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PROPAC ACCELERATOR

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: PROPAC ACCELERATOR

Synonyms: Acetic acid, propyl ester. **Manufacturer's Product Code:** PR3

Use: Printing Ink Accelerator.

DYEPAC LIQUID INKS PTY. LTD. A.C.N. 009 995 215 A.B.N.94 009 995 215 29 ENTERPRISE STREET CLEVELAND QLD 4163

Phone: (07) 3821 0899 FAX: (07) 3821 0788

e-mail: info@dyepac.com.au Web: http://www.Dyepac.com.au

2. HAZARDS IDENTIFICATION

HAZARDOUS ACCORDING TO ASCC/NOHSC/EU CRITERIA

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

Hazard Classification: HAZARDOUS SUBSTANCE, DANGEROUS GOOD

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

S2 Keep out of reach of children.

S16 Keep away from sources of ignition - No smoking.

S23 Do not breathe gas/fumes/vapour/spray [appropriate wording to be specified by the manufacturer].

S29 Do not empty into drains.

S33 Take precautionary measures against static discharge.

Road Transport (ADR/RID):

UN Number: 1276

Proper Shipping Name: n-PROPYL ACETATE

Dangerous Goods Class: 3

Packing Group: II

Poison Schedule: None allocated [Aust].

Warning Statement:

Irritating to eyes. Highly flammable liquid. Avoid sources of igntion, heat and naked flames.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME Proportion CAS Number

n-PROPYL ACETATE 60 to 100 % 109-60-4

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

4. FIRST AID MEASURES

Swallowed:

If swallowed, **<u>DO NOT</u>** 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

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

HAZARDS FROM COMBUSTION PRODUCTS: Decomposes on heating emitting oxides of carbon and small amounts of unburnt hydrocarbon entities.

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.

HAZCHEM CODE: 3[Y]E [Aust]

FLAMMABILITY

This material is a HIGHLY FLAMMABLE liquid.

Flash Point: 14°C (Closed Cup)

Flammability Limits: LEL: 1.7 % UEL: 8.0 %

Autoignition Temperature: 450°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. **<u>DO NOT</u>** use sawdust. **<u>ALLOW TO ABSORB</u>**. 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:

n-PROPYL ACETATE

[NOHSC]

[TWA] 200 ppm 835 mg/m³ [STEL] 250 ppm 1,040 mg/m³

References: H

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 and there is no suitable ventilation systems then the use of a half-face respirator fitted with an organic vapour cartridge is recommended.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Water white liquid with a mild fruity odour.

Boiling Point: 102°C **Melting Point:** -93°C

Vapour Pressure:3 kPa @ 20°CSpecific Gravity:0.89 @ 20°CFlash Point:14°C (Closed Cup)Flammability Limits:LEL: 1.7 % UEL: 8.0 %

Solubility in Water: Insoluble in water (1.9 % @ 20°C)

Other Properties

Autoignition Temperature: 450°C

Relative Vapour Density: 3.5 (air=1)

Molecular Weight: 102.1

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 small amounts of unburnt hydrocarbon entities.

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:

May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and 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.

Inhaled:

Mists or vapours may cause irritation to the nose.

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11. TOXICOLOGICAL INFORMATION (continued)

Chronic:

Prolonged or repeated skin contact may lead to dermatitis. Prolonged contact may cause severe eye irritation and some form of permanent eye damage may occur. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

n-Propyl acetate:

Inhalation LCLo(Rat): 8,000 ppm/4H Oral LD50(Rat): 9,370 mg/kg

Human and animal data collected for n-propyl acetate indicate irritation to eyes by vapour and by liquid contact.

12. ECOLOGICAL INFORMATION

n-Propyl acetate, if released to soil will display very high mobility and it has the potential to leach into groundwater. Rapid volatilization is expected to occur from both moist and dry soils. Hydrolysis of n-propyl acetate in soil is not expected to be a significant process except in highly basic soils with a pH >9. If released to water, n-propyl acetate is expected to rapidly volatilize to the atmosphere.

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.

14. TRANSPORT INFORMATION

Road Transport (ADR/RID):

UN Number: 1276

Proper Shipping Name: n-PROPYL ACETATE

Dangerous Goods Class: 3

Packing Group: II

Air Transport (IATA): UN Number: 1276

Proper Shipping Name: n-PROPYL ACETATE

Dangerous Goods Class: 3

Packing Group: II

Sea Transport (IMDG): UN Number: 1276

Proper Shipping Name: n-PROPYL ACETATE

Dangerous Goods Class: 3

Packing Group: II

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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: Irritant (Xi), Highly Flammable (F)

16. OTHER INFORMATION

Date of Preparation:

Issue date: August 08, 2011 **Supercedes:** 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

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16. OTHER INFORMATION (continued)

[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

Any advice, recommendation, information, assistance or service provided by Dyepac Liquid Inks Pty. Ltd. in relation to the goods supplied by it or their use or application is given in good faith and believed to be appropriate and reliable, however, it is provided with a disclaimer for any liability or responsibility on the part of Dyepac Liquid Inks Pty. Ltd. The customer accepts all risk and responsibility for use of the goods alone, or in combination with other products. All warranties, guarantees and conditions, other than those expressly stated and whether implied by statute, common law, custom of the trade or otherwise, are to the extent that the law permits, expressly excluded.

END OF MSDS