 mg/m³

References: H

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

ETHYL ACETATE

[NOHSC]

[TWA] 200 ppm 722 mg/m³

Engineering Controls

Highly 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.

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 then the use of a half-face respirator fitted with an organic vapour cartridge is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow coloured liquid with characteristic odour.
Boiling Point:	Not available
Melting Point:	Not available.
Vapour Pressure:	Not available.
Specific Gravity:	0.8 - 0.9
Flash Point:	~ 5°C
Flammability Limits:	Not available.
Solubility in Water:	Miscible

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:

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposes on heating emitting oxides of carbon and noxious smoke.

HAZARDOUS REACTIONS:

Will not occur.

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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:

May cause irritation to mouth, throat and stomach with effects including pains in the stomach, which may lead to nausea, vomiting and diarrhoea.

Eye:

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

Skin:

May cause irritation to the skin, with effects including: Redness and itchiness.

Inhaled:

Mists or vapours may cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache, coughing, loss of co-ordination and chest pains.

Chronic:

Prolonged or repeated skin contact may lead to dermatitis. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Ethanol:

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

Reaction: Stupor, sleepiness, headache.

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

n-Propyl acetate:

Inhalation LCLo(Rat): 8,000 ppm/4H

Oral LD50(Rat): 9,370 mg/kg

12. ECOLOGICAL INFORMATION

This substance may cause long term adverse effects in the aquatic environment. Avoid contaminating drains, sewers or waterways.

13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise highly 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.

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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

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: Irritant (Xi), Highly Flammable (F)

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]

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16. OTHER INFORMATION (continued)

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

[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