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**NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME  
(NICNAS)**

**FULL PUBLIC REPORT**

**Photomer 5430**

This Assessment has been compiled in accordance with the provisions of the *Industrial Chemicals (Notification and Assessment) Act 1989* (Cwlth) (the Act) and Regulations. This legislation is an Act of the Commonwealth of Australia. The National Industrial Chemicals Notification and Assessment Scheme (NICNAS) is administered by the Department of Health and Ageing, and conducts the risk assessment for public health and occupational health and safety. The assessment of environmental risk is conducted by the Department of the Environment and Water Resources.

For the purposes of subsection 78(1) of the Act, this Full Public Report may be inspected at our NICNAS office by appointment only at 334-336 Illawarra Road, Marrickville NSW 2204.

This Full Public Report is available for viewing and downloading from the NICNAS website or available on request, free of charge, by contacting NICNAS. For requests and enquiries please contact the NICNAS Administration Coordinator at:

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**Director  
NICNAS**

## **TABLE OF CONTENTS**

FULL PUBLIC REPORT .....	3
1. APPLICANT AND NOTIFICATION DETAILS .....	3
2. IDENTITY OF CHEMICAL .....	3
3. COMPOSITION.....	3
4. INTRODUCTION AND USE INFORMATION.....	4
5. PROCESS AND RELEASE INFORMATION.....	4
5.1. Distribution, transport and storage.....	4
5.2. Operation description.....	4
5.3. Occupational exposure.....	5
5.4. Release.....	6
5.5. Disposal .....	6
5.6. Public exposure.....	7
6. PHYSICAL AND CHEMICAL PROPERTIES.....	7
7. TOXICOLOGICAL INVESTIGATIONS .....	9
8. ENVIRONMENT.....	9
8.1. Environmental fate.....	9
8.2. Ecotoxicological investigations .....	9
9. RISK ASSESSMENT .....	9
9.1. Environment .....	9
9.1.1. Environment – exposure assessment.....	9
9.1.2. Environment – effects assessment .....	9
9.1.3. Environment – risk characterisation.....	9
9.2. Human health.....	10
9.2.1. Occupational health and safety – exposure assessment .....	10
9.2.2. Public health – exposure assessment.....	10
9.2.3. Human health – effects assessment.....	10
9.2.4. Occupational health and safety – risk characterisation .....	10
9.2.5. Public health – risk characterisation.....	11
10. CONCLUSIONS – ASSESSMENT LEVEL OF CONCERN FOR THE ENVIRONMENT AND HUMANS .....	11
10.1. Hazard classification.....	11
10.2. Environmental risk assessment .....	11
10.3. Human health risk assessment .....	11
10.3.1. Occupational health and safety.....	11
10.3.2. Public health.....	11
11. MATERIAL SAFETY DATA SHEET .....	11
11.1. Material Safety Data Sheet .....	11
11.2. Label .....	11
12. RECOMMENDATIONS.....	11
12.1. Secondary notification .....	13
13. BIBLIOGRAPHY .....	13

**FULL PUBLIC REPORT****Photomer 5430****1. APPLICANT AND NOTIFICATION DETAILS**

APPLICANT(S)  
Cognis Australia Pty Ltd, ABN: 87 006 374 456  
4 Saligna Drive  
Tullamarine, VICTORIA 3043

NOTIFICATION CATEGORY  
Limited: Polymer with NAMW  $\geq 1000$

EXEMPT INFORMATION (SECTION 75 OF THE ACT)  
Data items and details claimed exempt from publication:  
Chemical Name  
Other Names  
Molecular Formula  
Structural Formula  
CAS Number  
Polymer Constituents  
Use details  
Import Volume  
Molecular Weight  
Identity of Site

VARIATION OF DATA REQUIREMENTS (SECTION 24 OF THE ACT)  
Variation to the schedule of data requirements is claimed as follows:  
Melting Point/Boiling Point  
Vapour Pressure  
Autoignition Temperature

PREVIOUS NOTIFICATION IN AUSTRALIA BY APPLICANT(S)  
None

NOTIFICATION IN OTHER COUNTRIES  
USA (1998)

**2. IDENTITY OF CHEMICAL**

MARKETING NAME(S)  
Photomer 5430

**METHODS OF DETECTION AND DETERMINATION**

METHOD	<sup>13</sup> C NMR
Remarks	Reference spectra provided

**3. COMPOSITION**

DEGREE OF PURITY  
> 95%

**DEGRADATION PRODUCTS**

Polymerised resin in the case of unintended self-reaction, for example, kept at above 60 °C for too long or inadvertent exposure to photo or chemical initiator. As the polymerisation can be exothermic, toxic or irritant vapours may be emitted.

**LOSS OF MONOMERS, OTHER REACTANTS, ADDITIVES, IMPURITIES**

The notifier has not found evidence of loss of monomer, reactants additives or impurities when used as recommended. The traces of reactive residual monomer (Henkel Corp, analytical services 1997) in the polymer would be consumed in the polymerisation reaction and become an integral part of the solid resin structure.

**HAZARDOUS IMPURITIES/RESIDUAL MONOMERS**

All residual monomers and hazardous impurities are present below the relevant cut off for classifications of the notified polymer as a hazardous substance.

**4. INTRODUCTION AND USE INFORMATION****MODE OF INTRODUCTION OF NOTIFIED POLYMER (100%) OVER NEXT 5 YEARS**

The notified polymer (100%) will be imported by sea.

**MAXIMUM INTRODUCTION VOLUME OF NOTIFIED POLYMER (100%) OVER NEXT 5 YEARS**

<i>Year</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Tonnes</i>	1 to 2	2 to 3	3 to 4	3 to 5	4 to 5

**USE**

The notified polymer will be used as an ingredient in UV cured printing ink at approximately 10%.

**5. PROCESS AND RELEASE INFORMATION****5.1. Distribution, transport and storage****PORT OF ENTRY**

Sydney or Melbourne.

**IDENTITY OF MANUFACTURER/RECIPIENTS**

Cognis Australia Pty Ltd.

**TRANSPORTATION AND PACKAGING**

The notified polymer will be imported by sea and transported by road to the notifier's warehouse in 200 L lined closed-head steel sturdy drums. The drums will then be transported to the customer/s by road or rail for formulation. The formulated ink will be packaged in 1,4, and 10 Litre containers.

[No repacking of the drums will be carried out in Australia before ink formulation.](#)

**5.2. Operation description***Ink formulation*

At the formulation site, the notified polymer is transferred from 200 L drums to the mixing vessel by way of "Hydrum" drum lifter. The drum is opened and a proportion added to an open ink mixing vessel of between 100 and 500 kg capacity. The amount added is about 10% of the capacity of the vessel – that is between 10 kg and 50 kg per batch. It is estimated that about 60 batches would be produced each year (as usage increases the batch size will increase but batch frequency will remain roughly constant). There is a general extraction in the area and localised point extraction above the vessel. The remaining ingredients will be added and the batch stirred for approximately 45 mins under temperatures of 45°C until homogenous. The mixture is then milled to grind large particles and clumps of pigments. During this process, QA sampling takes place. The ink mixture containing 10% of the notified polymer is poured between sets of rollers for final collection via a pot. If required the collection pot is removed from the mill and adjustments are made, such as dilution with liquid resin or solvents. The pot is then placed under a high-speed mixer for further mixing.

The pot is lifted onto a platform that can be declined to fill containers (1, 4 and 10 litre) with the ink mixture containing the notified polymer from lower valve of the pot by the operator. The containers are sealed with a lid and placed on a conveyor belt. The area is fitted with a local exhaust ventilation (LEV). The pots containing residual ink mixtures are washed with solvents in a large ventilated booth

#### *End use*

The printing ink containing about 10% of the notified polymer is supplied to end users for application to surfaces by screen printing. The printing ink (supplied in 1, 4 and 10 litre) is poured directly into ink reservoirs of automated screen-printing machines. The ink is pumped directly from the ink reservoir to the applicator machinery which will apply the ink over the screen so the ink will imprint an image on the printed article. The printed articles are then sealed with a clear coating and cured by UV light. Excess ink is pumped back to the ink reservoir for re-use. On completion, the machinery is first drained so the excess ink is collected for future runs and then rinsed with “washup” solvents.

### 5.3. Occupational exposure

#### *Number and Category of Workers*

<i>Category of Worker</i>	<i>Number</i>	<i>Exposure Duration</i>	<i>Exposure Frequency</i>
<b><i>At the formulating site</i></b>			
Store operator	1	½ hr/day	60 days/year
Plant operator/ filling operators	3	2 hr/day	60 days/year
Laboratory technician	1	½ hr/day	60days/year
<b><i>At the screen printing facilities</i></b>			
Store operator	5	2½ hr/day	60 days/year
Printer	5	5 hr/day	60 days/year
Laboratory technician	5	2½ hr/day	60 days/year

#### ***Exposure Details***

##### *Ink formulation*

During transport and storage of the notified polymer, the worker’s exposure is unlikely except when packaging is accidentally breached. Personal protection equipment (PPE), such as glasses and gloves are expected to be worn.

During ink formulation, dermal and ocular exposure to the notified polymer (neat) could occur from drips, splashes and contact with contaminated surfaces during opening, weighing, pouring and cleaning of the empty drums. Workers may be exposed to printing inks containing 10 % of the notified polymer during sampling, mixing and packaging. However, worker’s exposure can be limited with the use of PPE.

Inhalation exposure is not expected to be a major route of exposure due to low predicted vapour pressure of the notified polymer and presence of exhaust ventilation systems.

##### *End use*

During use of the finished ink formulation, dermal and ocular exposure to the notified polymer (10% concentration) may occur when weighing, transferring, during the application of the ink formulation containing the notified polymer and from contact with contaminated surfaces.

Printing presses generally run with little operator intervention except at job change-over. It is anticipated that duration of exposure to the printing ink containing 10% of the notified polymer will be in the order of 1 hour per shift per operator. Therefore, worker’s exposure is expected to be limited. However, it is possible that some printing workers do not wear PPE at printing sites.

Once the coating has been cured the polymer is bound within an inert matrix and therefore will be unavailable for exposure.

#### 5.4. Release

##### RELEASE OF CHEMICAL AT SITE

No manufacture will take place in Australia.

##### RELEASE OF CHEMICAL FROM USE

During reformulation into inks, it is expected that the import drums are normally rinsed out into the process using an ink vehicle, minimising residues for disposal. The emptied drums will then be recycled via a recycling facility.

Wastage from cleaning empty formulating vessels (3 per batch) estimated at 0.15% of total imported. At the end of a campaign on a particular colour/formulation, the processing vessel is washed out with solvent and sent to hazardous waste processor (incinerated).

During end use, waste in emptied finished ink container is estimated at 0.1% of total imported quantity and sent to drum recycler.

Ink "overs" or "heels" removed from printing press at end of each job are returned to the pot for re-use in the next campaign of the ink type. From time to time, these "overs" will become redundant and will be disposed of as hazardous waste by licensed waste treatment facility, possibly by incineration, estimated at 0.2% of total imported.

Printing press washup solvent will contain small quantities of product, estimated at less than 0.05% of total imported. Press wash up solvent is normally sent to solvent recycler for redistillation and recovery.

The ink products containing the notified polymer will be supplied to the printing industry. Any waste material in the ink product will be captured and disposed of to landfill as will an ink residue in empty drums. Equipment residues will be washed with solvent and sent for incineration or solvent recycling and disposal of solid residues to landfill. There will be no release of the notified polymer to sewer. Thus, aquatic species will not be exposed to the notified polymer.

When incinerated, the notified polymer will be converted to water vapour and oxides of carbon. The notified polymer in waste material and ink residues in empty containers will be disposed of to landfill. The major environmental exposure of the notified polymer is via that disposed of to the landfill.

Emptied containers containing the notified polymer are to be disposed of to recycling facilities for cleaning and reuse or sent to landfill for disposal. Any container of cleaning solvents are expected to be sent to be recycled.

Due to its expected very low water solubility, the notified polymer is unlikely to be mobile in soils and landfill. If the polymer does enter the leachate it will be present at very low concentrations and unlikely to be mobile. The notified polymer will eventually degrade through abiotic and biotic processes. The notified polymer is not expected to bioaccumulate due to its high molecular weight.

Environmental exposure to the notified polymer during importation, transport and storage is not expected except in the event of an accident where the packaging may be breached.

#### 5.5. Disposal

Loss to the environment (assuming no incineration) is estimated to be of the order of:

Emptied import drums	$0.20 \times 5000/100 =$	10 kg max.
Ink-making process vessel cleaning	$0.15 \times 5000/100 =$	7.5 kg max.
Waste in emptied finished ink container	$0.10 \times 5000/100 =$	5 kg max.
"overs" that have become redundant	$0.20 \times 5000/100 =$	10 kg max.
Traces in printing press washup solvent	$0.05 \times 5000/100 =$	2.5 kg max.

Total estimated potential for landfill disposal is 35 kg Australia wide, dispersed in various locations over a year.

**5.6. Public exposure**

Neither the polymer nor the formulated ink products will be available to the general public. Public exposure is only expected in the case of accidental leakage /spill during transportation of these products. In addition, the notified polymer is bound within an inert matrix in the final product and will be not bioavailable. Therefore, public exposure is expected to be negligible.

**6. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance at 20°C and 101.3 kPa** Viscous, light yellow liquid

**Melting Point/Freezing Point** 349.84 °C

**Remarks** Modelled data determined by MPBPWIN v1.41. The notified polymer has different molecular weight and ratios of functional groups to that of modelled substance. The presence of impurities may also affect the characteristics of the polymer. The predicted melting point temperature does not correlate with the observed state of the polymer, which is liquid at room temperature.

**Boiling Point** 1,110°C.

**Remarks** Modelled data determined by MPBPWIN v1.41. The notified polymer has different molecular weight and ratios of functional groups to that of modelled substance. Modelled data may be inaccurate based on discrepancy between modelled and observed characteristics for melting point.

**Density** 1,110 kg/m<sup>3</sup> at 25°C

**Remarks** No study report received. Value obtained from MSDS.

**Vapour Pressure** 1.66 x 10<sup>-29</sup> kPa at 25°C

**Remarks** Modelled data determined by MPBPWIN v1.41. The modelled polymer varies from the notified polymer in molecular weight and ratio of functional groups. It is also indicative of the lower molecular weight range of the polymer. Hence, the estimated vapour pressure would be indicative of the maximum vapour pressure.

**Water Solubility** Not Determined

**Remarks** Water was added to various weights of the notified polymer to give a total mass of 50 g. The obtained emulsions showed several phases. The amount of dissolved organic carbon (DOC) was determined in the aqueous phase after centrifugation.

Sample weight (g)	Water amount (g)	DOC of aqueous phase (mg/L)
0.1	49.9	146
0.5	49.5	326
1	49.0	205
5	45.0	1210
10	40.0	1160
25	25.0	3200

The results indicate that as the amount of test substance is increased a greater amount of DOC is found in the aqueous phase. However, a decreasing proportion of the test material is dissolving in the aqueous phase. This behaviour is characteristic of complex dissolution behaviour for the notified polymer, and is possibly indicative of the formulation of micelles.

**TEST FACILITY** Cognis Deutschland GmbH (2006)

**Hydrolysis as a Function of pH**

19.5 days at pH 8

195 days at pH 7

Remarks Modelled data determined by HYDROWIN v1.66. The modelled polymer varies from the notified polymer in molecular weight and ratio of functional groups. It is also indicative of the lower molecular weight range of the polymer.

**Partition Coefficient (n-octanol/water)**

log Pow = 18.60

Remarks Modelled data determined by KOWWIN v1.67. The modelled polymer varies from the notified polymer in molecular weight and ratio of functional groups. It is also indicative of the lower molecular weight range of the polymer. Hence, the estimated partition coefficient would be indicative of the minimum partition coefficient.

**Adsorption/Desorption**log K<sub>oc</sub> = 13.72

Remarks Modelled data determined by PCKOCWIN v1.66. The modelled polymer varies from the notified polymer in molecular weight and ratio of functional groups. It is also indicative of the lower molecular weight range of the polymer. Hence, the estimated partition coefficient would be indicative of the minimum partition coefficient.

**Dissociation Constant**

Not Determined

Remarks The notified polymer does not contain any functional groups which would be expected to dissociate.

**Flash Point**

&gt;100 °C

Remarks No study report received. Value obtained from MSDS

**Flammability Limits**

Not determined

Remarks Based on the flash point the notified polymer is not classified as flammable according to ADG classification. It may be a combustible liquid.

**Autoignition Temperature**

Not determined

Remarks The notified polymer is not expected to autoignite under normal conditions of use

**Explosive Properties**

Not determined

Remarks There are no chemical groups that would infer explosive properties.

**Reactivity**

Not determined

Remarks The notified polymer contains an inhibitor that prevents polymerisation under all normal conditions. The notified polymer is intended to react with other ingredients of ink under the influence of UV light. Exposure to high temperatures can lead to exothermic polymerisation. Exposure to free radical initiators, UV or other ionising radiation, sunlight, alkalis or trace metals need to be avoided as uncontrolled polymerisation may occur.



## 7. TOXICOLOGICAL INVESTIGATIONS

No toxicity data were submitted.

## 8. ENVIRONMENT

### 8.1. Environmental fate

No environmental fate data were submitted.

### 8.2. Ecotoxicological investigations

No ecotoxicity data were submitted.

## 9. RISK ASSESSMENT

### 9.1. Environment

#### 9.1.1. Environment – exposure assessment

The majority of the notified polymer will be consumed during curing or remain bound within cured inks at low levels on metal, paper or plastic substrates.

The main potential for environmental hazard would arise from release of the notified polymer during storage or transport. The use of bunded containment minimises the risk of release at storage sites. Less than 35 kg of notified polymer may be released to landfill annually via spills, with the possibility a small portion of this may be hosed into the sewer. This release is expected to be distributed across several sites and will not be restricted to a single site, thus minimising the degree of risk to the environment at any given time. The compound is not expected to be readily biodegradable, has a high estimated partition coefficient, all indicating that any material released would partition to sediments, where it is expected to persist. Empty containers with residue of the notified polymer will be recycled after rinsing.

The notified polymer will ultimately suffer the same fate as the finished article at the end of its useful life, i.e. be disposed of to landfill. Since it will be incorporated into the inert matrix of the cured ink it will pose minimum risk to the environment.

Due to its large molecular weight the potential for bioaccumulation is very low.

#### 9.1.2. Environment – effects assessment

No ecotoxicological data were provided for the notified polymer. Nonionic polymers with number average molecular weights (NAMWs) greater than 1000 are considered to be non-hazardous to the aquatic environment (Boethling *et al.* 1997). Additionally, following application and curing, the notified polymer will be within an inert matrix and be unavailable to organisms.

#### 9.1.3. Environment – risk characterisation

The notified polymer will be used as a component of UV curable inks. Once these inks have been cured the notified polymer is expected to remain within the product matrices. Hence, the majority of the notified polymer will share the fate of the articles into which it is incorporated. It is anticipated that these will be disposed of to landfill or incinerated at the end of their useful lifetime. In landfill, it is expected that the notified polymer will remain immobile within the matrices. Incineration of the notified polymer will result in the formation of water vapour and oxides of carbon.

Very little will be released to water and it is not possible to calculate a reasonable predicted environmental concentration (PEC). However, as the notified polymer is not expected to be toxic to aquatic organisms it is estimated the risk quotient (PEC/PNEC) should be very small.

The above considerations indicate an acceptable hazard to the environment when the notified

polymer is used in the manner and levels indicated by the notifier.

## **9.2. Human health**

### **9.2.1. Occupational health and safety – exposure assessment**

#### *Transport and warehousing*

Worker's exposure during transport and storage is expected to be negligible considering the handling of sealed containers containing the notified polymer and should only occur in the event of an accident resulting in rupture of containers.

#### *Ink formulation*

During ink formulation, dermal and ocular exposure to the notified polymer (neat) could occur from drips and splashes during opening, weighing, pouring and cleaning of the empty drums. Dermal and ocular exposure could also occur during decanting, weighing and transferring of the ink formulation containing the notified polymer (at 10% concentration). Inhalation exposure of workers involved in the blending is minimised by low vapour pressure of the notified polymer and by the use of engineering controls such as local ventilations. Workers' exposure during ink formulation will be limited by the use of PPE.

#### *End use*

During use of the finished ink formulation, dermal, ocular and inhalation exposure to the notified polymer (10% concentration) may occur when weighing, transferring and during the application of the ink formulation containing the notified polymer. However the exposure can be minimised via the use of mechanical controls and PPE. However, it is indicated that some printing workers do not use PPE such as gloves.

### **9.2.2. Public health – exposure assessment**

The notified polymer is intended for industrial use only. The notified polymer in the end product is cured into an inert matrix and hence is unavailable for exposure. Therefore, public exposure to the notified polymer is expected to be negligible and will only occur in the event of a transport accident or spillage.

### **9.2.3. Human health – effects assessment**

No toxicity data were submitted and hence the notified polymer cannot be classified as a hazardous substance in accordance with the *Approved Criteria for Classifying Hazardous Substances* (NOHSC 2004).

The MSDS for the notified polymer indicated that it is irritating to the skin, eyes and respiratory system. The notifier classified the notified polymer as R36/37/38 Irritating to eyes, respiratory tract and skin. The notified polymer belongs to a general class of chemicals included in the hazardous substances list with these risk phrases (HSIS, 2006).

The MSDS also indicates that the notified polymer has low oral toxicity (LD50 > 2000 mg/kg).

No data was provided on the skin sensitisation of the notified polymer; however, it contains a structural alert that may cause skin sensitisation (Barrat *et al* 1994, TSCA (USA) 1995 and *TSCA New chemical program 2002*). The sensitisation hazard is likely to be limited due to the high molecular weight (MW > 1000), and therefore low skin permeability, of the notified polymer. However, the potential sensitisation effect of the notified polymer cannot be ruled out due to the presence of the low molecular weight species (MW < 1000).

### **9.2.4. Occupational health and safety – risk characterisation**

The notified polymer is a skin, eye and respiratory system irritant and a potential skin sensitiser due to a structural alert. Workers' exposure to the notified polymer during formulation and printing may occur.

The risk of irritation to the skin and eye exist during ink formulation especially in the process of

handling the neat notified polymer. However, the risk is limited due to usually short exposure duration and use of PPE such as gloves and eye protection. The risk of irritation to the skin and eye is expected to be low during printing because the concentration of the notified polymer is 10% plus automated printing processes and use of PPE. The risk of irritation to the respiratory system is limited based on low inhalation exposure of workers' involved in the ink formulation and printing.

The risk of skin sensitisation exists during both ink formulation and printing process as the concentration of the notified polymer in the product is above 1% (cut off concentration for skin sensitisation). Although workplace control measures such as use of PPE limit the risk, further regulatory controls to ensure safe use of the notified polymer is required.

#### **9.2.5. Public health – risk characterisation**

The risk to the public from importation and uses of the notified polymer is considered to be negligible based on the negligible exposure predicted.

### **10. CONCLUSIONS – ASSESSMENT LEVEL OF CONCERN FOR THE ENVIRONMENT AND HUMANS**

#### **10.1. Hazard classification**

No toxicological data was available and hence the notified polymer cannot be classified as hazardous under the *Approved Criteria for Classifying Hazardous Substances*. However, based on available information the following classification and labelling details should be used:

R36/37/38 Irritating to eyes, respiratory system & Skin  
R43 May cause sensitisation by skin contact

#### **10.2. Environmental risk assessment**

The chemical is not considered to pose a risk to the environment based on its reported use pattern.

#### **10.3. Human health risk assessment**

##### **10.3.1. Occupational health and safety**

There is Concern to occupational health and safety under the conditions of the occupational settings described.

##### **10.3.2. Public health**

There is Negligible Concern to public health when used under the conditions of the environmental, workplace and occupational settings described.

### **11. MATERIAL SAFETY DATA SHEET**

#### **11.1. Material Safety Data Sheet**

The MSDS of the notified polymer provided by the notifier was in accordance with the *National Code of Practice for the Preparation of Material Safety Data Sheets* 2<sup>nd</sup> edn [NOHSC:2011(2003)]. It is published here as a matter of public record. The accuracy of the information on the MSDS remains the responsibility of the applicant.

#### **11.2. Label**

The label for the notified polymer provided by the notifier was in accordance with the *National Code of Practice for the Labelling of Workplace Substances* [NOHSC:2012(1994)]. The accuracy of the information on the label remains the responsibility of the applicant.

### **12. RECOMMENDATIONS**

REGULATORY CONTROLS  
Hazard Classification and Labelling

- Use the following risk phrases for products/mixtures containing the notified polymer:  
Concentration  $\geq$  20%:  
R36/37/38 Irritating to eyes, respiratory system and skin  
R43 May cause sensitisation by skin contact  
Concentration  $\geq$  1% but  $<$  20%  
R43 May cause sensitisation by skin contact
- Products containing the notified polymer must carry the following safety directions on the label:  
  
Concentration  $\geq$  20%:  
-S23 *Do not breathe spray*  
-S24/25 *Avoid contact with skin & eyes*  
-S26 *In case of contact with eyes, rinse immediately with plenty of water and seek medical advice*  
-S37/39 *Wear suitable gloves, and eye/face protection*  
  
Concentration  $\geq$  1% but  $<$  20%  
-S24 *Avoid contact with skin*  
-S37 *Wear suitable gloves*

#### Health Surveillance

- As the notified polymer is a potential skin sensitiser, employers should carry out health surveillance for any worker who has been identified in the workplace risk assessment as having a significant risk of sensitisation.

#### CONTROL MEASURES

##### Occupational Health and Safety

- Employers should implement the following engineering controls to minimise occupational exposure to the notified polymer:  
- Local exhaust ventilation if aerosols generated.  
- Closed tanks and lines for ink formulation and transfer of the notified polymer as introduced and in the formulated ink product where possible.
- Employers should implement the following safe work practices to minimise occupational exposure during handling of the notified polymer:
  - Avoid skin and eye contact
  - Spillage should be avoided
  - Spillage should be cleaned up using appropriate absorbents and placed into containers for disposal.
- Employers should ensure that the following personal protective equipment is used by workers to minimise occupational exposure to the notified polymer:
  - Coveralls; and
  - eye protection; and
  - impervious gloves

Guidance in selection of personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.

- A copy of the MSDS should be easily accessible to employees.
- If products and mixtures containing the notified polymer are classified as hazardous to health in accordance with the *Approved Criteria for Classifying Hazardous Substances*, workplace practices and control procedures consistent with provisions of State and Territory hazardous substances legislation must be in operation.

#### Environment

- The following control measures should be implemented by end users to minimise environmental exposure during use of the notified polymer:
  - Do not allow material or contaminated packaging to enter drains, sewers or water courses.

#### Disposal

- The notified polymer should be disposed of into landfill or incinerated.

#### Storage

- A copy of the MSDS should be easily accessible to the party responsible for transport and storage.

#### Emergency procedures

- Spills / accidental release of the notified polymer should be handled by containment and collection by absorbent material, then storage of absorbent material in sealable labelled container ready for disposal to landfill.

### 12.1. Secondary notification

The Director of Chemicals Notification and Assessment must be notified in writing within 28 days by the notifier, other importer or manufacturer:

- (1) Under Section 64(1) of the Act; if
  - the polymer has a number-average molecular weight of less than 1000;
- (2) Under Section 64(2) of the Act:
  - if any of the circumstances listed in the subsection arise.

The Director will then decide whether secondary notification is required.

## 13. BIBLIOGRAPHY

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