

ABN 71 002 591 620

17 Reaghs Farm Rd, Minto NSW 2566 Telephone: (02) 9603-3399 Fax: (02) 9603-7761 Website: www.austspecialtyinks.com.au

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#### MATERIAL SAFETY DATA SHEET

Classified as hazardous according to criteria of Worksafe Australia.

Date of issue: March 2014

### **COMPANY DETAILS**

AUSTRALIAN SPECIALTY INKS PTY LTD A.B.N. 71 002 591 620 17 REAGHS FARM ROAD MINTO NSW 2566 (02) 9603-3399 A/H (02) 9792 7790 or mobile 0414 616 247

#### **IDENTIFICATION**

Product Name: NYLOPRINT CATALYST FNP176

U.N. Number: Not applicable

Trade Name: Other Names: Class: C1

Hazchem Code: Not applicable Manufacturers Code: FNP176 Poisons Schedule: S6

Pack Group: Not applicable

Use: Product is for use as a catalyst.

Physical Description/Properties:

Appearance: Colourless, yellowish liquid, mild odour.

Density: 1.13 Boiling Point/Range: 160°C

Vapour Pressure: n-butyl acetate 12mbar @ 20°C

Hexamethylene-1,6-diisocyanate .014mbar @ 20°C Resin .0001 mbar @ 20°C

Percent Volatiles: 9

Flash Point: approx 50°C DIN 53019/1

Flammability Limits (%): LEL:1 UEL: 7.5 Solubility in water: Negligible



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Ingredients
Chemical entity

CAS No.

Proportion

Resins

Hexamethylene-1,6-diisocyanate

Aromatic hydrocarbon

Formaldehyde

So-00-0

Proportion

> 99%

< .14%

< .14%

< .5%

< .5%

#### **HEALTH HAZARD INFORMATION**

#### **HEALTH EFFECTS**

Swallowed: A large dose may have the following effects:- Mouth, throat and gastrointestinal irritation. Drowsiness, nausea, vomiting and may lead to unconsciousness. Aspiration during swallowing or vomiting may severely damage the lungs.

Eye: Liquid or vapour may cause eye irritation.

Skin: May cause irritation.

Inhaled: Exposure to vapour may have the following effects:- Irritation of nose, throat and respiratory tract. Headache. Exposure to vapour at high concentrations may have the following effects:- Severe irritation of nose, throat and respiratory tract. Loss of consciousness.

Chronic: Repeated or prolonged skin exposures may produce pronounced irritation and dermatitis. Contains formaldehyde. Contains isocyanates. (See Toxicology)

### FIRST AID

Swallowed: Wash out mouth with water. Do not induce vomiting. Keep warm and at rest. Obtain medical advice urgently.

Eye: Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical advice urgently.

Skin: Immediately flood the skin with large quantities of water for at least 15 minutes, preferably under a shower. Remove contaminated clothing as washing proceeds. Continue washing for at least 10 minutes. Obtain medical attention urgently. Contaminated clothing should be washed or dry-cleaned before re-use.

Inhaled: Remove from exposure. Keep warm and at rest. Seek medical attention. If breathing stops or shows signs of failing give artificial respiration. If heartbeat absent, give external cardiac compression. Obtain medical attention.



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Advice to Doctor: Treat symptomatically. Because of risk of aspiration, gastric lavage should only be undertaken after endotracheal intubation.

### PRECAUTIONS FOR USE

Exposure Limits: n-butyl acetate 713mg/m³ TWA, 950mg/m³ STEL

Aromatic hydrocarbon 900mg/m³ TWA (value requires review) Isocyanates .02mg/m³ TWA, 0.07mg/m³ STEL (as -NCO)

Formaldehyde 2ppm STEL

Engineering Controls: Exposure to this material may be controlled in a number of ways. The measures appropriate for a particular worksite depend on how the material is used and on the potential for exposure. Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform satisfactorily, should be used.

Personal Protection: Wear chemical goggles. Wear chemical resistant gloves (made of PVC or rubber). Wear protective clothing as necessary to avoid skin contact. Wear respiratory protection if there is a risk of exposure to high vapor concentrations which meet the requirements of AS/NZS1715. In case of hypersensitivity of the respiratory tract (e.g. asthmatics and those who suffer from chronic bronchitis) it is inadvisable to work with the product. Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work. Keep working clothes separate.

Flammability: Avoid heat and sources of ignition. Prevent build-up of flammable vapours. Hoses should be electrically continuous and containers bonded to avoid static charge build-up.

### SAFE HANDLING INFORMATION

Storage and Transport: Store in cool well ventilated area away from heat above 50°C and ignition sources. Containers should always be kept closed in storage and properly labelled. Do not store in low or enclosed areas where vapours may become trapped. Store only in original or approved containers. Mild steel, carbon steel and polypropylene are suitable storage materials, as are lined steel and stainless steel where trace iron or slight discolouration are critical. Galvanised iron, aluminium and copper and its alloys are unsuitable. The product is a scheduled Poison (S6) and must therefore be stored, maintained and used in accordance with the relevant State Poisons Act.

Spills and Disposal: Keep public away. Extinguish all ignition sources. For major spills, dam and recover. Prevent entry into drainage systems, rivers etc. Collect with absorbent material such as sand, earth or saw dust. After 1 approximately hour transfer to waste container and do not seal (evolution of CO<sub>2</sub>). Keep damp in a safe ventilated area for several days. Further disposal by incineration, but ensure waste disposal conforms with local waste disposal regulations.

Fire/Explosion Hazard: Combustible. Combustion products include carbon monoxide, nitrogen oxide, isocyanate vapour, and traces of hydrogen cyanide is possible. Use water sprays to cool fire exposed



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surfaces and any adjacent storage vessels. Shut off source of product if safe to do so. Remove sources of re-ignition. Vapour/air mixtures may ignite explosively. Flashback along vapour trail may occur. Avoid contact with strong oxidizing agents and strong caustics. Use foam, CO2, dry chemical and water fog. Wear full protective clothing and self-contained breathing apparatus.

#### Other Information:

## Toxicology

Oral LD50 (rat) 5000mg/kg. Skin and mucous membrane compatibility, rabbit:

Skin 24 hours exposure - non-irritant

Eyes - Slight irritation for a short time.

Product contains isocyanates. May have an irritant effect on mucous membranes - especially on breathing organs - and cause hypersensitivity reactions. Inhalation of vapour or spray mist may cause sensitisation. When handling all precautions required for solvent-containing paints must be followed.

Formaldehyde has oral (rat) and dermal (rabbit) LD50 values of 100mg/kg and 270mg/kg respectively. The LC50 following a 4 hour inhalation exposure to rats is 250-478 ppm. Epidemiology studies have failed to link cancer in humans with occupational exposure to formaldehyde. Formaldehyde (gas) is a chemical known to the State of California to cause cancer.

Contact Point: Technical Director (02) 9603-3399 Date: March 2014