

File No PLC/849

July 2009

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

**FULL PUBLIC REPORT**

**Polymer in AH2025P**

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, Water, Heritage and the Arts.

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 also 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**

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**FULL PUBLIC REPORT****Polymer in AH2025P****1. APPLICANT AND NOTIFICATION DETAILS**

## APPLICANT(S)

The Valspar (Australia) Corporation Pty Limited (ABN: 82 000 039 396)  
203 Power Street  
Glendenning NSW 2761

## NOTIFICATION CATEGORY

Polymer of Low Concern

## EXEMPT INFORMATION (SECTION 75 OF THE ACT)

Data items and details claimed exempt from publication:

Chemical Name, CAS Number, Molecular Formula, Structural Formulae, Molecular Weight, Polymer Constituents, Residual Monomers, Use Details, Import Volume.

## VARIATION OF DATA REQUIREMENTS (SECTION 24 OF THE ACT)

No variation to the schedule of data requirements is claimed.

## PREVIOUS NOTIFICATION IN AUSTRALIA BY APPLICANT(S)

None

## NOTIFICATION IN OTHER COUNTRIES

None

**2. IDENTITY OF CHEMICAL**

## MARKETING NAME(S)

Polymer in AH2025P, DURASPUR and LIC (Light Industrial Coating)

## MOLECULAR WEIGHT (MW)

Number Average Molecular Weight (Mn) >1000 Da

## REACTIVE FUNCTIONAL GROUPS

The notified polymer contains only low concern functional groups.

**3. PLC CRITERIA JUSTIFICATION***Criterion*

Molecular Weight Requirements  
Functional Group Equivalent Weight (FGEW) Requirements  
Low Charge Density  
Approved Elements Only  
Stable Under Normal Conditions of Use  
Not Water Absorbing  
Not a Hazard Substance or Dangerous Good

*Criterion met*

Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes

The notified polymer meets the PLC criteria.

#### 4. PHYSICAL AND CHEMICAL PROPERTIES

Appearance at 20°C and 101.3 kPa:	Clear plastic
Melting Point/Glass Transition Temp	8.38°C
Density	1075 kg/m <sup>3</sup>
Water Solubility	Expected to be very low (in the low mg/L range) based on the structure.
Dissociation Constant	The notified polymer may contain limited acidic functionality (pKa ~ 4.8) but is not expected to dissociate in the environment because of the very low water solubility.
Reactivity	Stable under normal environmental conditions
Degradation Products	None under normal conditions of use

#### 5. INTRODUCTION AND USE INFORMATION

##### MAXIMUM INTRODUCTION VOLUME OF NOTIFIED CHEMICAL (100%) OVER NEXT 5 YEARS

<i>Year</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Tonnes	10-30	30-100	30-100	30-100	30-100

##### Use

The notified polymer will be used in industrial coating applications. This includes paint formulations used in the manufacture of new equipment or refurbishment of existing equipment, such as farm/construction equipment, trailers and transportation equipment, and miscellaneous applications over steel.

##### Mode of Introduction

The notified polymer will be imported as a part of fully finished industrial coatings at a concentration of <60% in drums or disposable totes. The imported formulations will be used as such and no further reformulation will take place in Australia.

#### 6. HUMAN HEALTH IMPLICATIONS

##### Hazard Characterisation

No toxicological data were submitted. The notified polymer meets the PLC criteria and can therefore be considered to be of low hazard.

##### Occupational Health and Safety Risk Assessment

Dermal, ocular and inhalation exposure may potentially occur during certain processes involving the notified polymer. However, exposure to significant amounts of the notified polymer is limited because workers handling these coatings have been trained in safe handling of coatings and will use automatic coating equipment, pumps and personal protective equipment such as safety glasses, gloves and protective clothing.

After application and once dried, the paint containing the notified polymer is cured into an inert matrix and the polymer is hence unavailable to exposure.

Overall, the OHS risk presented by the notified polymer is expected to be low, based on the minimal exposure to workers and the low intrinsic hazard of the polymer.

##### Public Health Risk Assessment

The notified polymer is intended only for use in industry and as such, public exposure to the notified polymer is not expected. Following application, the notified polymer will become trapped within a film and will not be bioavailable. Therefore, based on low hazard and very low exposure to the notified polymer, the risk to public from exposure to the notified polymer is considered low.

## 7. ENVIRONMENTAL IMPLICATIONS

### Hazard Characterisation

No ecotoxicological data were submitted. PLCs without significant ionic functionality are of low concern to the aquatic environment.

### Environmental Risk Assessment

The notified polymer will become encapsulated in an inert matrix when paint containing it is cured. Cured paint will be disposed of to landfill as container residues, waste paint and discarded articles, or destroyed during metals reclamation. Residues consigned to landfill are expected to remain immobile and slowly degrade. Therefore, the notified polymer is not expected to pose a risk to the environment when it is used as proposed.

## 8. CONCLUSIONS AND RECOMMENDATIONS

### Human health risk assessment

Under the conditions of the occupational settings described, the notified polymer is not considered to pose an unacceptable risk to the health of workers.

When used in the proposed manner, the notified polymer is not considered to pose an unacceptable risk to public health.

### Environmental risk assessment

Based on the reported use pattern, the notified polymer is not considered to pose a risk to the environment.

### Recommendations

#### CONTROL MEASURES

##### Occupational Health and Safety

- No specific engineering controls, work practices or personal protective equipment are required for the safe use of the notified polymer itself, however, these should be selected on the basis of all ingredients in the formulation.

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* [NOHSC:1008(2004)], workplace practices and control procedures consistent with provisions of State and Territory hazardous substances legislation must be in operation.

##### Disposal

- The notified polymer should be disposed of to landfill.

##### Emergency procedures

- Spills and/or accidental release of the notified polymer should be handled by containment, collection and subsequent safe disposal.

## Regulatory Obligations

### *Secondary Notification*

This risk assessment is based on the information available at the time of notification. The Director may call for the reassessment of the polymer under secondary notification provisions based on changes in certain circumstances. Under Section 64 of the *Industrial Chemicals (Notification and Assessment) Act (1989)* the notifier, as well as any other importer or manufacturer of the notified polymer, have post-assessment regulatory obligations to notify NICNAS when any of these circumstances change. These obligations apply even when the notified polymer is listed on the Australian Inventory of Chemical Substances (AICS).

Therefore, the Director of NICNAS 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 notified polymer is introduced in a chemical form that does not meet the PLC criteria.or
- (2) Under Section 64(2) of the Act; if
  - the function or use of the notified polymer has changed from industrial coating applications, or is likely to change significantly;
  - the amount of notified polymer being introduced has increased, or is likely to increase, significantly;
  - the notified polymer has begun to be manufactured in Australia;
  - additional information has become available to the person as to an adverse effect of the chemical on occupational health and safety, public health, or the environment.

The Director will then decide whether a reassessment (i.e. a secondary notification and assessment) is required.

### *Material Safety Data Sheet*

The MSDS of the product containing the notified polymer provided by the notifier was reviewed by NICNAS. The accuracy of the information on the MSDS remains the responsibility of the applicant.