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GV INK REDUCER

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: GV INK REDUCER Synonyms: GV INK THINNERS Manufacturer's Product Code: KR 128

Use: Used to extend the life of the ink during the printing process and also aids in the drying process.

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

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2. HAZARDS IDENTIFICATION

HAZARDOUS ACCORDING TO EU CRITERIA

Hazard Category: Harmful (Xn), Irritant (Xi)

Hazard Classification: HAZARDOUS SUBSTANCE, DANGEROUS GOOD

RISK PHRASES

R11 Highly flammable

R36/38 Irritating to eyes and skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63 Possible risk of harm to the unborn child.

R65 Harmful: May cause lung damage if swallowed.

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.

S23 Do not breathe vapour.

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.

S62 If swallowed, do not induce vomiting; Seek medical advice immediately and show this container or label.

Road Transport (ADR/RID):

UN Number: 1993

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Contains TOLUENE and ISOPROPANOL)

Dangerous Goods Class: 3

Packing Group: II

Poison Schedule: S5 [Aust]

This material is a Scheduled S5 Poison and must be stored, handled and used according to the appropriate regulations.

Warning Statement:

Avoid breathing of vapour, prolonged exposure will lead to liver, kidney and other CNS effects. Harmful if swallowed. Vomiting, may cause this product to be aspirated into the lungs, which may lead to chemical pneumonitis. Highly flammable liquid, avoid all sources of ignition, heat and naked flames. Irritating to eyes and skin. If swallowed,

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3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
TOLUENE ISOPROPANOL	60 to < 90 % 10 to 30 %	108-88-3 67-63-0
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, **<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: Use foam or dry chemical powder.

HAZARDS FROM COMBUSTION PRODUCTS: Emits oxides of carbon when heated to decomposition. PRECAUTIONS FOR FIRE FIGHTERS AND SPECIAL SPECIAL PROTECTIVE EQUIPOMENT: If safe to do so, move undamaged containers from fire area. Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. 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.

HAZCHEM CODE: 3[Y]E [Aust]

Flammability

Highly 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: 15°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:

TOLUENE

[NOHSC]

[TWA] 100 ppm 377 mg/m³ [STEL] 150 ppm 565 mg/m³

References: H;R

ISOPROPANOL

[NOHSC]

[TWA] 400 ppm 983 mg/m³ [STEL] 500 ppm 1,230 mg/m³

References: H;R

ETHYL ACETATE

[NOHSC]

[TWA] 200 ppm 722 mg/m³

Notices: Ammended

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

References: H;Ch

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Water white liquid with characteristic odour.

Boiling Point: Not available. **Vapour Pressure:** Not available.

Specific Gravity: 0.80 **Flash Point:** 15°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:

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:

Harmful if swallowed. Vomiting, may cause this product to be aspirated into the lungs, which may lead to chemical pneumonitis.

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11. TOXICOLOGICAL INFORMATION (continued)

Eye:

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

Skin:

Will cause irritation to the skin, with effects including; Redness, itchiness, and drying/defatting. Toluene may be absorbed through the skin with resultant toxic effects in blood system, spleen and kidneys.

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. Toluene may effect the central nervous system.

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. 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. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Toluene:

Inhalation TCLo(human): 200 ppm Toxic effects: CNS. Inhalation LC50(rat): 49 gm/m3/4H Oral LD50(rat):636 mg/kg

Isopropanol:

Inhalation LC50(rat): 16,000 ppm/8H Oral LD50(rat): 5,045 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 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: 1993

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Contains TOLUENE and ISOPROPANOL)

Dangerous Goods Class: 3

Packing Group: II

Air Transport (IATA): UN Number: 1993

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14. TRANSPORT INFORMATION (continued)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Contains TOLUENE and ISOPROPANOL)

Dangerous Goods Class: 3

Packing Group: II

Sea Transport (IMDG): UN Number: 1993

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Contains TOLUENE and ISOPROPANOL)

Dangerous Goods Class: 3

Packing Group: II

15. REGULATORY INFORMATION

Poison Schedule: S5 [Aust]

This material is a Scheduled S5 Poison and must be stored, handled and used according to the appropriate regulations.

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), 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]

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16. OTHER INFORMATION (continued)

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