

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

**POLYMER OF LOW CONCERN PUBLIC REPORT**

**RILSAN® CLEAR G 850 RNEW**

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 the Department of the Environment, has screened this assessment report. The data supporting this assessment will be subject to audit by NICNAS.

This 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:

Street Address:	Level 7, 260 Elizabeth Street, SURRY HILLS NSW 2010, 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**

September 2015

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**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/178	Arkema Pty Ltd	RILSAN® CLEAR G 850 RNEW	No	≤ 50 tonnes per annum	Component of plastic articles

**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
- 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 (M)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 of 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.

**Disposal**

- Where reuse or recycling are not available or appropriate, dispose of the notified polymer 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, 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 , 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.

**(Material) Safety Data Sheet**

The (M)SDS of the notified polymer was provided by the applicant. The accuracy of the information on the (M)SDS remains the responsibility of the applicant.

## ASSESSMENT DETAILS

### 1. APPLICANT AND NOTIFICATION DETAILS

#### Applicants

Arkema Pty Ltd (ABN: 44 000 330 772)  
313 Canterbury Rd  
CANTERBURY VIC 3126

#### Exempt Information (Section 75 of the Act)

Data items and details claimed exempt from publication: chemical name, CAS number, molecular and structural formulae, molecular weight and polymer constituents.

### 2. IDENTITY OF POLYMER

#### Marketing Name(s)

RILSAN® CLEAR G 850 RNEW

#### Molecular Weight

Number Average Molecular Weight (Mn) is > 1,000 Da.

### 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	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	Colourless granule
Melting Point/Glass Transition Temp	150 °C
Density	1,010 kg/m <sup>3</sup> at 20 °C
Water Solubility	Insoluble
Dissociation Constant	Not determined. The notified polymer does not contain any functional groups that are expected to dissociate in water.
Particle Size	~5 mm
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	20	30	50	50

#### Use

The notified polymer will be imported into Australia as dried pellets in sealed 25kg bags and

will be used in injection moulding applications to produce plastic articles such as high end eyewear frames.

## **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**

The notified polymer will be imported into Australia and injection moulded in Australia to form plastic articles such as eyewear frames. Release of the notified polymer to the environment during transport and warehousing is expected to occur only through accidental spills or leaks of containers. When spills occur, they are expected to be collected and disposed of in accordance with local regulations, which is most likely landfill.

The notified polymer which is in pellet form will be heated in an industrial setting to form the final products. During this process, cleaning of the die will lead to a small amount of waste but this is expected to be re-pelletised and re-used. Any spills or losses together with residues in industrial equipment washings and empty containers are expected to be disposed of in accordance with local regulations.

#### **ENVIRONMENTAL FATE**

The notified polymer injection moulded into plastic articles is expected to share the fate of the articles at the end of their useful lives, which will be disposed of to landfill. In landfill, the notified polymer will be physically bound within the inert matrix of the plastic articles, which will be neither bioavailable nor mobile. The notified polymer is not expected to be readily biodegradable and due to its high molecular weight and low water solubility, it is not expected to bioaccumulate. In landfill, the notified polymer is expected to eventually degrade via biotic and abiotic processes to form water and oxides of carbon and nitrogen.

### **7.2. Environmental Hazard Characterisation**

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

### **7.3. Environmental Risk Assessment**

It is expected that most of the notified polymer will be sent to landfill for disposal at the end of its useful life. No significant aquatic release is expected during end-use of the notified polymer. The notified polymer will be physically bound within the inert matrix of the plastic articles, and is not expected to be either bioavailable or bioaccumulative. The notified polymer is likely to eventually undergo in-situ decomposition by abiotic and biotic processes to form water and oxides of carbon and nitrogen. Based on its assumed low hazard and assessed use patterns, the notified polymer is not considered to pose an unreasonable risk to the environment.