File No: SAPLC/213

NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME (NICNAS)

POLYMER OF LOW CONCERN PUBLIC REPORT

Polymer in Resin G 543

This Self Assessment has been compiled by the applicant and adopted by NICNAS in accordance with the provisions of the Industrial Chemicals (Notification and Assessment) Act 1989 (the Act) and Regulations. This legislation is an Act of the Commonwealth of Australia. The National Industrial Chemicals Notification and Assessment Scheme (NICNAS), administered by the Department of Health and the Department of the Environment and Energy, has screened this assessment report. The data supporting this assessment will be subject to audit by NICNAS.

This 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

February 2019

Table of Contents

SUMMARY:

The following details will be published in the NICNAS *Chemical Gazette:*

ASSESSMENT REFERENCE	APPLICANT(S)	CHEMICAL OR TRADE NAME	HAZARDOUS SUBSTANCE	INTRODUCTION VOLUME	USE
SAPLC/213	The Valspar (Australia) Corporation Pty Limited	Polymer in Resin G 543	No	≤ 20 tonnes per annum	Component of coatings

CONCLUSIONS AND REGULATORY OBLIGATIONS

Human Health Risk Assessment

Based on the assumed low hazard and the assessed use pattern, the notified polymer is not considered to pose an unreasonable risk to the health of workers and the public.

Environmental Risk Assessment

Based on the assumed low hazard and the assessed use pattern, the notified polymer is not considered to pose an unreasonable risk to the environment.

Health and Safety Recommendations

- If aerosols are formed during the use of the notified polymer, engineering controls and respiratory protection should be used to prevent inhalation exposure.

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

- A copy of the SDS should be easily accessible to employees.

- If products and mixtures containing the notified polymer are classified as hazardous to health in accordance with the *Globally Harmonised System for the Classification and Labelling of Chemicals (GHS),* as adopted for industrial chemicals in Australia, workplace practices and control procedures consistent with provisions of State and Territory hazardous substances legislation should be in operation.

Environment

- Prevent material from entering surface waters, drains or sewers and soil

Disposal

- Where reuse or recycling are not appropriate the notified polymer should be disposed of in an environmentally sound manner in accordance with relevant Commonwealth, state, territory and local government legislation.

Emergency Procedures

- Spills and/or accidental release of the notified polymer should be handled by physical containment (using absorbent material), collection and subsequent safe disposal.

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 component of coatings, 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 notified polymer 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.

Safety Data Sheet
The SDS of the product containing the notified polymer was provided by the applicant. The accuracy of the information on the SDS remains the responsibility of the applicant.

ASSESSMENT DETAILS

1. APPLICANT AND NOTIFICATION DETAILS

Applicants
The Valspar (Australia) Corporation Pty Limited (ABN: 82 000 039 396)
2 – 44 Graingers Road
WEST FOOTSCRAY VIC 3012

Exempt Information (Section 75 of the Act)
Data items and details claimed exempt from publication: chemical name, other names, CAS number, molecular and structural formulae, molecular weight, polymer constituents, residual monomers/impurities and use details.

2. IDENTITY OF POLYMER

Marketing Name
Resin G 543 (product containing the notified polymer at ≤ 60% concentration)

Molecular Weight
Number Average Molecular Weight (Mn) is > 1,000 g/mol

3. PLC CRITERIA JUSTIFICATION

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

The notified polymer meets the PLC criteria.

4. PHYSICAL AND CHEMICAL PROPERTIES

Appearance at 20 °C and 101.3 kPa	Liquid
Melting Point/Glass Transition Temp	Not determined. Notified polymer will not be isolated from dispersion.
Density	950 kg/m^3
Water Solubility	Not water soluble
Dissociation Constant	Not determined. However, the notified chemical contains anionic functionality and is expected to be ionised in the environmental pH range (4 – 9).
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

Year	*1*	*2*	*3*	*4*	*5*
Tonnes	10	15	20	20	20

Use
The notified polymer will not be manufactured in Australia. The notified polymer will be imported into Australia as a component of ready to use finished coating products at concentrations of ≤ 35% in 200 L steel drums for application to metal substrates. The notified polymer will be present in the finished coating products as the product Resin G 543 (containing the notified polymer at concentrations of ≤ 60%). No reformulation or repacking of the notified polymer will occur in Australia and ready to use coatings will be transported by road to end use customers.

End use coatings containing the notified polymer will be applied to metal substrates using automated roll coat application equipment fitted with a fume extraction canopy at industrial application sites. The coated article will then be thermally cured using an industrial oven, which is insulated and sealed to prevent volatile material entering the work areas. The solvents and other volatile materials emitted through the curing process will be captured by the fume extraction canopy and then thermally decomposed before being discharged into the atmosphere. Air quality will be monitored at the industrial application sites on a regular basis, as required by their Environment Protection Agency (EPA) license.

Workers handling end use coatings containing the notified polymer (at concentrations of ≤ 35%) will use appropriate personal protection equipment (PPE) including impervious gloves, eye protection and protective clothing. Operators are also monitored for chemical exposure, as required by the relevant government authorities.

The notified polymer will not be sold directly to the public. However, the public may come in contact with the notified polymer in the form of coated articles. Once applied to metal articles, the coating containing the notified polymer will be cured and the notified polymer is expected to be trapped within the inert coating matrix. It is not expected to be available for further exposure after curing.

6. HUMAN HEALTH RISK ASSESSMENT

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

The risk of the notified polymer to occupational and public health is not considered to be unreasonable given the assumed low hazard and the assessed use pattern.

7. ENVIRONMENTAL RISK ASSESSMENT

7.1. Exposure Assessment

Environmental Release
Release to the environment during shipping, transport and warehousing will only occur through accidental spills or leaks of the drums or steel packaged containers.

During formulation and packaging, spills are expected to be minimal. When spills occur, they will be contained by bunding, collected with absorbent material and sent to a licensed off site waste disposal centre.

Environmental Fate
Following the application, the notified polymer is expected to be cured and subsequently share the fate of the materials to which it has been applied. The notified polymer is expected to be primarily disposed of in landfill, where it will eventually decompose via both biotic and abiotic processes to form water and oxides of carbon or it may also enter metal recycling, where the notified polymer is expected to be completely combusted.

7.2. Environmental Hazard Characterisation

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

7.3. Environmental Risk Assessment

Based upon the assumed low hazard and its use pattern, the notified polymer is not considered to pose an unreasonable risk to the environment.