Stephenson

Environmental Management Australia

AIR QUALITY, ODOUR AND SEPP 33 ASSESSMENT

PROPOSED MODIFICATIONS TO PRINTING PROJECT

INDEPENDENT PRINT MEDIA GROUP

WARWICK FARM, NSW

PROJECT NO.: 4747/11/A

DATE OF FINAL ISSUE: 15 FEBRUARY 2011

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1 INTRODUCTION

1.1 BACKGROUND

Approval was granted in March 2009 by the Minister under part 3 A 75 J of the Environmental Planning and Assessment Act NSW for Independent Print Media (IPMG) group, to build and operate a Gravure printing facility at 2 to 8 Priddle St (23 Scrivener St) Warwick Farm.

Since this approval was granted, the scope of the project has for commercial reasons been changed to incorporate both Heatset Web Offset (HSWO) and Gravure printing processes onto the same site. Initially heatset printing will be exclusively on the site whilst market conditions remain the same. Consequently a modification to the original approval has been requested.

IPMG has commissioned SEMA to investigate the impact of the use of HSWO and the Hazardous materials will be assessed relative to SEPP 33 following an investigation of the requirements of the proposed plant using data supplied by IPMG from their existing plants. This report identifies and addresses three aspects of the proposed modification:-

- **Air Quality,** Proposed Emissions, Air quality assessment and Condition 16 of the part 3A consent.
- **Hazardous Materials,** Storage of HSWO inks and solvents
- **Odour Emissions.**

1.2 THE PROCESS

The HSWO method of printing applies a film of wet ink to the web of paper travelling through the printing units of speed of up to 15 metres per second (m/s). In order for the printing ink to be dried, heat has to be applied to the web, to dry off the ink carrier medium, once the oils are evaporated away the resin sets adhering the pigment to the paper. Hence the term Heat Set. There is one dryer for each web of paper printed.

1.3 THE DRYER

The dryer consists of a series of air bars located close to the surface of the paper. Hot air is blown through fine slots in each air bar onto the paper. The air temperature at the air bar is around 230 degrees Celsius (^oC). The hot air heats the paper to around 150^oC evaporating the ink oils. The evaporated ink oil inside the dryer resembles diesel fog, which is drawn into the enclosed upper and lower sections of the dryer by a series of process air control fans. The fog is then forced through a heat exchanger where it is heated to 500^oC before passing through the combustion burner where the evaporated oils are incinerated directly with combustion gas in the afterburner chamber. The process is designed specifically to reduce the use of natural gas by

substituting ink oil as the combustion gas; that is, the more ink oil used the less natural gas is required. The exhaust gases from each press dryer are discharged to atmosphere via a flue which has an exit 3 meters above the roof line in accordance with AS 1668.2

Appendix A Figure A-1 presents a diagram of a typical HSWO dryer and associated integrated chemical emission control and heat recovery equipment.

The key design benefits are:

- Low gas energy consumption
- VOC oxidation – an exothermic reaction
- VOC oxidation then forms much of the heat supply for the drying process
- Integrated heat exchanger design
- High performance - nominal 65 percent (%) , 75-80% in production
- Very high VOC destruction
- Low CO emissions
- Low NO_x production

2 AIR QUALITY – PROPOSED EMISSIONS

The following gases will be emitted from the Heat Set Web Offset (HSWO) with integrated Thermal Oxidiser:

- Nitrogen oxides (NOx)
- Carbon Monoxide (CO)
- Carbon Dioxide (CO_2)
- Volatile Organic Compounds (VOCs) – negligible
- Oxygen (17-19% depending on afterburner configuration)

These HSWO emissions are similar to, but not the same as, the emission parameters associated with the Roto Gravure printing which include:-

- Sulphuric Acid mist/Sulphur Trioxide from the wet scrubber serving the metal printing cylinder preparation and engraving process
- Chromium from the above process
- VOC's (including toluene) (expressed as n-propane)
- NO_x, CO_2, CO and Oxygen from the steam generation process using natural gas fired boilers
- Total Solid Particles (TSP) from the fabric filter bag-house serving waste paper recovery

Table 2-1 summarises the proposed emissions from both the approved Roto Gravure press and the proposed Scenarios for HSWO Press stacks. There will be eight (8) stacks for Scenario 1 serving six HSWO Presses which have eight (8) Heatset dryers.

There would also be eight (8) stacks for Scenario 2 serving six (6) heatset dryers, one Rotogravure vapour recovery system and one boiler.

These proposed scenarios include either six HSWO presses or a combination of a Roto Gravure press and four HSWO presses. The emissions from these Scenarios will be a combination of the emission parameters referred to above.

The Table 2-1 also references the Project Emission Concentration Limits presented in Approval Condition 16 of Schedule 3: Specific Environmental Conditions of the NSW Department of Planning Project Approval for Application Number 08 0088.

TABLE 2-1 APPROVED CONDITION 16 EMISSION CONCENTRATIONS AND EMISSION CONCENTRATIONS FROM PROPOSED PLANT CONFIGURATION SCENARIOS

		Condition 16 Approved Maximum Concentration Limit	Emission Concentration as measured at the stack	Emission Concentration as measured at the stack	Group 6 Emission Limits
Parameter	**Units**	**Approved Option**	**Proposed Scenario 1**	**Proposed Scenario 2**	**All Scenarios**
Nitrogen Oxides	mg/m^3	100	72 - 100	100	350
Carbon Monoxide	mg/m^3	NS	240 – 450	450	125 or VOC limit
Carbon Dioxide	%	NS	1.8 - 2.0	8 – 10	Not specified
Sulphur Dioxide	mg/m^3	NS	< 5	< 5	Not specified
VOC (as n-propane)	mg/m^3	35	0.09 – 0.19	35	40 (expressed as n- propane)
Oxygen	%	NS	17.4 – 17.9	18	Not specified
SulphuricAcid mist/Sulphur Trioxide	mg/m^3	60	NA	60	100
Chromium (a Type I & Type II Hazardous Substance under the Regulation)	mg/m^3	1	NA	1	1

Key:

mg/m^3 = milligrams per cubic meter @ 0^oC , 1 atmosphere

Scenario 1 = Proposed Scenario 1 will comprise 6 off HSWO of similar size to those measured @ IPMG – Offset Alpine Printing Press No. 7

Scenario 2 = Proposed Scenario 2 will comprise a combination of the Approved Option and Proposed Scenario 1; that is, 1 off Rotogravure and 4 off HSWO Presses

NS = Not Specified – combustion is not part of control system for the Approved Option utilizing Roto-gravure process

VOC = Volatile Organic Compounds

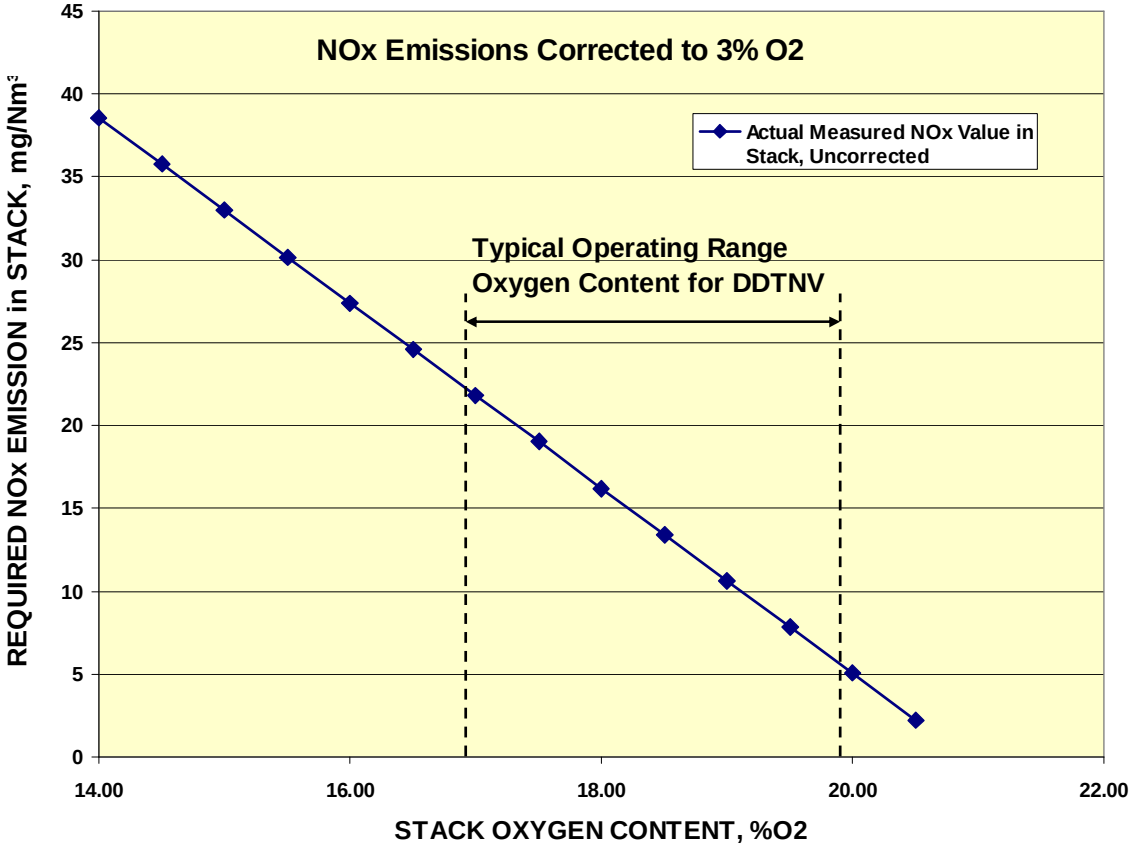
3 AIR QUALITY ASSESSMENT AND CONDITION 16

DECCW Reference Conditions for concentration based emission limits for gas fired combustion sources for Group 6 plant will be corrected to 3% Oxygen (O_2). This will mean that Group 6 NO_x actual emissions will need to be less than 70 milligrams per cubic metre (mg/m^3) @ 17.4% stack O_2.

The proponents supplier of the HSWO dryers, will have integrated afterburners to destroy the VOC's and associated heat recovery to optimize energy consumption, has advised that the NO_x emissions from the HSWO stacks will be able to comply with DECCW requirements.

The proponents supplier has provided a plot of their NO_x emissions corrected to 3% Oxygen which is presented in Figure 3-1. The proponents supplier has confirmed to IPMG that their design for this system will have a compliant NO_x emission from the proposed HSWO dryers.

FIGURE 3-1 NO_x EMISSIONS IN STACK CORRECTED TO 3% O_2



VOCs (as n-propane) emission have a Group 6 limit of 40 milligrams per cubic metre (mg/m^3) at 3% O_2.

It is considered that the VOC emission from the HSWO presses after passing through the integrated thermal oxidiser will readily comply with this limit, as indicated in Table 2-1. Therefore meeting Approval Condition 16.

Overall, it is considered that the Roto Gravure plant is more efficient per tonne of paper printed but the tonnage will decrease with Scenario 1 and Scenario 2. Therefore, the overall mass emission impact will be less under the proposed modification.

4 HAZARDOUS MATERIALS ASSESSMENT AND SEPP 33

4.1 BACKGROUND AND APPROVAL

The storage volumes for each of the chemicals identified in Section 3 of the original Project Application and the associated SEPP 33 Screening Threshold Quantities are summarised in Table 4-1.

If any of the tests result in a screening threshold being exceeded the proposed development should be considered potentially hazardous and SEPP 33 will apply. In such cases, a preliminary hazard analysis (PHA) will be required to be submitted with the modified development application.

TABLE 4-1 STORAGE QUANTITY AND SEPP 33 SCREENING THRESHOLD QUANTITIES

Material and Dangerous Goods Classification	Proposed Storage Quantity per month	Actual Proposed Distances to Boundary (m)	SEPP 33 Screening Threshold Quantities (Refer Appendix B of original report and Table 1 of SEPP 33)
Toluene Solvent (3PGII) and Inks and Varnishes (50% toluene)	145 cubic metres	25	> 22 metres to boundary
Sulphuric Acid (<1.84 kg/L) (8PGII)	2 cubic metres	--	25 (Class 8 PGII) cubic metres
Sulphuric Acid (2%) (8PGII)	7.1 cubic metres	--	25 cubic metres
Chromic Acid(500 gram/Litre) (8PGII or 8PGIII)	2 cubic metres	--	25 tonne or 25 cubic metres (Class 8PGII) or 50 tonne or 50cubic metres (Class 8PGIII))

Refer to Figure 4-1 of the original Project Application for site layout drawing showing location of the storage areas of the Dangerous Goods and the distances to the nearest boundary.

The following summarises the overall consequences of storage of the proposed materials presented in Table 4-1 above which is reproduced from Table 4-1 of the original Project Application:-

- All acid solutions do not trigger SEPP33 Screening Threshold Quantities
- Toluene and Bulk Ink storage of 145 cubic metres (m^3) per month (cumulative total which is made up of 80m^3 of recovered toluene and 40m^3 of toluene solvent as ink carrier and 25m^3 stored as varnish constituent) of Dangerous Goods Code Class 3PGII flammable liquid would require a minimum buffer distance to the nearest boundary of 22 metres (m).

The current design has the toluene and ink storage tanks located at 25m from the nearest boundary and hence does not trigger SEPP 33 Screening Threshold for Class 3 PG II Flammable Liquids. Figure 4-1 in the original Project Application presents the location of these storage tanks and the relevant distances to the boundary.

4.2 HAZARDOUS MATERIALS STORAGE

The HSWO ink storage tanks will be located 53m from the Eastern boundary. Housed in a suitably bunded area within the warehouse.

This storage area is a further 21 metres West from the eastern boundary than the proposed Roto Gravure toluene storage tanks would be located.

The heatset web offset ink is delivered by shipping container (each load approx 21 tonnes) the outlet on the container is connected via a stortz coupling and suction hose to a unloading pump located within the Eastern wall of the existing building. The proposed quantity of ink stored on the site will be contained in 4 tanks x 40 tonnes each. There will also be 4 x 25 tonne tanks for low tack inks.

Additional storage of this volume of HSWO inks on-site will not present a major increase in hazardous materials on-site. This is because of the high viscosity and lower volatility of the inks in this additional storage.

This modification requests the use of both HSWO and Gravure printing to be carried out on site. The initial proposal has provision for 6 HSWO presses.

In time, two of the existing HSWO presses will be decommissioned, prior the introduction of the first Roto Gravure press. This change will represent a 33% reduction in HSWO Ink storage, conversely 30% of the overall ink storage will have to revert to the originally approved Gravure ink and Toluene. Effectively the offset of these 2 processes will remain within the parameters of original part 3A approval.

Therefore, the proposed HSWO Scenario 1 and 2 modification will enable the plant to remain within the Part3A approval and SEPP 33 will not be triggered by the proposed modification.

TABLE 4-2 LIST OF CHEMICALS STORED AND HANDLED AT THE SITE

UN No.	Proper Chemical Name	Class	PG	Product Name	Quantity Stored	SEPP 33 Screening Threshold	Minimum Distance to Boundary (m)
1268	Petroleum Distillates NOS	3	III	Blanket Wash	4000 Litres or 4 m^3 (In cubes)	50 m^3	7
1210	Offset printing inks	3	II or III	Offset printing inks	260 m^3 or (39 m^3 of Volatiles)	50 m^3	25 or (16)

The HSWO ink has a high viscosity similar to grease. Mc Gee oil which accounts for 15% of the volume of the ink and is not prone to spillage or fugitive VOC emissions. This McGee oil is a vegetable oil with a flash point of 140^{o}C. The nearest Australian Dangerous Goods Code for offset printing works is UN No.1210 which is used as a guideline in Table 4-2.

Any residual ink is returned to manufacturer for disposal or reconstitution.

Some kerosene (Shell X55) is generally used to wash down rollers. However, recent modifications to blanket washing procedures and chemicals are reducing the potential for VOC emissions. There are Material Safety Data Sheets (MSDS) available for all of these chemicals.

Other non hazardous chemicals stored on site include non flammable blanket wash (1000 litres), Fountain solution (2000 litres), Silicone emulsion (1000 litres) and varnish (less than 1000 litres). All MSDS are presented in Appendix B of this report.

5 ODOUR EMISSION ASSESSMENT

No additional odours will be generated from the HSWO Printing. The integrated Thermal Oxidiser fitted to each HSWO dryer is designed to destroy any odorous VOCs.

6 CONCLUSION

AIR QUALITY:

The use of the latest HSWO dryer technology will not increase any of the VOC, CO_2 or NO_x levels approved in the original part 3 Approvals. There is no requirement to vary Approval Condition 16 of Schedule 3: Specific Environmental Conditions of the NSW Department of Planning Project Approval for Application Number 08 0088.

HAZARDOUS MATERIALS:

The Modification of the plant and process will not trigger SEPP 33 because the volumes of HSWO inks with their high viscosity and higher flash points compared with the solvents used in Gravure which have much lower flash points. Therefore, there will not be any increase in the hazard risk on the site beyond the Part 3A Approval which has previously been granted.

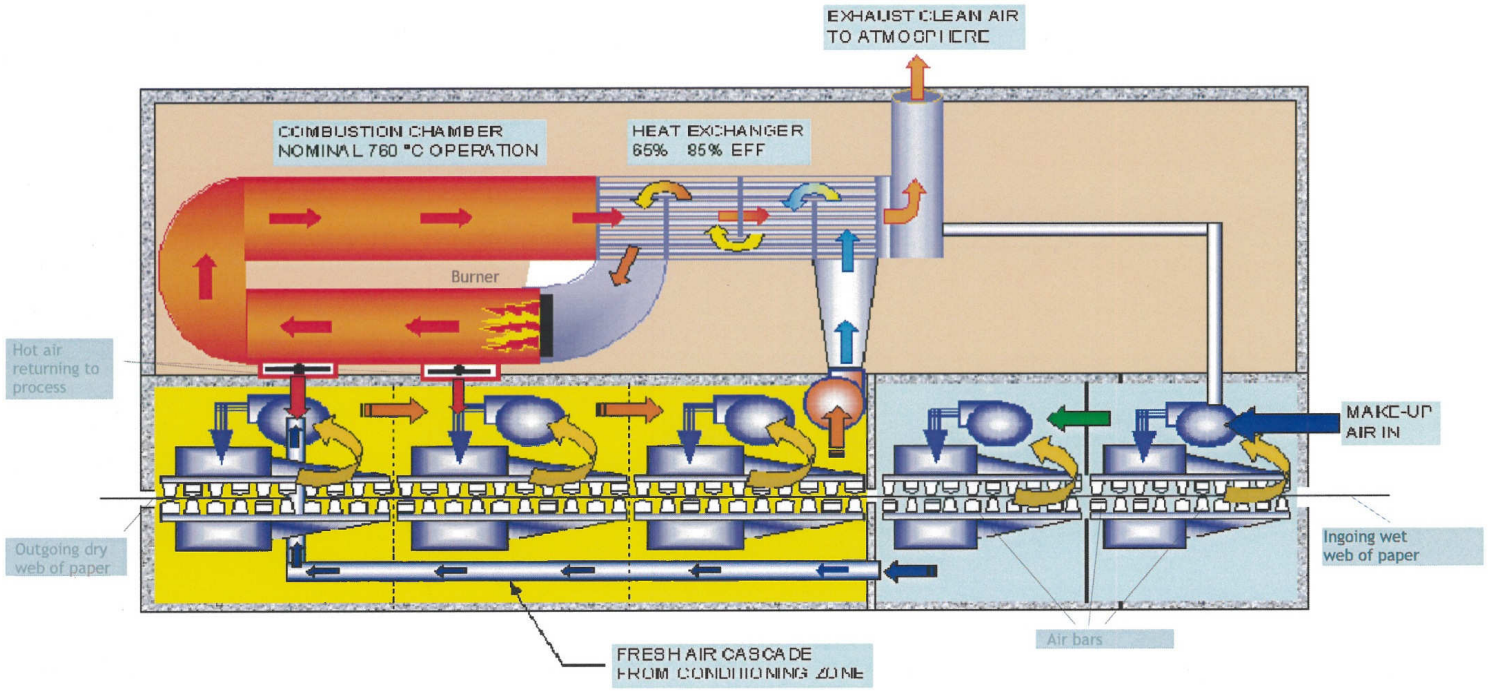
The combination of HSWO and Gravure printing in combination will remain within the parameters of the original Part3A approval.

ODOUR:

No additional odours will be generated by the HSWO printing process.

APPENDIX A – TYPICAL DIAGRAM OF THE HEAT SET WEB OFFSET DRYER

FIGURE A - 1 TYPICAL DIAGRAM OF THE HEAT SET WEB OFFSET DRYER



– Typical diagram of the heat set web offset dryer.

APPENDIX B – MATERIAL SAFETY DATA SHEETS (MSDS)

Material Safety Data Sheet

FUJIFILM

Section 1: Identification of the Material and Supplier

Product Name :Ecowash
Product Code :011422
Other Name :
Area of Use :Ecowash is a blanket and roller wash, especially formulated for web offset heatset and coldset presses

Usage Directions: Refer to Product Information Sheet

Company Name: DS CHEMPORT (AUSTRALIA) PTY LTD
ABN: 68 006 335 048
Company Address: 41 Jesica Road
Campbellfield, 3061.
Phone : (03) 9357 0933
FAX : (03) 9357 0944
Emergency Number: Technical Representative 0412 594 997

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia. Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code for Transport by Road and Rail

Hazard Classification: Xn Harmful

Risk Statements:	R65	Harmful: May cause lung damage if swallowed.
Safety Statements:	S02	Keep out of reach of children.
	S23	Do not inhale fumes/vapour
	S24	Avoid contact with skin.
	S43	In case of fire use foam/dry powder/CO2
	S62	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label.

UN Number: None allocated
DG Class: None allocated
Subrisk: None allocated
Packing Group: None allocated
Poison Schedule: S 5
Hazchem Code: None allocated

Section 3: Composition

NAME	CAS NUMBER	PROPORTION
Distillates (petroleum), hydrotreated light	64742-47-8	>60%
Solvent naphtha (petroleum),heavy arom.	64742-94-5	<10%
Non-hazardous Ingredients		Balance

Section 4: First Aid Directions

Eye : Remove contact lenses if worn.
Hold eyelids open and flush thoroughly with water for at least 15 minutes.
Seek medical attention.

Skin : Remove and wash contaminated clothing before re-use.
Do NOT induce vomiting.
If irritation develops and persists, seek medical attention.

Inhaled : If affected by vapour, remove to fresh air, lay down and rest.

Material Safety Data Sheet

FUJIFILM

If overcome by vapour, move victim to fresh air and if breathing stopped, apply artificial respiration.
No mouth-to-mouth respiration.
Remove contaminated clothing and loosen remaining clothing.
Seek medical attention.

Swallowed : Immediately rinse mouth with water.
Vomiting should NOT be induced due to risk of solvent aspiration into lungs.
Obtain medical attention immediately if ingested.

Doctor Advice : If aspirated into lungs, may cause chemical pneumonitis. Treat Symptomatically

Section 5: Fire Fighting Measures

Extinguishing Media: Foam, water spray (fog), dry chemical or carbon dioxide.

Fire Precautions: Eliminate all sources of ignition. Use water spray to cool fire exposed surfaces and to protect personnel.
Firefighters should use self contained breathing apparatus if risk of exposure to products of combustion.

Hazchem Code: None allocated

Section 6: Accidental Release Measures

Spills: In the event of a spill, evacuate spill/danger area. Stop leak if safe to do so.
Remove all ignition sources.
Wear protective equipment to prevent skin and eye contamination.
Do NOT allow spilt material to enter drains, sewers or waterways.
Clean up spill immediately. Spills on the floor may be slippery.
Do NOT absorb with saw-dust or other combustible absorbents.

Section 7: Handling and Storage

Storage and Transport: Store in a cool, dry place away from direct sunlight and avoid exposure to moisture.
Store away from sources of heat and ignition.
Keep containers closed when not in use.
Do not handle or store near open flame, heat, sparks or strong oxidants.

Precaution: All handling equipment should be grounded.
Safety goggles and gloves must be used when handling this product.
Avoid frequent or long lasting contact with the skin and eyes.
A solvent resistant barrier cream is recommended when handling this product.
Use only in a well ventilated area and avoid breathing vapour and mist.
Prolonged or repeated contact may cause contact dermatitis.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: TLV - 100 ppm

Ventilation: Use in a well ventilated area.

Respiration: Not required

Gloves: Use chemical resistant gloves.

Material Safety Data Sheet

FUJIFILM

Clothing: If needed, use protective apron to prevent skin contact.

Goggles: Use chemical splash goggles or shield.

Section 9:Physical and Chemical Properties

Appearance: Very pale yellow, clear liquid
Boiling Point: 180-260 C
% Volatile: 96 % Min..
pH: Not applicable
Flash Point: 66 C
Specific Gravity: 0.80-0.82
Solubility: Miscible with water
Odour: Hydrocarbon type
VOC:

Section 10: Stability and Reactivity

Do not mix or store with strong oxidants, organic peroxides or spontaneously combustible substances. Will react violently. Material can form flammable mixtures and can burn only upon heating to or above flash point.
Heating will cause high vapour concentrations which are irritant to eyes and tissue.

Section 11: Toxicological Information

Eye: This product will cause eye discomfort but will not injure eye tissue.

Skin: Prolonged or repeated contact with skin may irritate and cause contact dermatitis.

Inhaled: If exposed to concentrations above recommended levels, may be irritating to the eyes and lungs.
May cause headaches and dizziness
Only considered to be a moderate hazard when inhaled.

Swallowed: This product is moderately toxic.
Small amounts of product aspirated into lungs following ingestion may cause bronchopneumonia.

Chronic: After prolonged and repeated exposure, this product can cause dermatitis

Section 12: Ecological Information

Mobility: This product is partially soluble in water

Persistence: Expected to biodegrade at a moderate rate according to OECD guidelines

Ecotoxicity: No acute toxicity to aquatic organisms is expected at the maximum water solubility of this material

Section 13: Disposal Considerations

Disposal:

Section 14: Transport Information

UN Number: None allocated
DG Class: None allocated
Subrisk: None allocated
Packing Group: None allocated
Proper Shipping Name:

Initial Emergency Response Guide Number : 100

Material Safety Data Sheet

FUJIFILM

Section 15: Regulatory Information

Hazard Classification: Xn Harmful

Risk Statements:	R65	Harmful: May cause lung damage if swallowed.
Safety Statements:	S02	Keep out of reach of children.
	S23	Do not inhale fumes/vapour
	S24	Avoid contact with skin.
	S43	In case of fire use foam/dry powder/CO2
	S62	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label.

Poison Schedule: S 5

Section 16: Other Information

Date of preparation or last review: 02-Dec-05

Version: 1

This MSDS summarises at the date of preparation or last review our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DS Chemport (Australia) Pty Ltd and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

Safety Data Sheet

FUJIFILM

Section 1: Identification of the Material and Supplier

Product Name : Eurowash T100
Product Code : AM0556
Other Name :
Area of Use : Eurowash T100 is a state of the art blanket wash, suitable for automatic washing of printing blankets using Techniweb cleaning systems.
Usage Directions: Refer to Product Information Sheet

Company Name: DS CHEMPORT (AUSTRALIA) PTY LTD
ABN: 68 006 335 048
Company Address: 41 Jesica Road
Campbellfield, 3061.
Phone : (03) 9357 0933
FAX : (03) 9357 0944
Emergency Number: Technical Representative 0412 594 997

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia. Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code for Transport by Road and Rail

Hazard Classification: Xn Harmful

Risk Statements:	R65	Harmful: May cause lung damage if swallowed.
Safety Statements:	S02	Keep out of reach of children.
	S23	Do not inhale fumes/vapour
	S24	Avoid contact with skin.
	S62	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label.

UN Number: None allocated
DG Class: None allocated
Subrisk: None allocated
Packing Group: None allocated
Poison Schedule: S 5
Hazchem Code: None allocated

Section 3: Composition

NAME	CAS NUMBER	PROPORTION
Distillates (petroleum), hydrotreated light	64742-47-8	>60%
Non-hazardous Ingredients		Balance

Section 4: First Aid Directions

Eye : Remove contact lenses if worn.
Hold eyelids open and flush thoroughly with water for at least 15 minutes.
Seek medical attention.

Skin : Remove and wash contaminated clothing before re-use.
Do NOT induce vomiting.
If irritation develops and persists, seek medical attention.

Inhaled : If affected by vapour, remove to fresh air, lay down and rest.
If overcome by vapour, move victim to fresh air and if breathing stopped, apply artificial respiration.
No mouth-to-mouth respiration.

Safety Data Sheet

FUJIFILM

Remove contaminated clothing and loosen remaining clothing.
Seek medical attention.

Swallowed : Immediately rinse mouth with water.
Do NOT induce vomiting.
Seek medical attention.

Doctor Advice : Treat Symptomatically

Section 5: Fire Fighting Measures

Extinguishing Media: Foam, water spray (fog), dry chemical or carbon dioxide

Fire Precautions: Eliminate all sources of ignition. Use water spray to cool fire exposed surfaces and to protect personnel.
Firefighters should use self contained breathing apparatus if risk of exposure to products of combustion.

Hazchem Code: None allocated

Section 6: Accidental Release Measures

Spills: In the event of a spill, evacuate spill/danger area. Stop leak if safe to do so.
Remove all ignition sources.
Wear protective equipment to prevent skin and eye contamination.
Ensure adequate ventilation to remove vapours, fumes, dust, etc.
Do NOT allow spilt material to enter drains, sewers or waterways.
Clean up spill immediately. Spills on the floor may be slippery.
Do NOT absorb with saw-dust or other combustible absorbents.

Section 7: Handling and Storage

Storage and Transport: Store in a cool, dry place away from direct sunlight and avoid exposure to moisture.
Store away from sources of heat and ignition.
Keep well sealed in a cool, dry well ventilated area.
Do not expose to extreme cold.
Do not handle or store near open flame, heat, sparks or strong oxidants.

Precaution: All handling equipment should be grounded.
Safety goggles and gloves must be used when handling this product.
Avoid frequent or long lasting contact with the skin and eyes.
A solvent resistant barrier cream is recommended when handling this product.
Prolonged or repeated contact may cause contact dermatitis.
Use only for its intended purpose and observe established practices of industrial hygiene.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: OEL - 300ppm

Ventilation: Use in well ventilated area

Safety Data Sheet

FUJIFILM

Respiration: Not required
Clothing: If needed, use protective apron to prevent skin contact.
Gloves: Use chemical resistant gloves
Goggles: Use chemical splash goggles or shield

Section 9:Physical and Chemical Properties

Appearance: Pale yellow coloured liquid
Boiling Point: 100-280
% Volatile: 90% Min.
pH: Not Applicable
Flash Point: 100 C
Specific Gravity: 0.83-0.86
Solubility: Miscible with water
Odour: Mild
VOC:

Section 10: Stability and Reactivity

Do not mix or store with strong oxidants or strong alkalis. Will react violently.
Material can form flammable mixtures and burn only upon heating to or above flash point.
Heating can cause expansion or decomposition, leading to violent rupture of containers.
Firefighters should use self contained breathing apparatus.

Section 11: Toxicological Information

Eye: This product will cause eye discomfort but will not injure eye tissue.
Skin: Prolonged or repeated contact with skin may irritate and cause contact dermatitis.
Inhaled: If exposed to concentrations above recommended levels, may be irritating to the eyes and lungs.
Swallowed: This product is moderately toxic.
Small amounts of product aspirated into lungs following ingestion may cause bronchopneumonia.
Chronic: After prolonged and repeated exposure, this product can cause dermatitis

Section 12: Ecological Information

Mobility: This product is partially soluble in water
Persistence: Expected to biodegrade at a moderate rate according to OECD guidelines
Ecotoxicity: May be toxic to aquatic organisms. Avoid contaminating waterways

Section 13: Disposal Considerations

Disposal: Collect spilled and leaking material in labeled containers.
Residue should be disposed of at an approved disposal site.

Section 14: Transport Information

UN Number: None allocated
DG Class: None allocated
Subrisk: None allocated
Packing Group: None allocated
Proper Shipping Name:

Safety Data Sheet

FUJIFILM

Initial Emergency Response Guide Number : 100

Section 15: Regulatory Information

Hazard Classification: Xn Harmful

Risk Statements:	R65	Harmful: May cause lung damage if swallowed.
Safety Statements:	S02	Keep out of reach of children.
	S23	Do not inhale fumes/vapour
	S24	Avoid contact with skin.
	S62	If swallowed, do NOT induce vomiting: seek medical advice immediately and show this container or label.

Poison Schedule: S 5

Section 16: Other Information

Date of preparation or last review: 01-Nov-06

Version: 1

This MSDS summarises at the date of preparation or last review our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DS Chemport (Australia) Pty Ltd and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

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Material Safety Data Sheet

Page 1 of 4 Issue date: June 2006
Not Hazardous according to criteria of Worksafe Australia
HEATSET OVERPRINT VARNISH

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Toyo Ink Australia Ltd
29 Garden st
KILSYTH 3137
Ph: +61 1300 558 696 Fax: +61 3 9728 4099
Emergency: 000

Product Name:	HEATSET OVERPRINT VARNISH, GLOSS O/P VARNISH, MATT O/P VARNISH, TRU IMAGE O/P VARNISH
Synonyms: None	
Manufacturer's Product Code(s):	1735, 3575, 3229, 3228
Use:	Printing Ink Overprint Varnish
UN Number:	No UN number allocated
Proper Shipping Name:	Not applicable
Dangerous Goods Class:	None allocated
Subsidiary risk:	Not applicable
Packing Group:	N/a
Hazchem Code:	N/a
Poison Schedule:	Not applicable

2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
PHENOLIC MODIFIED RESIN	30 - 50%	28470-78-2
PETROLEUM RESIN	20 - 40%	Mixture
LINSEED OIL	10 - 30%	67700-51-0
ALIPHATIC PETROLEUM DISTILLATES	10 to 30%	64742-88-7
WAX DISPERSION	1 to 10%	Mixture

3. HAZARD IDENTIFICATION

NOT HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE AUSTRALIA

HAZARD CATEGORY: Not Harmful

ACUTE HEALTH EFFECTS
Swallowed:
May cause irritation if swallowed.

Eye:
May 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 from the product may cause irritation to the nose, throat and respiratory system with effects including: Cough, discomfort, difficulty breathing and shortness of breath.

Chronic:
Prolonged or repeated skin contact may lead to dermatitis.
Prolonged or repeated exposure or deliberately concentrating and inhaling the vapour(s) may result in lung function incapacity or death.

4. FIRST AID MEASURES

Swallowed:

Material Safety Data Sheet

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Not Hazardous according to criteria of Worksafe Australia
HEATSET OVERPRINT VARNISH

If swallowed, DO NOT induce vomiting. Give 3 to 4 glasses of water to drink. Seek medical assistance.

Eye:
If material is splashed into eyes, flush with plenty of water for at least 15 minutes, ensuring eye lids are held open. If irritation persists, seek medical attention

Skin:
If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap.

Inhaled:
Remove victim to fresh air..

First Aid Facilities:
Eye wash fountain, safety shower and normal washroom facilities.

Advice to Doctor:
Treat symptomatically.
In case of poisoning, contact Poisons Information Centre
In Australia call Tel: 131126
In New Zealand Tel: 034747000

5. FIRE-FIGHTING MEASURES

Fire/Explosion Hazard
Not considered an explosion of fire hazard

Flammability
Not flammable under conditions of use

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION:
Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas. Do not walk or touch spilt material unless wearing personal protection as outlined under MSDS.
SPILL OR LEAK PROCEDURE:
No special procedures required.
SMALL SPILLS:
Take up with sand, dirt or vermiculite. Place into labeled drum(s) for later disposal.
LARGE SPILLS:
Notify Emergency Services (P olice or Fire Brigade). Tell them exact location, nature, hazards, quantities, type of vehicle and any other information that would be helpful. Contain spill. Consult an expert regarding disposal of this product.

7. HANDLING AND STORAGE

Store in a cool place and out of direct sunlight. No other special requirements for storage or transport are necessary

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards

No exposure standards are available for this product, however, the following exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC) to the following components of the product:
****
PHENOLIC MODIFIED RESIN
No Exposure details available
****

Material Safety Data Sheet

Not Hazardous according to criteria of Worksafe Australia

HEATSET OVERPRINT VARNISH

PETROLEUM RESIN
No Exposure details available

LINSEED OIL
No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC)

ALIPHATIC PETROLEUM DISTILLATES
No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC)

WAX
No Exposure details available

Engineering Controls
No special requirements.
Personal Protection Equipment
CLOTHING: PVC, Nitrile, Neoprene, Natural rubber or any other type of apron or splash suit as recommended by the manufacturer.
GLOVES: PVC, Nitrile, Neoprene, Natural rubber or any other type of glove as recommended by the manufacturer.
EYES: Chemical goggles or faceshield to protect eyes.
RESPIRATORY PROTECTION: Normal room ventilation is sufficient

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Amber Coloured paste]
Boiling Point Melting Point:	[150 - 160 C]
Vapour Pressure:	[Not applicable]
Specific Gravity:	[0.9 - 1.1 @ 20 C]
Flash Point:	[> 100 C]
Flammability Limits:	[Not flammable]
Solubility in Water:	[Insoluble]

Other Properties
[None significant]

10. STABILITY AND REACTIVITY

STABILITY:
Stable under normal conditions of use.

HAZARDOUS DECOMPOSITION PRODUCTS:
Emits choking and toxic fumes when heated to decomposition.

HAZARDOUS POLYMERIZATION:
Will not occur.

INCOMPATIBILITIES:
Strong acids, alkalis and oxidizing agents.

CONDITIONS TO AVOID:
Heat, flames, ignition sources and incompatibles.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product.

12. ECOLOGICAL INFORMATION

Material Safety Data Sheet

Not Hazardous according to criteria of Worksafe Australia

HEATSET OVERPRINT VARNISH

There are no reported ecological effects of this material

13. DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

UN Number:	No UN Number allocated
Proper Shipping Name:	No special storage or shipping requirements
Dangerous Goods Class:	Not applicable
Subsidiary risk:	Not applicable
Packing Group:	N/A
Hazchem Code:	N/A

Not classified as hazardous according to the criteria of Worksafe Australia

15. REGULATORY INFORMATION

Poison Schedule: Not applicable

16. OTHER INFORMATION

Contact Point
TECHNICAL MANAGER / QUALITY CONTROL MANAGER
Tel: +61 1300 558 696

Disclaimer
The information herein is to the best of our knowledge, correct and complete. It descibes the safety requirements for this product and should not be construed as guaranteeing specific properties. Since methods and conditions are beyond our control we do not accept liability for any damages resulting from the use of, or reliance on, this information in inappropriate contexts.

Material Safety Data Sheet

Issue Date: June 2008 ISSUED by AEROSOLVE Page 1 of 4

Product Name: **INK REMOVER 325 400 g AEROSOL**

Classified as Hazardous

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name INK REMOVER 325
Product Code 325
Product Use Ink remover
Company Name Aerosolve (J & CE Musgrove Pty Ltd) (ABN 068 440 200)
Address 2 Clare Street BAYSWATER VIC 3153
Telephone Number/Fax Tel: 03 9729 1488 Fax: 03 9720 7015

2. COMPOSITION/INFORMATION ON INGREDIENTS

Information on Product contains Alcohol , additives, and Hydrocarbons as Propellant.
Composition

Ingredients Name	CAS	**Proportion**
Propan-2-ol	67-63-0	10-30%
Acetone	67-64-1	10-30%

Ingredients not Determined to be hazardous. Not Required Balance

3. HAZARDS IDENTIFICATION

Classified as hazardous according to the criteria of NOHSC.
Classified as a Dangerous Good According to the ADG Code

Risk Phrases: R36 Irritating to eyes.
Safety Phrases:
S23 Do not breathe gas/fumes/vapour/spray 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.
S36/37/39 wear suitable protective clothing, gloves and eye/face protection.

4. FIRST AID MEASURES

Inhalation Remove affected person from contaminated area and if irritation persists, seek medical advice. If not breathing apply artificial respiration and seek urgent medical advice.
Ingestion Do NOT induce vomiting. Wash out mouth with water. Seek medical attention.
Skin Remove contaminated clothing and wash skin thoroughly with soap and water. Ensure contaminated clothing is washed before re-use or discard. If irritation develops, seek medical attention.
Eye Flood eyes with plenty of water, holding eyelid(s) open. If irritation develops and persists, seek medical attention.
First Aid Facilities Eye wash station, safety showers and normal washroom facilities.
Advice to Doctor Treat symptomatically.
Other Information For advice may contact the Poisons Information Centre (Australia phone 131 126) or a doctor at once.

5. FIRE FIGHTING MEASURES **Extinguishing Media**

Use foam, carbon dioxide or dry chemical to extinguish fire.Use water spray to keep cool aerosol container.
Specific Hazards Combustable Liquid. Container may explode when heated. Keep away from naked flames, sparks and other sources of ignition.
Hazardous Combustion products include oxides of carbon.
Combustion Products
Precautions in Fire fighters should wear full protective clothing and self contained **connection with Fire** breathing apparatus.

Material Safety Data Sheet

Issue Date: June 2008 ISSUED by AEROSOLVE Page 2 of 4

Product Name: **INK REMOVER 325 400 g AEROSOL**

Classified as Hazardous

6. ACCIDENTAL RELEASE MEASURES

For liquid spill: Wear appropriate personal protective equipment and clothing to minimise exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unnecessary personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container for subsequent disposal. Prevent contamination of ground water or surface water. Dispose of waste according to the Environmental Protection Authority (EPA), federal, state and local regulations. If large quantities of this material enter the waterways contact the EPA, or your local Waste Management Authority.

7. HANDLING AND STORAGE

Handling Use in a well ventilated area. DO NOT store or use in confined spaces. Build up of mists and vapours in the atmosphere must be prevented. Prevent concentration in hollows and sumps. Product contains an asphyxiant therefore do not enter these areas until atmosphere has been checked. Avoid breathing in spray or mists or vapours. Do not use near welding or other ignition sources and avoid sparks. Do not puncture cans. Do not incinerate empty cans. Do not smoke. When dealing with large quantities, repeated or prolonged skin exposure without protection should be prevented in order to lessen the possibility of skin disorders. It is essential that all who come into contact with this material maintain high standards of personal hygiene ie. washing hands prior to eating, drinking, smoking or using toilet facilities.
Storage Store in a cool, dry, well-ventilated area away from heat, sources of ignition, oxidising agents, foodstuffs, and clothing and out of direct sunlight. Protect containers against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Do NOT pressurise, cut or heat aerosol containers. Content is under pressure and can explode violently. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids. Reference should also be made to all Local, State and Federal regulations.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits No value assigned for this specific material by the Australian National Occupational Health and Safety Commission (NOHSC). As with all chemicals, exposure should be kept to lowest possible levels.
Other Exposure This product contains an asphyxiant and the minimum oxygen content in air **Information** should be 18% by volume under normal atmospheric pressure.
Respiratory If engineering controls are not effective in controlling airborne exposure **Protection** then respiratory protective equipment should be used suitable for protecting against airborne contaminants. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices.
Eye Protection Safety glasses with side shields or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances ie. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform to Australian/New Zealand Standard AS/NZS 1337- Eye Protectors for Industrial Applications.

Material Safety Data Sheet

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Product Name: **INK REMOVER 325 400 g AEROSOL**

Classified as Hazardous

Hand Protection Impervious gloves recommended. Final choice of appropriate gloves will vary according to individual circumstances ie. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161 Occupational protective gloves- Selection, use and maintenance.
Body Protection Wear appropriate clothing including chemical resistant apron where clothing is likely to be contaminated. It is advisable that a local supplier of personal protective clothing is consulted regarding the choice of material.
Eng. **Controls** Provide sufficient ventilation to keep airborne levels as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a local exhaust ventilation system is required. Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS 2430 - Explosive gas atmospheres for further information concerning ventilation requirements.
Other Information No biological limit allocated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance clear oily spray liquid.
Melting Point Not Available
Boiling Point Not Available
Solubility in Water Insoluble
Specific Gravity 0.85
(H20=1)
Vapour Pressure 55 psi (approximately)
Vapour Density Not Available
(Air=1)
Volatile Component 90% (Approximately)
Flash Point -300C
Flammability Flammable.
Ignition Temperature Not Available
Flammable Limits 1. 2%
LEL
Flammable Limits 7.5%
UEL

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of storage and handling.
Materials to Avoid Strong oxidising agents.
Hazardous Oxides of carbon.
Decomposition
Products
Hazardous Reaction Hazardous reaction with strong oxidising agents.
Conditions to Avoid Extremes of temperature.

11. TOXICOLOGICAL INFORMATION

Toxicology Product contains less than 0.1% butadiene.
Information
Inhalation vapours or mists generated in confined and/or poorly ventilated areas, may cause respiratory system irritation, headache, nausea and dizziness.
Deliberate misuse of aerosol sprays can have an adverse affect the CNS, resulting in confusion, lack of coordination, can cause hallucinations, perceptual distortions and euphoria. Solvent misuse can cause death.
Ingestion Not a likely source of exposure. Ingestion of liquid may cause irritation of the gastrointestinal system. Symptoms may include nausea, vomiting and diarrhoea.

Material Safety Data Sheet

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Product Name: **INK REMOVER 325 400 g AEROSOL**

Classified as Hazardous

Skin May cause irritation to skin. Symptoms may include redness and achiness.
Repeated or prolonged skin contact may lead to dermatitis.
May be Irritating to eyes. Eye contact and high concentration of solvent vapour may cause symptoms including redness, excessive tearing, stinging and swelling.
Chronic Effects Prolonged and/or repeated skin contact with this product will cause irritation and could lead to drying and defatting, possibly leading to dermatitis.

12. ECOLOGICAL INFORMATION

Environ. Protection Do not allow product to enter drains, waterways or sewers.
Mobility Data not available for this specific product.
Persistence 1 Data not available for this specific product.
Degradability
Bioaccumulation Data not available for this specific product.
Ecotoxicity Data not available for this specific product.

13. DISPOSAL CONSIDERATIONS

Dispose of waste according to Environmental Protection Authority, federal, state and local regulations.

14. TRANSPORT INFORMATION

This material is classified as a Class 2.1 Dangerous Good according to the Australian Code for the Transport of Dangerous Goods. Class 2.1 Flammable Gases shall not be loaded or packed in the same vehicle or freight as:
- Class 1, Explosives
- Class 3, Flammable Liquids (It both the Class 2.1 and Class 3 dangerous goods are in bulk).
- Class 4.1, Flammable Solids
- Class 4.2, Spontaneously Combustible Substances
- Class 4.3, Dangerous When Wet Substances
- Class 5.1, Oxidising Agents
- Class 5.2, Organic Peroxides
- Class 7, Radioactive Substances.

UN Number 1950
Proper Shipping Name AEROSOLS
DG Class 2.1
Packaging Method 5.9.2
EPG Number 2D1
IERG Number 49

15. REGULATORY INFORMATION

Risk Phrase. R36 Irritating to eyes.
Safety PhraseSafety Phrase S23 Do not breathe gas/fumes/vapour/spray
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes , rinse immediately with plenty of water and seek medical advise.
S36/37/39. Wear suitable protective clothing,gloves,and eye/face protection.
Poisons Schedule. S5
Hazard Category. Irritant.

16. OTHER INFORMATION

Contact Person/Point Mr. Jon Musgrove
General Manager
Telephone: (03) 9729 1488
Fax: (03) 9720 7015
SDS History MSDS Review: June 2008
... End Of MSDS ..

Hostmann-Steinberg

huber group

MATERIAL SAFETY DATA SHEET

Product reference: **HGI-12600, HGI-12700, HGI-12790**
Date of issue : 24.04.2007

Revision No:00
Page No. 1 of 3

1. IDENTICATION OF PRODUCT AND COMPANY

Product name : **RND HEATSET BLACK**
Product Code : HGI- 12600 RND Heatset black low tack, HGI- 12700 & HGI-12790 RND Heatset black medium tack.
Intended use : Printing on paper via the web offset heat-set process.

Company details : **Hostmann-Steinberg Australia Ltd**
9 Christina Road,
Villawood. N.S.W. 2163

Phone: + 61 2 9755 8000
Fax : + 61 2 9723 3833

2. STATEMENT OF HAZARDOUS NATURE

Not classified as hazardous according to criteria of Worksafe Australia

3. UN NUMBER, DANGEROUS GOODS CLASS, AND SUBSIDIARY RISK

UN Number	**None**
Packing Group	**None**
Dangerous Goods Class	**None**
Subsidiary Risk	**None**
Hazchem Code	**None**
Poisons Schedule Number	**None**

4. COMPOSITION / INFORMATION ON INGREDIENTS

C.I. Pigment Black 7 (Cas no. 1333-86-4)	14 – 18 %
Vehicle	51 – 55 %
Additives	04 – 06 %
Vegetable oil	04 – 06 %
Ink oil	21 – 25 %

5. FIRST AID MEASURES

General information. No special measures required.
After inhalation - remove to fresh air if fumes or combustion by-products are inhaled; consult doctor in case of symptoms such as shallow breathing.
After skin contact – instantly remove any contaminated clothing and wash affected areas with soap and water and rinse thoroughly.
After eye contact – rinse opened eye for several minutes under running water. Ensure complete irrigation of the eye.
After swallowing - DO NOT INDUCE vomiting – seek medical advice.

6. FIRE-FIGHTING MEASURES

Suitable extinguishing agents
Foam
Dry chemical powder
Carbon dioxide

Water spray or fog for large fires only
For safety reasons water jet in unsuitable.
Alert the Fire Brigade and give them the location and nature of the hazard.
Wear breathing apparatus plus protective gloves as under certain fire conditions hazardous gases such as Carbon Monoxide (CO) and Nitrogen Oxide (NO) cannot be excluded.

7. SPILLS AND DISPOSAL

Wear appropriate protective clothing.
Slippery when spilt
Remove all ignition sources
Prevent spillage from entering drains and water ways.
Contain spill with sand, earth, or Vermiculite.
Collect recoverable into labeled containers for recycling.
Absorb remaining product with sand, earth, or Vermiculite and place in appropriate containers for disposal.
Wash area and prevent runoff into drains or water ways.
If contamination of drains or water ways occurs, then advise emergency services immediately.

Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.

8. HANDLING AND STORAGE

Avoid skin and eye contact.
Smoking , eating, and drinking are prohibited in the storage areas or when handling.
Check all containers are clearly labeled, securely sealed and free from leaks.
Avoid storage with oxidizers.
Store away from ignition sources or naked lights.
Store in original containers, out of direct sunlight and away from sources of heat.
Store in a cool, dry and well ventilated area.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

These products do not contain any relevant materials with critical values that have to be monitored at the workplace.

General protection and hygiene measures
The usual precautionary general measures for handling chemicals should be adhered to.
Hygiene measure : Keep away from foodstuffs and beverages.
Wash hands before breaks and after work.
Clean skin thoroughly after work and apply skin cream
Protection of hands : Protective gloves and protective skin cream.
Eye protection : Safety glasses recommended during refilling.
Safety shoes should be worn at all times.

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :
Form : Paste
Colour : Black.

		Value/Range	Unit	Method
Change in condition				
Melting point/Melting Range	:	Not determined		
Boiling Point/Boiling Range	:	> 240 °C		
Flash Point	:	> 100 °C		
Ignition temperature	:	> 220 °C		
Self-inflammability	:	Product is not self-igniting.		
Danger of Explosion		:Product is not explosive		
Critical values for explosion	:			
Lower	:	0.6 Vol. %		
Upper	:	6.0 Vol. %		
Solubility in/Miscibility with water	:	Not miscible or difficult to mix.		
Viscosity:				
Dynamic at 25.0 °C	:	40 - 180 poise		

11. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 8)
Keep away from oxidizing agents and strong alkaline or acid materials in order to avoid exothermic reactions.

12. TOXICOLOGICAL INFORMATION

The product is not subject to classification according to the calculation method of the General EC classification Guidelines for preparations as issued in the latest version: When used and handled according to the recommendations these products do not have any harmful effects according to our experience and the information provided to us.
Repeated or prolonged contact with this product may cause removal of natural fats from the skin resulting in skin dryness. If splashed into the eyes some irritation may occur and possibly some reversible damage.

13. ECOLOGICAL INFORMATION

The product should not be allowed to enter drains of water courses or soil.

14. DISPOSAL CONSIDERATIONS

Recycle wherever possible.
Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.
Recycle containers if possible, or dispose of in an authorized landfill.

15. TRANSPORT INFORMATION

No restrictions.

16. REGULATORY INFORMATION

Non-flammable, non-hazardous, and insoluble in water.

17. OTHER INFORMATION

The information of this Material Safety Data Sheet (MSDS) is based on the present state of our knowledge and laws. The users' working conditions are beyond our knowledge and control and for this reason the user must accept responsibility for taking all the necessary precautions. The information in this MSDS is not to be considered as a guarantee of the product's properties.

18. CONTACT POINT

COMPANY CONTACT – RICHARD KRAFT
(02) 9755 8000 – during normal business hours
0404 461 451 - during normal business hours and after hours.

AUSTRALIAN POISONS INFORMATION CENTRE 24 HOUR SERVICE 13 11 26

POLICE, FIRE BRIGADE OR AMBULANCE 000

Hostmann-Steinberg

huber group

MATERIAL SAFETY DATA SHEET

Product reference: **HGI-12601, HGI-12701, HGI-12791**
Date of issue : 18.06.2007

1. IDENTIFICATION OF PRODUCT AND COMPANY

Product name : **RND HEATSET CYAN**
Product code : HGI-12601 RND Heatset cyan low tack, HGI-12701 & HGI-12791 RND Heatset cyan medium tack.
Intended use : Printing on paper via the web offset heat-set process.

Company details : **Hostmann-Steinberg Australia Ltd**
9 Christina Road,
Villawood, N.S.W. 2163
Phone: + 61 2 9755 8000
Fax : + 61 2 9723 3833

2. STATEMENT OF HAZARDOUS NATURE

Not classified as hazardous according to criteria of Worksafe Australia

3. UN NUMBER, DANGEROUS GOODS CLASS, AND SUBSIDIARY RISK

UN Number	**None**
Packing Group	**None**
Dangerous Goods Class	**None**
Subsidiary Risk	**None**
Hazchem Code	**None**
Poisons Schedule Number	**None**

4. COMPOSITION / INFORMATION ON INGREDIENTS

C.I. Pigment Blue 15:3 (Cas no. 147 – 14 – 8)	12 – 14%
Vehicle	63 – 67%
Additives	04 – 06%
Vegetable oil	07 – 09%
Ink oil	12 – 16%

5. FIRST AID MEASURES

General information, No special measures required.
After inhalation – remove to fresh air if fumes or combustion by-products are inhaled; consult doctor in case of symptoms such as shallow breathing.
After skin contact – instantly remove any contaminated clothing and wash affected areas with soap and water and rinse thoroughly.
After eye contact – rinse opened eye for several minutes under running water. Ensure complete irrigation of the eye.
After swallowing - DO NOT INDUCE vomiting – seek medical advice.

6. FIRE-FIGHTING MEASURES

Suitable extinguishing agents
Foam
Dry chemical powder
Carbon dioxide

Water spray or fog for large fires only
For safety reasons water jet in unsuitable.
Alert the Fire Brigade and give them the location and nature of the hazard.
Wear breathing apparatus plus protective gloves as under certain fire conditions hazardous gases such as Carbon Monoxide (CO) and Nitrogen Oxide (NO) cannot be excluded.

7. SPILLS AND DISPOSAL

Wear appropriate protective clothing
Slippery when spilt
Remove all ignition sources
Prevent spillage from entering drains and water ways.
Contain spill with sand, earth, or Vermiculite.
Collect recoverable into labeled containers for recycling.
Absorb remaining product with sand, earth, or Vermiculite and place in appropriate containers for disposal.
Wash area and prevent runoff into drains or water ways.
If contamination of drains or water ways occurs, then advise emergency services immediately.

Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.

8. HANDLING AND STORAGE

Avoid skin and eye contact.
Smoking , eating, and drinking are prohibited in the storage areas or when handling.
Check all containers are clearly labeled, securely sealed and free from leaks.
Avoid storage with oxidizers.
Store away from ignition sources or naked lights.
Store in original containers, out of direct sunlight and away from sources of heat.
Store in a cool, dry and well ventilated area.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

These products do not contain any relevant materials with critical values that have to be monitored at the workplace.

General protection and hygiene measures
The usual precautionary general measures for handling chemicals should be adhered to.
Hygiene measure : Keep away from foodstuffs and beverages.
Wash hands before breaks and after work.
Clean skin thoroughly after work and apply skin cream
Protection of hands : Protective gloves and protective skin cream.
Eye protection : Safety glasses recommended during refilling.
Safety shoes should be worn at all times.

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :
Form : Paste
Colour : Cyan

		Value/Range	Unit	Method
Change in condition				
Melting point/Melting Range	:	Not determined		
Boiling Point/Boiling Range	:	> 240 °C		
Flash Point	:	> 100 °C		
Ignition temperature	:	> 220 °C		
Self-inflammability	:	Product is not self-igniting.		
Danger of Explosion	:	Product is not explosive		
Critical values for explosion	:			
Lower	:	0.6 Vol. %		
Upper	:	6.0 Vol. %		
Solubility in/Miscibility with water	:	Not miscible or difficult to mix.		
Viscosity:				

Dynamic	at 25.0 °C	:	40 - 120 poise

11. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 8)
Keep away from oxidizing agents and strong alkaline or acid materials in order to avoid exothermic reactions.

12. TOXICOLOGICAL INFORMATION

The product is not subject to classification according to the calculation method of the General EC classification Guidelines for preparations as issued in the latest version: When used and handled according to the recommendations these products do not have any harmful effects according to our experience and the information provided to us.
Repeated or prolonged contact with this product may cause removal of natural fats from the skin resulting in skin dryness. If splashed into the eyes some irritation may occur and possibly some reversible damage.

13. ECOLOGICAL INFORMATION

The product should not be allowed to enter drains of water courses or soil.

14. DISPOSAL CONSIDERATIONS

Recycle wherever possible.
Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.
Recycle containers if possible, or dispose of in an authorized landfill.

15. TRANSPORT INFORMATION

No restrictions.

16. REGULATORY INFORMATION

Non-flammable, non-hazardous, and insoluble in water.

17. OTHER INFORMATION

The information of this Material Safety Data Sheet (MSDS) is based on the present state of our knowledge and laws. The users' working conditions are beyond our knowledge and control and for this reason the user must accept responsibility for taking all the necessary precautions. The information in this MSDS is not to be considered as a guarantee of the product's properties.

18. CONTACT POINT

COMPANY CONTACT – RICHARD KRAFT
(02) 9755 8000 – during normal business hours
0404 461 451 - during normal business hours and after hours.

AUSTRALIAN POISONS INFORMATION CENTRE 24 HOUR SERVICE	13 11 26
POLICE, FIRE BRIGADE OR AMBULANCE	000

Hostmann-Steinberg

huber group

MATERIAL SAFETY DATA SHEET

Product reference: **HGI-12602, HGI-12702, HGI-12792**
Date of issue : 24.04.2007

Revision No:0
Page No. 1 of 3

1. IDENTICATION OF PRODUCT AND COMPANY

Product name : **RND HEATSET MAGENTA**
Product Code : HGI-12602 RND Heatset magenta low tack, HGI-12702 & HGI-12792 RND Heatset magenta medium tack.
Intended use : Printing on paper via the web offset heat-set process.

Company details : **Hostmann-Steinberg Australia Ltd**
9 Christina Road,
Villawood. N.S.W. 2163
Phone: + 61 2 9755 8000
Fax : + 61 2 9723 3833

2. STATEMENT OF HAZARDOUS NATURE

Not classified as hazardous according to criteria of Worksafe Australia

3. UN NUMBER, DANGEROUS GOODS CLASS, AND SUBSIDIARY RISK

UN Number	**None**
Packing Group	**None**
Dangerous Goods Class	**None**
Subsidiary Risk	**None**
Hazchem Code	**None**
Poisons Schedule Number	**None**

4. COMPOSITION / INFORMATION ON INGREDIENTS

C.I. Pigment Red 57:1 (Cas no. 5281-04-9)	13 – 15 %
Vehicle	59 – 62 %
Additives	04 – 06 %
Vegetable oil	05 – 07 %
Ink oil	17 – 21 %

5. FIRST AID MEASURES

General information, No special measures required.
After inhalation – remove to fresh air if fumes or combustion by-products are inhaled; consult doctor in case of symptoms such as shallow breathing.
After skin contact – instantly remove any contaminated clothing and wash affected areas with soap and water and rinse thoroughly.
After eye contact – rinse opened eye for several minutes under running water. Ensure complete irrigation of the eye.
After swallowing - DO NOT INDUCE vomiting – seek medical advice.

6. FIRE-FIGHTING MEASURES

Suitable extinguishing agents
Foam
Dry chemical powder

Carbon dioxide
Water spray or fog for large fires only
For safety reasons water jet in unsuitable.
Alert the Fire Brigade and give them the location and nature of the hazard.
Wear breathing apparatus plus protective gloves as under certain fire conditions hazardous gases such as Carbon Monoxide (CO) and Nitrogen Oxide (NO) cannot be excluded.

7. SPILLS AND DISPOSAL

Wear appropriate protective clothing
Slippery when spilt
Remove all ignition sources
Prevent spillage from entering drains and water ways.
Contain spill with sand, earth, or Vermiculite.
Collect recoverable into labeled containers for recycling.
Absorb remaining product with sand, earth, or Vermiculite and place in appropriate containers for disposal.
Wash area and prevent runoff into drains or water ways.
If contamination of drains or water ways occurs, then advise emergency services immediately.

Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.

8. HANDLING AND STORAGE

Avoid skin and eye contact.
Smoking , eating, and drinking are prohibited in the storage areas or when handling.
Check all containers are clearly labeled, securely sealed and free from leaks.
Avoid storage with oxidizers.
Store away from ignition sources or naked lights.
Store in original containers, out of direct sunlight and away from sources of heat.
Store in a cool, dry and well ventilated area.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

These products do not contain any relevant materials with critical values that have to be monitored at the workplace.

General protection and hygiene measures
The usual precautionary general measures for handling chemicals should be adhered to.
Hygiene measure : Keep away from foodstuffs and beverages.
Wash hands before breaks and after work.
Clean skin thoroughly after work and apply skin cream
Protection of hands : Protective gloves and protective skin cream.
Eye protection : Safety glasses recommended during refilling.
Safety shoes should be worn at all times.

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :
Form : Paste
Colour : Magenta.

		Value/Range	Unit	Method
Change in condition				
Melting point/Melting Range	:	Not determined		
Boiling Point/Boiling Range	:	> 240 °C		
Flash Point	:	> 100 °C		
Ignition temperature	:	> 220 °C		
Self-inflammability	:	Product is not self-igniting.		
Danger of Explosion		Product is not explosive		
Critical values for explosion	:			
Lower	:	0.6 Vol. %		
Upper	:	6.0 Vol. %		
Solubility in/Miscibility with water	:	Not miscible or difficult to mix.		
Viscosity:				
Dynamic at 25.0 °C	:	40 - 120 poise		

11. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 8)
Keep away from oxidizing agents and strong alkaline or acid materials in order to avoid exothermic reactions.

12. TOXICOLOGICAL INFORMATION

The product is not subject to classification according to the calculation method of the General EC classification Guidelines for preparations as issued in the latest version: When used and handled according to the recommendations these products do not have any harmful effects according to our experience and the information provided to us.
Repeated or prolonged contact with this product may cause removal of natural fats from the skin resulting in skin dryness. If splashed into the eyes some irritation may occur and possibly some reversible damage.

13. ECOLOGICAL INFORMATION

The product should not be allowed to enter drains of water courses or soil.

14. DISPOSAL CONSIDERATIONS

Recycle wherever possible.
Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.
Recycle containers if possible, or dispose of in an authorized landfill.

15. TRANSPORT INFORMATION

No restrictions.

16. REGULATORY INFORMATION

Non-flammable, non-hazardous, and insoluble in water.

17. OTHER INFORMATION

The information of this Material Safety Data Sheet (MSDS) is based on the present state of our knowledge and laws. The users' working conditions are beyond our knowledge and control and for this reason the user must accept resporisibility for taking all the necessary precautions. The information in this MSDS is not to be considered as a guarantee of the product's properties.

18. CONTACT POINT

COMPANY CONTACT – RICHARD KRAFT
(02) 9755 8000 – during normal business hours
0404 461 451 - during normal business hours and after hours.

AUSTRALIAN POISONS INFORMATION CENTRE 24 HOUR SERVICE 13 11 26

POLICE, FIRE BRIGADE OR AMBULANCE 000

Hostmann-Steinberg

huber group

MATERIAL SAFETY DATA SHEET

Product reference: **HGI-12603, HGI-12703, HGI-12793**
Date of issue : 24.04.2007

Revision No:0
Page No. 1 of 3

1. IDENTICATION OF PRODUCT AND COMPANY

Product name : **RND HEATSET YELLOW**
Product Code : HGI-12603 RND Heatset Yellow low tack, HGI-12703 & HGI-12793 RND Heatset Yellow medium tack.
Intended use : Printing on paper via the web offset heat-set process.

Company details : **Hostmann-Steinberg Australia Ltd**
9 Christina Road,
Villawood. N.S.W. 2163

Phone: + 61 2 9755 8000
Fax : + 61 2 9723 3833
ACN: 115955327

2. STATEMENT OF HAZARDOUS NATURE

Not classified as hazardous according to criteria of Worksafe Australia

3. UN NUMBER, DANGEROUS GOODS CLASS, AND SUBSIDIARY RISK

UN Number	**None**
Packing Group	**None**
Dangerous Goods Class	**None**
Subsidiary Risk	**None**
Hazchem Code	**None**
Poisons Schedule Number	**None**

4. COMPOSITION / INFORMATION ON INGREDIENTS

C.I. Pigment Yellow - 174 (Cas no.78952-72-4)	10 – 12 %
Vehicle	62 – 66 %
Additives	04 – 06 %
Vegetable oil	05 – 07 %
Ink oil	17 – 21 %

5. FIRST AID MEASURES

General information, No special measures required.
After inhalation - remove to fresh air if fumes or combustion by-products are inhaled; consult doctor in case of symptoms such as shallow breathing.
After skin contact – instantly remove any contaminated clothing and wash affected areas with soap and water and rinse thoroughly.
After eye contact – rinse opened eye for several minutes under running water. Ensure complete irrigation of the eye.
After swallowing - DO NOT INDUCE vomiting – seek medical advice.

6. FIRE-FIGHTING MEASURES

Suitable extinguishing agents
Foam
Dry chemical powder
Carbon dioxide

Water spray or fog for large fires only
For safety reasons water jet in unsuitable.
Alert the Fire Brigade and give them the location and nature of the hazard.
Wear breathing apparatus plus protective gloves as under certain fire conditions hazardous gases such as Carbon Monoxide (CO) and Nitrogen Oxide (NO) cannot be excluded.

7. SPILLS AND DISPOSAL

Wear appropriate protective clothing
Slippery when spilt
Remove all ignition sources
Prevent spillage from entering drains and water ways.
Contain spill with sand, earth, or Vermiculite.
Collect recoverable into labeled containers for recycling.
Absorb remaining product with sand, earth, or Vermiculite and place in appropriate containers for disposal.
Wash area and prevent runoff into drains or water ways.
If contamination of drains or water ways occurs, then advise emergency services immediately.

Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.

8. HANDLING AND STORAGE

Avoid skin and eye contact.
Smoking , eating, and drinking are prohibited in the storage areas or when handling.
Check all containers are clearly labeled, securely sealed and free from leaks.
Avoid storage with oxidizers.
Store away from ignition sources or naked lights.
Store in original containers, out of direct sunlight and away from sources of heat.
Store in a cool, dry and well ventilated area.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

These products do not contain any relevant materials with critical values that have to be monitored at the workplace.

General protection and hygiene measures
The usual precautionary general measures for handling chemicals should be adhered to.
Hygiene measure : Keep away from foodstuffs and beverages.
Wash hands before breaks and after work.
Clean skin thoroughly after work and apply skin cream
Protection of hands : Protective gloves and protective skin cream.
Eye protection : Safety glasses recommended during refilling.
Safety shoes should be worn at all times.

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :
Form : Paste
Colour : Yellow

		Value/Range	Unit	Method
Change in condition				
Melting point/Melting Range	:	Not determined		
Boiling Point/Boiling Range	:	> 240 °C		
Flash Point	:	> 100 °C		
Ignition temperature	:	> 220 °C		
Self-Inflammability	:	Product is not self-igniting		
Danger of Explosion	:	Product is not explosive		
Critical values for explosion	:			
Lower	:	0.6 Vol. %		
Upper	:	6.0 Vol. %		
Solubility in/Miscibility with water	:	Not miscible or difficult to mix.		
Viscosity:				
Dynamic at 25.0 °C	:	40 - 120 poise		

11. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 8)
Keep away from oxidizing agents and strong alkaline or acid materials in order to avoid exothermic reactions.

12. TOXICOLOGICAL INFORMATION

The product is not subject to classification according to the calculation method of the General EC classification Guidelines for preparations as issued in the latest version: When used and handled according to the recommendations these products do not have any harmful effects according to our experience and the information provided to us.
Repeated or prolonged contact with this product may cause removal of natural fats from the skin resulting in skin dryness.
If splashed into the eyes some irritation may occur and possibly some reversible damage.

13. ECOLOGICAL INFORMATION

The product should not be allowed to enter drains of water courses or soil.

14. DISPOSAL CONSIDERATIONS

Recycle wherever possible.
Consult State Land Waste Authority for disposal.
Bury or incinerate at an approved site.
Recycle containers if possible, or dispose of in an authorized landfill.

15. TRANSPORT INFORMATION

No restrictions.

16. REGULATORY INFORMATION

Non-flammable, non-hazardous, and insoluble in water.

17. OTHER INFORMATION

The information of this Material Safety Data Sheet (MSDS) is based on the present state of our knowledge and laws. The users' working conditions are beyond our knowledge and control and for this reason the user must accept responsibility for taking all the necessary precautions. The information in this MSDS is not to be considered as a guarantee of the product's properties.

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COMPANY CONTACT – RICHARD KRAFT
(02) 9755 8000 – during normal business hours
0404 461 451 - during normal business hours and after hours.

AUSTRALIAN POISONS INFORMATION CENTRE 24 HOUR SERVICE 13 11 26

POLICE, FIRE BRIGADE OR AMBULANCE 000

Safety Data Sheet

FUJIFILM

Section 1: Identification of the Material and Supplier

Product Name :Rollermatt N/F
Product Code : DP4663
Other Name :
Area of Use : Cleaning and conditioning of the dampening system of lithographic offset presses.
Usage Directions: Refer to Product Information Sheet

Company Name: DS CHEMPORT (AUSTRALIA) PTY LTD
ABN: 68 006 335 048
Company Address: 41 Jesica Road
Campbellfield, 3061.
Phone : (03) 9357 0933
FAX : (03) 9357 0944
Emergency Number: Technical Representative 0412 594 997

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia. Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code for Transport by Road and Rail

Hazard Classification: Xn Harmful

Risk Statements:	R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
	R36/38	Irritating to eyes and skin.
	R65	Harmful: May cause lung damage if swallowed.
	R66	Repeated exposure may cause skin dryness or cracking.
	R67	Vapours may cause drowsiness and dizziness.
Safety Statements:	S23	Do not inhale fumes/vapour
	s24/25	Avoid contact with skin and eyes.
	S26	In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or poisons information centre.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S62	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label.

UN Number: Non regulated
DG Class: Non regulated
Subrisk: None allocated
Packing Group: Non regulated
Poison Schedule: S 5
Hazchem Code: Non regulated

Section 3: Composition

NAME	CAS NUMBER	PROPORTION
Solvent naphtha (petroleum),heavy arom.	64742-94-5	>60%
Ethylene Glycol Monobutyl Ether	111-76-2	30-60%
Non-hazardous Ingredients		Balance

Section 4: First Aid Directions

Eye : Remove contact lenses if worn.
Hold eyelids open and flush thoroughly with water for at least 15 minutes.
If irritation persists, seek medical attention.

Safety Data Sheet

FUJIFILM

Skin : Wash affected area with plenty of water.
Remove and wash contaminated clothing before re-use.
If irritation develops and persists, seek medical attention.

Inhaled : If affected by vapour, remove to fresh air, lay down and rest.
If overcome by vapour, move victim to fresh air and if breathing stopped, apply artificial respiration.
Seek medical attention.

Swallowed : Immediately rinse mouth with water.
Do NOT induce vomiting.
Seek medical attention.

Doctor Advice : Treat Symptomatically

Section 5: Fire Fighting Measures

Extinguishing Media: Foam, water spray (fog), dry chemical or carbon dioxide.

Fire Precautions: Eliminate all sources of ignition. Use water spray to cool fire exposed surfaces and to protect personnel.
Firefighters should use self contained breathing apparatus if risk of exposure to products of combustion.
On burning will emit toxic fumes including those of carbon monoxide and carbon dioxide.

Hazchem Code: Non regulated

Section 6: Accidental Release Measures

Spills: In the event of a spill, evacuate spill/danger area. Stop leak if safe to do so.
Remove all ignition sources.
Wear protective equipment to prevent skin and eye contamination.
Open all doors and windows to improve ventilation in contaminated area.
Do NOT allow spilt material to enter drains, sewers or waterways.
Clean up spill immediately. Spills on the floor may be slippery.
Spills should be absorbed with sand or other suitable material.
Do NOT place spilled material back into original container/s.

Section 7: Handling and Storage

Storage and Transport: Store in a cool, dry place away from direct sunlight and avoid exposure to moisture.
Keep containers closed when not in use.
Do not store in aluminium or galvanized containers and do not use die cast zinc or aluminium bungs.
Do not handle or store near open flame, heat, sparks or strong oxidants.

Precaution: All handling equipment should be grounded.
Safety goggles and gloves must be used when handling this product.
Avoid frequent or long lasting contact with the skin and eyes.
Use only in a well ventilated area and avoid breathing vapour and mist.

Section 8: Exposure Controls/Personal Protection

Safety Data Sheet

FUJIFILM

Exposure Limits: TWA - 100mg/m3
Ventilation: Use in a well ventilated area.
Respiration: Not required
Clothing: If needed, use protective apron to prevent skin contact.
Gloves: Use chemical resistant gloves
Goggles: Use chemical splash goggles or shield.

Section 9:Physical and Chemical Properties

Appearance: Water white, clear liquid
Boiling Point: 168-215 C
% Volatile: 98% MIN.
pH: not applicable
Flash Point: 65 °C
Specific Gravity: 0.89-0.90
Solubility: Sl. water miscible
Odour: Hydrocarbon Odour
VOC:

Section 10: Stability and Reactivity

Combustible.
Do not mix or store with strong oxidants or strong alkalis.
Vapour is heavier than air and can travel along the ground to remote sources of ignition.

Section 11: Toxicological Information

Eye: This product can cause moderate eye irritation.
Skin: Prolonged or repeated contact with skin may irritate and cause contact dermatitis.
Inhaled: This product can cause moderate irritation of the lungs if inhaled.
Swallowed: Short term exposure by ingestion is considered harmful.
Chronic: After prolonged and repeated exposure, this product can cause dermatitis

Section 12: Ecological Information

Mobility: This product is partially soluble in water
Persistence: Expected to biodegrade at a moderate rate according to OECD guidelines
Ecotoxicity: May be toxic to aquatic organisms. Avoid contaminating waterways

Section 13: Disposal Considerations

Disposal: Collect spilled and leaking material in labeled containers.
Residue should be disposed of in accordance with local regulations.
Residue should be disposed of at an approved disposal site.

Section 14: Transport Information

UN Number: Non regulated
DG Class: Non regulated
Subrisk: None allocated
Packing Group: Non regulated

Safety Data Sheet

FUJIFILM

Proper Shipping Name:

Initial Emergency Response Guide Number : 100

Section 15: Regulatory Information

Hazard Classification: Xn Harmful

Risk Statements:	R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
	R36/38	Irritating to eyes and skin.
	R65	Harmful: May cause lung damage if swallowed.
	R66	Repeated exposure may cause skin dryness or cracking.
	R67	Vapours may cause drowsiness and dizziness.
Safety Statements:	S23	Do not inhale fumes/vapour
	s24/25	Avoid contact with skin and eyes.
	S26	In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or poisons information centre.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S62	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label.

Poison Schedule: S 5

Section 16: Other Information

Date of preparation or last review: 01-Aug-07

Version: 1

This MSDS summarises at the date of preparation or last review our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DS Chemport (Australia) Pty Ltd and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

Safety Data Sheet

FUJIFILM

Section 1: Identification of the Material and Supplier

Product Name : Rollermatt
Product Code : DP2896
Other Name : Flammable liquid, n.o.s.
Area of Use : Cleaning and conditioning of the dampening system of alcohol dampened lithographic offset presses.
Usage Directions: Refer to Technical Data Sheet.
Company Name: DS CHEMPORT (AUSTRALIA) PTY LTD
ABN: 68 006 335 048
Company Address: 41 Jesica Road
Campbellfield, 3061.
Phone : (03) 9357 0933
FAX : (03) 9357 0944
Emergency Number: Technical Representative 0412 594 997

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia. Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code for Transport by Road and Rail

Hazard Classification: Xn Harmful

Risk Statements:	R10	Flammable.
	R65	Harmful: May cause lung damage if swallowed.
	R66	Repeated exposure may cause skin dryness or cracking.
Safety Statements:	S02	Keep out of reach of children.
	S03/07/09	Keep containers tightly closed in a cool, well ventilated place.
	S23	Do not inhale fumes/vapour
	S24/25	Avoid contact with skin and eyes.
	S62	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label.

UN Number: 1993
DG Class: 3
Subrisk: None allocated
Packing Group: III
Poison Schedule: S 5
Hazchem Code: 2 [S]

Section 3: Composition

NAME	CAS NUMBER	PROPORTION
Solvent naphtha (petroleum),heavy arom.	64742-94-5	>60%
Non-hazardous Ingredients		Balance

Section 4: First Aid Directions

Eye : Remove contact lenses if worn.
Hold eyelids open and flush thoroughly with water for at least 15 minutes.
Seek medical attention.

Skin : Remove and wash contaminated clothing before re-use.
Do NOT induce vomiting.
If irritation develops and persists, seek medical attention.

Inhaled : If affected by vapour, remove to fresh air, lay down and rest.
Seek medical advice if effects persist.

Safety Data Sheet

FUJIFILM

Swallowed : Immediately rinse mouth with water.
Vomiting should NOT be induced due to risk of solvent aspiration into lungs.
Obtain medical attention immediately if ingested.

Doctor Advice : Treat Symptomatically

Section 5: Fire Fighting Measures

Extinguishing Media: Foam, water spray (fog), dry chemical or carbon dioxide.

Fire Precautions: Eliminate all sources of ignition. Use water spray to cool fire exposed surfaces and to protect personnel.
Firefighters should wear full protective clothing and self contained breathing apparatus when fighting fires involving this product.

Hazchem Code: 2 [S]

Section 6: Accidental Release Measures

Spills: In the event of a spill, evacuate spill/danger area. Stop leak if safe to do so.
Remove all ignition sources.
Wear full protective clothing and self contained breathing apparatus, especially in confined areas.
Do NOT allow spilt material to enter drains, sewers or waterways.
Clean up spill immediately. Spills on the floor may be slippery.
Spills should be absorbed with sand or other suitable material.

Section 7: Handling and Storage

Storage and Transport: Store in a cool, dry place away from direct sunlight and avoid exposure to moisture.
Store away from sources of heat and ignition.
Do not handle or store near open flame, heat, sparks or strong oxidants.

Precaution: Safety goggles and gloves must be used when handling this product.
Use only in a well ventilated area and avoid breathing vapour and mist.
Do not get in eyes.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: TLV - 100 ppm

Ventilation: Use in a well ventilated area.

Respiration: Not required

Gloves: Use chemical resistant gloves

Clothing: If needed, use protective apron to prevent skin contact.

Goggles: Use chemical splash goggles or shield.

Section 9:Physical and Chemical Properties

Appearance: Water white, clear liquid

Boiling Point: 171-208 C

Specific Gravity: 0.89-0.90

% Volatile: 98% MIN.

Solubility: Sl. water miscible

Safety Data Sheet

FUJIFILM

pH: not applicable
Flash Point: 44 °C
Odour: Hydrocarbon Odour
VOC:

Section 10: Stability and Reactivity

Do not mix or store with strong oxidants, organic peroxides or spontaneously combustible substances. Will react violently. Material can form flammable mixtures and can burn only upon heating to or above flash point.

FLAMMABLE. Vapour accumulation could flash and/or explode at or above flash point.

Firefighters should use self contained breathing apparatus.

Vapour accumulation could flash and/or explode if in contact with open flame.

Section 11: Toxicological Information

Eye: This product can cause slight to moderate eye irritation.

Skin: Prolonged or repeated contact with skin may irritate and cause contact dermatitis.

Inhaled: If exposed to concentrations above recommended levels, may be irritating to the eyes and lungs.

Swallowed: This product can cause serious health effects if swallowed.

Chronic: After prolonged and repeated exposure, this product can cause dermatitis

Section 12: Ecological Information

Mobility: This product is partially soluble in water

Persistence: Expected to biodegrade at a moderate rate according to OECD guidelines

Ecotoxicity: May be toxic to aquatic organisms. Avoid contaminating waterways

Section 13: Disposal Considerations

Disposal: Residue should be disposed of in accordance with local regulations.

Section 14: Transport Information

UN Number: 1993
DG Class: 3
Subrisk: None allocated
Packing Group: III
Proper Shipping Name: Flammable liquid, n.o.s.

Initial Emergency Response Guide Number : 14

Section 15: Regulatory Information

Hazard Classification: Xn Harmful

Risk Statements:	R10	Flammable.
	R65	Harmful: May cause lung damage if swallowed.
	R66	Repeated exposure may cause skin dryness or cracking.
Safety Statements:	S02	Keep out of reach of children.
	S03/07/09	Keep containers tightly closed in a cool, well ventilated place.
	S23	Do not inhale fumes/vapour

Safety Data Sheet

FUJIFILM

S24/25	Avoid contact with skin and eyes.
S62	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label.

Poison Schedule: S 5

Section 16: Other Information

Date of preparation or last review: 01-Apr-07

Version: 2

This MSDS summarises at the date of preparation or last review our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DS Chemport (Australia) Pty Ltd and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

Safety Data Sheet

FUJIFILM

Section 1: Identification of the Material and Supplier

Product Name : Rotowash Bio

Product Code : DP3816

Other Name :

Area of Use : Rotowash Bio is an approved blanket and roller wash, designed for commercial and newspaper web printing presses. It can be used as an automatic wash at full press speed, or as a manual wash.

Usage Directions: Refer to Product Information Sheet

Company Name: DS CHEMPORT (AUSTRALIA) PTY LTD
ABN: 68 006 335 048
Company Address: 41 Jesica Road
Campbellfield, 3061.
Phone : (03) 9357 0933
FAX : (03) 9357 0944

Emergency Number: Technical Representative 0412 594 997

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia. Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code for Transport by Road and Rail

Hazard Classification: Xn Harmful

Risk Statements:	R65	Harmful: May cause lung damage if swallowed.
Safety Statements:	S45	In case of accident or if you feel unwell, contact a doctor or poisons information centre immediately and show this container or label.
	S53	Avoid exposure - obtain special instructions before use.

UN Number: None allocated
DG Class: None allocated
Subrisk: None allocated
Packing Group: None allocated
Poison Schedule: S 5
Hazchem Code: None allocated

Section 3: Composition

NAME	CAS NUMBER	PROPORTION
Distillates (petroleum), hydrotreated light	64742-47-8	30-60%
Non-hazardous Ingredients		Balance

Section 4: First Aid Directions

Eye : Remove contact lenses if worn.
Hold eyelids open and flush thoroughly with water for at least 15 minutes.
Seek medical attention.

Skin : Remove and wash contaminated clothing before re-use.
If irritation develops and persists, seek medical attention.

Inhaled : If affected by vapour, remove to fresh air, lay down and rest.
If overcome by vapour, move victim to fresh air and if breathing stopped, apply artificial respiration.
No mouth-to-mouth respiration.
Remove contaminated clothing and loosen remaining clothing.
Seek medical attention.

Swallowed : Immediately rinse mouth with water.

Safety Data Sheet

FUJIFILM

Do NOT induce vomiting.
Obtain medical attention immediately if ingested.

Doctor Advice : Treat symptomatically

Section 5: Fire Fighting Measures

Extinguishing Media: Foam, water spray (fog), dry chemical or carbon dioxide.

Fire Precautions: Eliminate all sources of ignition. Use water spray to cool fire exposed surfaces and to protect personnel.
Firefighters should wear full protective clothing and self contained breathing apparatus when fighting fires involving this product.

Hazchem Code: None allocated

Section 6: Accidental Release Measures

Spills: In the event of a spill, evacuate spill/danger area. Stop leak if safe to do so.
Remove all ignition sources.
Wear protective equipment to prevent skin and eye contamination.
Ensure adequate ventilation to remove vapours, fumes, dust, etc.
Do NOT allow spilt material to enter drains, sewers or waterways.
Clean up spill immediately. Spills on the floor may be slippery.
Do NOT absorb with saw-dust or other combustible absorbents.

Section 7: Handling and Storage

Storage and Transport: Store in a cool, dry place away from direct sunlight and avoid exposure to moisture.
Store away from sources of heat and ignition.
Store away from alkalis and oxidizing agents.
Do not handle or store near open flame, heat, sparks or strong oxidants.

Precaution: All handling equipment should be grounded.
Safety goggles and gloves must be used when handling this product.
Avoid frequent or long lasting contact with the skin and eyes.
A solvent resistant barrier cream is recommended when handling this product.
Use only in a well ventilated area and avoid breathing vapour and mist.
Use only for its intended purpose and observe established practices of industrial hygiene.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: TLV - 300 ppm

Ventilation: Use in well ventilated area

Respiration: Not required

Clothing: If needed, use protective apron to prevent skin contact.

Gloves: Use chemical resistant gloves

Goggles: Use chemical splash goggles or shield

Safety Data Sheet

FUJIFILM

Section 9:Physical and Chemical Properties

Appearance: Pale yellow, clear liquid
Boiling Point: 235->350 C
% Volatile: 50% MIN
pH: Not applicable
Flash Point: 112 C
Specific Gravity: 0.82-0.85
Solubility: Miscible with water
Odour: Mild, unspecific
VOC:

Section 10: Stability and Reactivity

Do not mix or store with strong oxidants or strong alkalis.
Heat may cause violent rupture of containers. Fire may produce irritating or poisonous gases.
Heating can cause expansion or decomposition, leading to violent rupture of containers.
Firefighters should use self contained breathing apparatus.

Section 11: Toxicological Information

Eye: This product will cause eye discomfort but will not injure eye tissue.

Skin: Prolonged or repeated contact with skin may irritate and cause contact dermatitis.

Inhaled: If exposed to concentrations above recommended levels, may be irritating to the eyes and lungs.
May cause headaches and dizziness

Swallowed: This product is moderately toxic.
Small amounts of product aspirated into lungs following ingestion may cause bronchopneumonia.

Chronic: After prolonged and repeated exposure, this product can cause dermatitis

Section 12: Ecological Information

Mobility: This product is partially soluble in water

Persistence: Expected to biodegrade at a moderate rate according to OECD guidelines

Ecotoxicity: May be toxic to aquatic organisms. Avoid contaminating waterways

Section 13: Disposal Considerations

Disposal: Residue should be disposed of at an approved disposal site.

Section 14: Transport Information

UN Number: None allocated
DG Class: None allocated
Subrisk: None allocated
Packing Group: None allocated
Proper Shipping Name:

Initial Emergency Response Guide Number : 100

Section 15: Regulatory Information

Hazard Classification: Xn Harmful

Safety Data Sheet

FUJIFILM

Risk Statements:	R65	Harmful: May cause lung damage if swallowed.
Safety Statements:	S45	In case of accident or if you feel unwell, contact a doctor or poisons information centre immediately and show this container or label.
	S53	Avoid exposure - obtain special instructions before use.
Poison Schedule:	S 5	

Section 16: Other Information

Date of preparation or last review: 01-Jul-06
Version: 2

This MSDS summarises at the date of preparation or last review our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DS Chemport (Australia) Pty Ltd and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

DAY

VARN REVITOL

Hazard Alert Code: HIGH

Chemwatch Material Safety Data Sheet (REVIEW) | Revision No: 2 | Chemwatch 13700
Issue Date: 3-Aug-2006 | CD 2006/4

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VARN REVITOL
PROPER SHIPPING NAME
FLAMMABLE LIQUID, N.O.S. (contains isopropanol)
PRODUCT USE
Concentrated roller detergent and glaze remover.
SUPPLIER

Company: Day International
Address:
53 Westpool Drive
Hallam
VIC, 3803
AUS
Telephone: +61 3 9703 2300
Emergency Tel: +61 414 348 078 (Mon-Fri: 8am-6pm)
Fax: +61 3 9796 4771

Company: Day International
Address:
PO Box 29
Doveton
VIC, 3177
AUS

HAZARD RATINGS

	Min	Max
Flammability:	2	
Toxicity:	2	
Body Contact:	3	
Reactivity:	0	
Chronic:	3	

Min/Nil=0
Low=1
Moderate=2
High=3
Extreme=4

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE
HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.
POISONS SCHEDULE
None

RISK
Flammable.
Harmful if swallowed.
Irritating to respiratory system and skin.

Risk of serious damage to eyes.
Harmful: danger of serious damage to health by prolonged exposure if swallowed.
HARMFUL- May cause lung damage if swallowed.
Inhalation and/or skin contact may produce health damage*.
Cumulative effects may result following exposure*.
Limited evidence of a carcinogenic effect*.

Possible skin sensitiser*.

May affect fertility*.
May be harmful to the foetus/ embryo*.
Vapours potentially cause drowsiness and dizziness*.
* (limited evidence).

SAFETY
Keep away from sources of ignition. No smoking.
Keep container in a well ventilated place.
Avoid exposure - obtain special instructions before use.

Do not empty into drains.
To clean the floor and all objects contaminated by this material, use water.
Keep container tightly closed.
Keep away from food, drink and animal feeding stuffs.

Take off immediately all contaminated clothing.
If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
This material and its container must be disposed of as hazardous waste.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
tall oil	8002-26-4	10-30
diethanolamine	111-42-2	10-30
isopropanol	67-63-0	<10

VARN REVITOL

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ethylene glycol monobutyl ether	111-76-2	<10
ethylene glycol	107-21-1	<10
water	7732-18-5	30-60

Section 4 - FIRST AID MEASURES

SWALLOWED

If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Avoid giving milk or oils. Avoid giving alcohol.

EYE

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear
- Flush skin and hair with running water (and soap if available).

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

Treat symptomatically.

For acute or short term repeated exposures to ethylene glycol:

- Early treatment of ingestion is important. Ensure emesis is satisfactory.
- Test and correct for metabolic acidosis and hypocalcaemia.

To treat poisoning by the higher aliphatic alcohols:

- Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.

for poisons (where specific treatment regime is absent):

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Alcohol stable foam.
- Dry chemical powder.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.

FIRE/EXPLOSION HAZARD

- Liquid and vapour are flammable.
- Moderate fire hazard when exposed to heat or flame.

Combustion products include: carbon monoxide (CO), carbon dioxide (CO_2), nitrogen oxides (NOx), other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

None known.

HAZCHEM

3[Y]

Personal Protective Equipment

Breathing apparatus.
Gas tight chemical resistant suit.
Limit exposure duration to 1 BA set30 mins.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

Slippery when spilt.

- Remove all ignition sources.

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- Clean up all spills immediately.

MAJOR SPILLS
Slippery when spilt.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.

DO NOT allow clothing wet with material to stay in contact with skin.
Alkanolamines and iron may produced unstable complexes. Monoethanolamine (MEA) and iron form a triethanolamino-iron complex.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.

SUITABLE CONTAINER

Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid.
- For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C)

STORAGE INCOMPATIBILITY

Avoid strong acids.
Incompatible with aluminium. DO NOT heat above 49 deg.
Avoid contact with copper, aluminium and their alloys.
Avoid storage with strong acids, acid chlorides, acid anhydrides, oxidising agents.

STORAGE REQUIREMENTS

- Store in original containers in approved flammable liquid storage area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³	Peak ppm	Peak mg/m³	TWA F/CC
Australia Exposure Standards	diethanolamine (Diethanolamine (h))	3	13					
Australia Exposure Standards	isopropanol (Isopropyl alcohol)	400	983	500	1,230			
Australia Exposure Standards	ethylene glycol monobutyl ether (2-Butoxyethanol)	20	96.9	50	242			
Australia Exposure Standards	ethylene glycol (Ethylene glycol (vapour))	20	52	40	104			
Australia Exposure Standards	ethylene glycol (Ethylene glycol (particulate))		10					

The following materials had no OELs on our records
- tall oil: CAS:8002-26-4 CAS:68334-43-0
- water: CAS:7732-18-5

PERSONAL PROTECTION

RESPIRATOR

Type AK-P Filter of sufficient capacity

EYE

- Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

Suitability and durability of glove type is dependent on usage. Factors such as:
- frequency and duration of contact,
- chemical resistance of glove material,

Wear chemical protective gloves, eg. PVC.
NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

OTHER

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- Overalls.
- PVC Apron.

ENGINEERING CONTROLS

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Clear gold flammable liquid with a sweet odour; mixes with water.

PHYSICAL PROPERTIES

Mixes with water.

Molecular Weight: Not applicable	Boiling Range (°C): 82
Melting Range (°C): Not available	Specific Gravity (water=1): 1.0@20C
Solubility in water (g/L): Miscible	pH (as supplied): 9.5 approx.
pH (1% solution): Not available	Vapour Pressure (kPa): 1.583 @ 20 degC
Volatile Component (%vol): <42	Evaporation Rate: Not available
Relative Vapour Density (air=1): Not available	Flash Point (°C): 44 (CC)
Lower Explosive Limit (%): Not Available	Upper Explosive Limit (%): Not Available
Autoignition Temp (°C): Not available	Decomposition Temp (°C): Not Available
State: LIQUID	Viscosity: Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS	CHRONIC HEALTH EFFECTS
Harmful if swallowed.	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
HARMFUL- May cause lung damage if swallowed.	Possible skin sensitiser*.
Risk of serious damage to eyes.	Limited evidence of a carcinogenic effect*.
Irritating to respiratory system and skin.	May affect fertility*.
Vapours may cause dizziness or suffocation.	May be harmful to the foetus/ embryo*.
Inhalation and/or skin contact may produce health damage*.	Cumulative effects may result following exposure*.
Vapours potentially cause drowsiness and dizziness*.	* (limited evidence).
* (limited evidence).	

TOXICITY AND IRRITATION

Not available. Refer to individual constituents.
unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

TOXICITY	IRRITATION
TALL OIL:	
for tall oil fatty acids:	
Oral (rat) LD50: 10000 mg/kg [CCOHS, VW&R]	Nil Reported
DIETHANOLAMINE:	
Oral (rat) LD50: 710 mg/kg	Skin (rabbit): 50 mg (open)- Mild
Dermal (rabbit) LD50: 12200 mg/kg	Skin (rabbit): 500 mg/24 hr- Mild
Eye (rabbit): 5500 mg - SEVERE	
Eye (rabbit):0.75 mg/24 hr SEVERE	

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

ISOPROPANOL:	
Oral (human) LDLo: 3570 mg/kg	Skin (rabbit): 500 mg - Mild
Oral (human) TDLo: 223 mg/kg	Eye (rabbit): 10 mg - Moderate
Oral (man) TDLo: 14432 mg/kg	Eye (rabbit): 100mg/24hr- Moderate
Oral (rat) LD50: 5045 mg/kg	Eye (rabbit): 100 mg - SEVERE
Dermal (rabbit) LD50: 12800 mg/kg	

The substance is classified by IARC as Group 3:
NOT classifiable as to its carcinogenicity to humans.
Evidence of carcinogenicity may be inadequate or limited in animal testing.

ETHYLENE GLYCOL MONOBUTYL ETHER:

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Oral (rat) LD50: 470 mg/kg
Dermal (rabbit) LD50: 220 mg/kg
Inhalation (human) TCLo: 100 ppm
Inhalation (human) TCLo: 195 ppm/8h
Inhalation (rat- male) LC50: 486 ppm *
Inhalation (rat- female) LC50: 450 ppm *
Skin (rabbit): 500 mg, open; Mild
Eye (rabbit): 100 mg/24h- Moderate
Eye (rabbit): 100 mg SEVERE
* [Union Carbide]

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.
NOTE: Changes in kidney, liver, spleen and lungs are observed in animals exposed to high concentrations of this substance by all routes.

ETHYLENE GLYCOL:

Oral (rat) LD50: 4700 mg/kg
Oral (human) LDLo: 398 mg/kg
Oral (child) TDLo: 5500 mg/kg
Inhalation (human) TCLo: 10000 mg/m³
Dermal (rabbit) LD50: 9530 mg/kg
Inhalation (rat) LC50: 50100 mg/m³/8 hr
[Estimated Lethal Dose (human) 100 ml;
Substance is reproductive effector in rats (birth defects).
Mutagenic to rat cells.
Skin (rabbit): 555 mg(open)- Mild
Eye (rabbit): 100 mg/1h - Mild
Eye (rabbit): 1440mg/6h- Moderate
Eye (rabbit): 500 mg/24h - Mild
Eye (rabbit): 12 mg/m³/3D
RTECS quoted by Orica]

WATER:

No significant acute toxicological data identified in literature search.

MATERIAL	CARCINOGEN	REPROTOXIN	SENSITISER	SKIN
diethanolamine	IARC:3			
isopropanol	IARC:3			
ethylene glycol monobutyl ether	IARC:3			

CARCINOGEN
IARC: International Agency for Research on Cancer (IARC) Carcinogens: diethanolamine Category: 3
CARCINOGEN
IARC: International Agency for Research on Cancer (IARC) Carcinogens: isopropanol Category: 3
CARCINOGEN
IARC: International Agency for Research on Cancer (IARC) Carcinogens: ethylene glycol monobutyl ether Category: 3

Section 12 - ECOLOGICAL INFORMATION

Marine Pollutant:Not Determined
This material and its container must be disposed of as hazardous waste.

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Section 14 - TRANSPORTATION INFORMATION

Labels Required: FLAMMABLE LIQUID
HAZCHEM: 3[Y]

UNDG:

Dangerous Goods Class:	3	Subrisk:	None
UN Number:	1993	Packing Group:	III

Shipping Name:FLAMMABLE LIQUID, N.O.S.
(contains isopropanol)

Section 15 - REGULATORY INFORMATION

VARN REVITOL

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POISONS SCHEDULE

None

REGULATIONS

tall oil (CAS: 8002- 26- 4) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals
tall oil (CAS: 68334- 43- 0) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
diethanolamine (CAS: 111- 42- 2) is found on the following regulatory lists;
Australia Exposure Standards
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
Australia Poisons Schedule
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
International Agency for Research on Cancer (IARC) Carcinogens
OECD Representative List of High Production Volume (HPV) Chemicals
isopropanol (CAS: 67- 63- 0) is found on the following regulatory lists;
Australia - Australia New Zealand Food Standards Code - Food Additives - Schedule 1 Permitted uses of food additives by food type
Australia - Australia New Zealand Food Standards Code - Processing Aids - Generally permitted
Australia - Australia New Zealand Food Standards Code - Processing Aids - Permitted carriers, solvents and diluents
Australia Exposure Standards
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
International Agency for Research on Cancer (IARC) Carcinogens
OECD Representative List of High Production Volume (HPV) Chemicals
ethylene glycol monobutyl ether (CAS: 111- 76- 2) is found on the following regulatory lists;
Australia Exposure Standards
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
Australia Poisons Schedule
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
International Agency for Research on Cancer (IARC) Carcinogens
OECD Representative List of High Production Volume (HPV) Chemicals
VAP 6013 (CAS: 107- 21- 1) is found on the following regulatory lists;
Australia Exposure Standards
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
Australia National Pollutant Inventory
Australia Poisons Schedule
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals
water (CAS: 7732- 18- 5) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
OECD Representative List of High Production Volume (HPV) Chemicals

Section 16 - OTHER INFORMATION

Ingredients with multiple CAS Nos

Ingredient Name	CAS
tall oil	8002-26-4, 68334-43-0

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Print Date: 19-Jan-2007