

**Application for Assessment Certificate  
(Polymer of Low Concern)  
Self-Assessment**



**Australian Government**  
**Department of Health and Ageing**  
**NICNAS**

Use this form to apply for a self-assessed Assessment Certificate for a Polymer of Low Concern pursuant to paragraph 23A (1)(a) of the *Industrial Chemicals (Notification and Assessment) Act 1989*.  
For fees see 'Type of Notification' below. Please make cheque payable to NICNAS.  
If Exempt Information is proposed, Form 3 should accompany this application.

**FORM 1-PLC SELF-ASSESSMENT**

**This form must be accompanied by Attachment 1 – PLC Self Assessment Report**

Please complete forms electronically and ensure that relevant fees are enclosed. Please provide to NICNAS by electronic means.

Return to: Director  
NICNAS  
GPO Box 58, Sydney NSW 2001  
Telephone (02) 8577 8800 Fax (02) 8577 8888

**Notifier**

Business Name	Nass Industrial Chemicals	ABN	00 123 456 789
Business Address	334-336 ILLAWARRA ROAD MARRICKVILLE NSW		
		Postcode	2204
Postal Address (if same as Business Address, state AS ABOVE)	GPO Box 58 SYDNEY		
		Postcode	2001
Phone (02)8577 8800	Fax (02) 8577 8888	Email info@nicnas.gov.au	

**Technical Contact**

Name	Nicky Nass	Position	Regulatory Affairs Officer	Company	Nass Industrial Chemicals
Business Address (if different to above)					Postcode
Postal Address (if same as Business Address, state AS ABOVE)	As above				
		Postcode			
Phone (02) 8577 8899	Fax (02) 8577 8888	Email nick.nass@nicnas.gov.au			

**Chemical** The full chemical name of the polymer must be included in Attachment 1 – PLC Self Assessment Report.

Marketing or Other Name(s)	Polymer in Acrylosplash 31
CAS Number (if known)	25034-86-0

**Type of Notification**

Polymer of Low Concern (Self-assessment)	Fee	\$2,348
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**POPS Criteria** Note that self-assessment will lapse for polymers with these characteristics.

Is the notified polymer or the breakdown products likely to be persistent and bioaccumulative? **NO**

**Declaration**

I declare that to the best of my knowledge all the information in this application is true, correct and complete. In relation to the notification statement and/or other documentation accompanying this application, I declare that I am entitled to use and give the Director all data in the statement.

I declare that I hold the supporting documentation used to fill in the application and will produce it on request from NICNAS for a period of five years from the date of issue of a certificate for this polymer.

By submitting the attached PLC Self Assessment Report, I consent to its publication under section 38(1) of the Industrial Chemicals (Notification and Assessment) Act 1989 (the Act), with modifications as required under section 33B(2) of the Act, and adopted by NICNAS as the complete assessment report in accordance with section 36(2) of the Act.

Name	Nicky Nass	Position	Regulatory affairs officer
Signature		Date	1/7/05

**Note:** It is an offence under the Act to supply a statement which is false or misleading.

<b>Is your company a small business with less than 20 employees?</b>	<b>YES</b>	<b>NO</b>
<b>If yes, please provide an estimate of the time taken to complete this form:</b>		
	hrs	mins

## **Brief instructions for the completion of a Self-Assessment**

### **NOTIFICATION PROCEDURE**

The self-assessment application must consist only of a hard copy and an electronic copy of this form with the attached self-assessment report (Attachment 1), the relevant fee, and a copy of the material safety data sheet for the notified polymer. If supporting data (e.g. physiochemical and toxicological studies) are submitted then this application would not be considered a self-assessed application. In addition, the applicant(s) may claim certain information to be exempt from publication, in which case Form 3 - Exempt Information and the relevant fee should also be submitted with the application.

The attached self-assessment report consists of two Parts:

- Part 1- should contain information for which an exemption is claimed. Do not complete Part 1 if no information is being claimed as exempt.
- Part 2- should contain information suitable for publication.

Note that PLC self-assessment applications may not be Joint Notifications, or make use of a Variation of Schedule Requirements or Third Party Information Lodgement. If these options are required, then a non self-assessment PLC notification must be applied for. A rebate of up to 15% of the assessment fee may be paid to the notifier if a completed PLC self-assessment template is attached to a non-self-assessed PLC application form.

### **COMPLIANCE**

The following obligations apply to certificate holders under the self-assessment system:

- Supporting documentation must be retained for at least five years from the date of the certificate; and
- The introduction volume (import and/or manufacture) of the notified polymer and any adverse health or environmental effects must be reported to NICNAS before the end of the NICNAS registration year (i.e. before 28 Sept the following year); and
- Inform the director within 28 days of becoming aware of changes in circumstances under Section 64.

NICNAS may audit/inspect the certificate holders to monitor compliance with the obligations associated with the self-assessment category.

### **GUIDANCE**

To assist in filling out the attached self-assessment report, there is guidance material within this template in the form of highlighted headings (hover the mouse pointer over the highlighted text to see the comments). If you cannot see yellow highlighting in the previous sentence, please ensure that Tools → Options → Screen Tips is selected.

There is also additional guidance and an example notification available from NICNAS, which can be accessed on: [http://www.nicnas.gov.au/Forms/New\\_Chemicals/Self\\_Assessment.asp](http://www.nicnas.gov.au/Forms/New_Chemicals/Self_Assessment.asp)

This includes the [Guidance Document for PLC Self-Assessment](#), which is the essential reference when completing this self-assessment template. Other useful references are previous PLC Full Public Reports, which can be downloaded from <http://www.nicnas.gov.au/Publications/CAR/New.asp>

Please contact NICNAS on phone 1800 638 528 or email [info@nicnas.gov.au](mailto:info@nicnas.gov.au) if you have any questions.

### **SCREENING**

On receipt of a self-assessment application, NICNAS will screen the notification for three issues:

1. correct application of the PLC criteria, including confirmation of the identity of the polymer; and
2. that the risk assessment section addresses all issues and concerns in a scientific manner; and
3. completeness of the self-assessment.

During screening if it is determined that the PLC criteria have been incorrectly applied to the polymer, or if there is a possibility of unreasonable risk, the application will be refused and the notifier advised to re-notify in the correct category.

Note that a polymer will not be accepted for self-assessment if it can be predicted to be persistent and/or bioaccumulative or to have breakdown products that can be predicted to be persistent and/or bioaccumulative, under the Stockholm Convention on Persistent Organic Pollutants (further guidance on this can be found in the [January 2004 gazette](#)). Currently fluorinated and brominated chemicals are of particular concern with respect to persistence and bioaccumulation.

The self-assessment application is required to be a complete record of the risk assessment for the notified polymer. If NICNAS is not satisfied with the assessment, the notifier may be requested to revise the document and re-submit it. The assessment clock will not be started until NICNAS has accepted that the report is complete. Upon receiving a complete application, NICNAS will prepare an Assessment Report, Full Public Report, Summary Report and certificate within 28 days.

## **Attachment 1 - PLC Self Assessment Report**

File No: (NICNAS use only)

Day Month Year

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

#### **ASSESSMENT REPORT (Exempt Information and Full Public Report)**

#### **Polymer in Acryloplash 31**

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* (Cwlth) (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 Ageing and the Department of the Environment and Heritage has screened this assessment report. The data supporting this assessment will be subject to audit by NICNAS.

Under subsection 38(5) of the Act the Director NICNAS publishes this assessment report by giving a copy of it to the:

- Secretary of the Department of Environment and Heritage; and
- Secretary of the Department of Health and Ageing.

This assessment report will not be available for inspection by the public.

**Director  
NICNAS**

## Section 1 –PLC Self Assessment Exempt Information

### DISTRIBUTION

Nicky Nass – Nass Industrial Chemicals  
 NICNAS  
 Department of Environment and Heritage

### Polymer in Acrylosplash 31

#### 1. APPLICANT DETAILS

APPLICANT  
 Nass Industrial Chemicals (ABN: 00 123 456 789)  
 334-336 Illawarra Road  
 Marrickville NSW 2204

#### 2. IDENTITY OF CHEMICAL

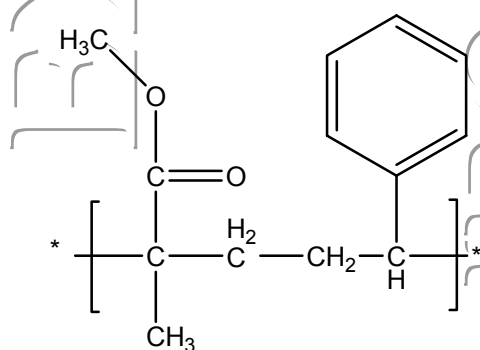
CHEMICAL NAME  
 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene

OTHER NAME(S)  
 Poly(styrene-methyl methacrylate)  
 2-Methyl-2-propenoic acid methyl ester polymer with ethenylbenzene

CAS NUMBER  
 25034-86-0

MOLECULAR FORMULA  
 $(C_8H_8 \cdot C_5H_8O_2)_x$

STRUCTURAL FORMULA



MOLECULAR WEIGHT (MW)	
Number Average Molecular Weight (NAMW)	8265
Weight Average Molecular Weight (WAMW)	25479
Polydispersity Index (WAMW/NAMW)	3.08
% of Low MW Species < 1000	4.6%
% of Low MW Species < 500	1.9%

## POLYMER CONSTITUENTS

<i>Chemical Name</i>	<i>CAS No.</i>	<i>Weight % starting</i>	<i>Weight % residual</i>
Benzene, ethenyl-	100-42-5	44	<0.18
2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	56	<0.05

## 4. 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>
<i>Tonnes</i>	20	35	40	40	40

## USE AND MODE OF INTRODUCTION AND DISPOSAL

Acryloplash 31 (37% notified polymer in xylene) will be used as a stabiliser in automotive refinish paints. The final concentration of the polymer in the paint will be 7.5%.

File No: (NICNAS use only)

Day Month Year

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

**FULL PUBLIC REPORT**

**Polymer in Acryloplash 31**

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* (Cwlth) (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 Ageing and the Department of the Environment and Heritage has screened this assessment report. The data supporting this assessment will be subject to audit by NICNAS.

For the purposes of subsection 78(1) of the Act, this Full Public Report may be inspected at:

Library  
Australian Safety and Compensation Council  
25 Constitution Avenue  
CANBERRA ACT 2600  
AUSTRALIA

To arrange an appointment contact the Librarian on TEL + 61 2 6279 1162 or email [ascc.library@dewr.gov.au](mailto:ascc.library@dewr.gov.au)

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:

Street Address:	334 - 336 Illawarra Road MARRICKVILLE NSW 2204, AUSTRALIA.
Postal Address:	GPO Box 58, SYDNEY NSW 2001, AUSTRALIA.
TEL:	+ 61 2 8577 8800
FAX:	+ 61 2 8577 8888
Website:	<a href="http://www.nicnas.gov.au">www.nicnas.gov.au</a>

**Director  
NICNAS**

## Section 2 –PLC Self Assessment

### Polymer in Acryloplash 31

#### 1. APPLICANT AND NOTIFICATION DETAILS

APPLICANT

Nass Industrial Chemicals (ABN: 00 123 456 789)  
334-336 Illawarra Road  
Marrickville NSW 2204

NOTIFICATION CATEGORY

Self Assessment: Polymer of Low Concern

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, Use Details, Manufacture/Import Volume.

PREVIOUS NOTIFICATION IN AUSTRALIA BY APPLICANT(S)

Nass Industrial Chemicals previously held a LVC permit (LVC/000), which expired 31/12/88.

NOTIFICATION IN OTHER COUNTRIES

None.

#### 2. IDENTITY OF CHEMICAL

MARKETING NAME(S)

Acryloplash 31 (30-50 % notified polymer in xylene)

MOLECULAR WEIGHT (MW)

Number Average Molecular Weight (NAMW) >1000

REACTIVE FUNCTIONAL GROUPS

*Insert more rows for FGs if required*

The notified polymer contains only low concern functional groups.

#### 3. PLC CRITERIA JUSTIFICATION

	<i>Criterion</i>	<i>Criterion met</i>
	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	N/A
	Not a Hazard Substance or Dangerous Good	Yes
<i>OR</i>	<i>Criterion</i>	<i>Criterion met</i>
	Low MW Polyester Manufactured from Allowable Reactants	No

The notified polymer meets the PLC criteria.

#### 4. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance at 20°C and 101.3 kPa</b>	The product is a clear liquid.
<b>Melting Point/Glass Transition Temp</b>	2°C
<b>Density</b>	1140 kg/m <sup>3</sup> at 25°C
<b>Water Solubility</b>	< 1 × 10 <sup>-6</sup> g/L at 20°C
<b>Reactivity</b>	Stable under normal environmental conditions
<b>Degradation Products</b>	Small amounts of monomers produced on heating to 300°C
<b>Comments</b>	None.

#### 5. INTRODUCTION AND USE INFORMATION

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

Year	1	2	3	4	5
Tonnes	10-30	30-100	30-100	30-100	30-100

##### USE AND MODE OF INTRODUCTION AND DISPOSAL

###### Mode of Introduction

The notified polymer will be imported as a 30-50% solution in xylene, contained in closed head 150 L steel drums. It is imported via Sydney harbour, and stored at the notifier's warehouse before being transported by truck to customers for reformulation.

###### Reformulation/manufacture processes

Reformulation involves manual weighing out the product, followed by automated mixing and filling of 1-3 L containers. The reformulated paint contains <10% notified polymer.

###### Use

The paint will be used by spray-painting and smash repair companies only, and will not be available to the general public.

#### 6. HUMAN HEALTH IMPLICATIONS

##### 6.1. Exposure Assessment

###### OCCUPATIONAL EXPOSURE *Please use point form if possible.*

Transport and warehousing workers may come into dermal and ocular contact with the notified polymer through accidental leaks and spillages of the drums and containers.

During formulation, workers will manually weigh and transfer the polymer solution to the mixing vats. Workers will wear impermeable gloves, eye protection and coats. Exposure from the notified polymer to these workers can occur by either dermal or ocular routes, however significant exposure will be limited due to the workplace practices and personal protective equipment used.

Throughout end use, spray painters will come into contact with the notified polymer through dermal, inhalation and ocular routes. The risk of exposure, however, will be minimal as the spray paint is applied in a ventilated spray booth by workers using protective equipment.

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.

###### PUBLIC EXPOSURE

The notified polymer will not be sold to the public except in the form of finished articles. There is



potential for extensive public exposure to articles comprised wholly or partly of the notified polymer. However, the notified polymer is cured into an inert matrix and is hence unavailable to exposure.

## 6.2. Toxicological Hazard Characterisation

The notified polymer meets the PLC criteria and can therefore be considered to be of low hazard. This is supported by toxicological endpoints observed in testing conducted on the notified polymer or analogue chemical.

<i>Endpoint</i>	<i>Result</i>	<i>Classified?</i>	<i>Effects Observed?</i>	<i>Test Guideline (Choose one)</i>
1. Rat, acute oral	LD50 >2000 mg/kg bw	no	yes	OECD TG 401
4. Rabbit, skin irritation	non-irritating	no	no	OECD TG 404
5. Rabbit, eye irritation	non-irritating	no	no	OECD TG 405

All results were indicative of low hazard.

Acute oral toxicity: Soft faeces occurred in one rat after day one but ceased by day three.

## 6.3. Human Health Risk Assessment

### OCCUPATIONAL HEALTH AND SAFETY

The OHS risk presented by the notified polymer is expected to be low, based on low hazard and low exposure as well as the engineering controls and personal protective equipment used by workers.

### PUBLIC HEALTH

The low hazard of the notified polymer translates to a low risk to the public. In addition, the notified polymer will not be sold to the public, only being used by professional spray painters. Once the polymer is applied and cured it will be contained in an inert matrix, and hence will not be bioavailable. Risk to the public is considered low.

## 7. ENVIRONMENTAL IMPLICATIONS

### 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. Empty drums from import will be sent to drum reconditioners. Total waste from all sources is expected to be approximately 2 % of the import volume.

Under normal use procedures, losses of the notified polymer through overspray, mixing of chemicals and cleaning of plant equipment as well as losses from residues in containers have been estimated to be a maximum of 50 %, which equates to a maximum of 50 tonnes per annum. Wastes from application will be hardened and disposed of to landfill.

The remainder of the notified polymer will be bound in the paint matrix and not be available for direct release to the environment. Disposal of the automobile may be through landfill or recycling, and the fate of the paint will be related to that of the automobile.

#### ENVIRONMENTAL FATE

The notified polymer is expected to be hydrolytically stable and to not be readily biodegradable. Due to its hydrophobic nature, it is expected that the notified polymer in landfill will associate with sediments and organic phases of soil and sediments, and slowly degrade to simple carbon compounds. During automobile recycling, the polymer will be destroyed.

**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**

No aquatic exposure is anticipated during manufacture and end use of the notified polymer. It is envisaged that 2% waste would be generated from the manufacturing process. These wastes would be collected by licenced waste contractors and be incinerated. It is expected that practically all of the waste generated from end users (50 % as overspray) will be disposed of in approved landfills as inert solid waste. In landfill, the solid wastes will not be mobile and will degrade slowly and not pose a significant risk to the environment.

**8. CONCLUSIONS****8.1. Level of Concern for Occupational Health and Safety**

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

**8.2. Level of Concern for Public Health**

There is Negligible Concern to public health when used in the proposed manner.

**8.3. Level of Concern for the Environment**

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

**9. MATERIAL SAFETY DATA SHEET****9.1. Material Safety Data Sheet**

The notifier has provided MSDS as part of the notification statement. The accuracy of the information on the MSDS remains the responsibility of the applicant.

**10. RECOMMENDATIONS**

## CONTROL MEASURES

## Occupational Health and Safety

- No specific engineering controls or work practices 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 NOHSC *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 the notifier to minimise environmental exposure during formulation of the notified polymer:
  - Bunding
- The following control measures should be implemented by end users (spray painters) to minimise environmental exposure during use of the notified polymer:
  - Exhaust ventilation with filter

#### Disposal

- The notified polymer should be disposed of to landfill or incinerated.
- Empty containers should be sent to local recycling or waste disposal facilities.

#### Emergency procedures

- Spills/release of the notified polymer should be handled by absorbing with sand and put into suitable container for disposal. Contaminated containers can be re-used after cleaning.

#### **10.1. Secondary Notification**

*This section for NICNAS use only.*