ESTRON CHEMICAL

THE EDGE OF INNOVATION

GHS COMPLIANT SAFETY DATA SHEET

TO COMPLY WITH REGULATION (EC) No. 2020/878 (REACH)
& THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

Version Date: June 4, 2025

SECTION 1: *Identification of the substance/mixture and of the company/undertaking*

1.1 Product identifier

PRODUCT NAME	Resiflow® PL-220
MFR.'S CODE ID/SYNONYMS	Resiflow® PL-220
CAS NUMBER	Proprietary

1.2 Relevant identified uses of the substance or mixture and uses advised against

PRODUCT USE	Flow control additive for paints and coatings
RESTRICTIONS ON USE	For industrial use only

1.3 Details of the supplier of the safety data sheet

MANUFACTURER/SUPPLIER	Estron Chemical, Inc.
ADDRESS	807 North Main Street, Calvert City, KY 42029 USA
GENERAL INFORMATION	(270) 395-4195
E-MAIL ADDRESS	msds@estron.com

1.4 Emergency telephone number

EMERGENCY TELEPHONE	CHEMTREC (800) 424-9300

SECTION 2: *Hazards identification*

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

The product is not classified as dangerous according to Directive 1272/2008/EC and its amendments.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms	None assigned
Signal word	None assigned
Hazard statements	None assigned
Precautionary statements	Not applicable

2.3 Other hazards

Other hazards which do not result in classification

The buildup of fine dust can lead to a risk of dust explosions. High dust concentration may cause mechanical irritation to the eyes.

SECTION 3: *Composition/information on ingredients*

3.1 Substances

Substance	Acylic polymer absorbed onto silica powder
Chemical characterisation	Acrylic polymer and silica powder

3.2 Mixtures

Product/ingredient name	Identifiers	%	**Classification** 67/548/EEC	Type
Acrylic polymer	-	65 – 70	Not classified	[A]
Silica, Amorphous, Precipitated	112926-00-8	30 – 35	Not classified	[A]

Product/ingredient name	Identifiers	%	**Classification** 1272/2008/EC (CLP)	Type
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There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type
[A] Constituent
[B] Impurity
[C] Stabilising additive

SECTION 4: *First aid measures*

4.1 Description of first aid measures

General information: In all cases of doubt, or when symptoms persist, seek medical attention. If unconscious, place in recovery position and get medical attention immediately. Never give anything by mouth to an unconscious person. In any case show the physician the Safety Data Sheet.

Eye contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Begin with medical treatment.

Inhalation: Remove the casualty into fresh air and keep at rest.

Skin contact: Take off immediately all contaminated clothing. Wash contaminated clothing before reusing. Do not allow the product to dry on the skin. Wash skin thoroughly with soap and water or use recognised skin cleanser.

Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information: No known significant effects or critical hazards.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: No special recommendations.

SECTION 5: *Firefighting measures*

5.1 Extinguishing media

Suitable: Extinguishing measures to suit surroundings. In case of fire, use water spray jet, dry extinguishing powder, foam or carbon dioxide.

Not suitable: Water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Fire will produce dense black smoke containing hazardous combustion products. In a fire, the following may be released: Carbon Dioxide and Carbon Monoxide.

5.3 Advice for firefighters

Special protective equipment for fire-fighters: During fire-fighting wear self-contained breathing apparatus and protective clothing.

Additional information: Use water spray to keep fire-exposed containers cool. Use extinguishing media suitable for surrounding materials. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Caustic soda may induce vigorous polymerization of the resinous material at temperatures around 200 °C.

SECTION 6: *Accidental release measures*

6.1 Personal precautions, protective equipment and emergency procedures

Non-emergency personnel Provide adequate ventilation. Use personal protective equipment. Isolate the area.

For emergency responders Use personal protective equipment appropriate to the situation.

6.2 Environmental precautions

General information Obey relevant local, state, provincial and federal laws and regulations. Stop the spill at the source. Do not allow the product to enter public drainage systems or open water courses.

6.3 Methods and materials for containment and cleaning up

General information Avoid creating excessive dust while collecting. Sweep or scoop into a suitable container for disposal.

6.4 Reference to other sections

General information See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: *Handling and storage*

7.1 Precautions for safe handling

Protective measures Do not allow dust to concentrate in the air from handling. If necessary, use local ventilation. Handle in accordance with good industrial hygiene and safety practice. See Section 8.2 for Hygiene measures to take.

7.2 Conditions for safe storage, including any incompatibilities

General information Store in cool, dry, well-ventilated areas. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. The product shelf life is three years from date of shipment in an unopened container stored at 20 °C.

Packaging materials
Recommended Coated steel. Polyethylene. Glass. Stainless steel.

7.3 Specific end use(s)

Recommendations Not available.

SECTION 8: *Exposure controls/personal protection*

8.1 Control parameters

Occupational exposure limits

Component	CAS-No.	Value	Control Parameters	Basis
Acrylic Polymer	-	65 – 70	*None established*	
Silica, Amorphous, Precipitated	112926-00-8	30 – 35	5 mg/m^3 respirable dust	OSHA (USA)

DNELs/DMELs No DNELs/DMELs available.

PNECs No PNECs available

8.2 Exposure controls

Hygiene measures Handle in accordance with good industrial hygiene and safety practices. When using, do not eat, drink or smoke. Wash face and hands before breaks and at the end of work. Wash contaminated clothing before re-use.
Use protective skin cream for preventive skin protection. Clean skin thoroughly after work; apply skin cream.

Eye/face protection Safety goggles with lateral shielding (DIN EN 166)

Skin protection Usual working clothes for the chemical industry, suitable for the job.

Hand protection Wear protective gloves in cases of prolonged contact (DIN EN 374). Protective gloves should in any case be tested for workplace-specific suitability (e.g.

	mechanical resistance, product compatibility, antistatic properties). Comply with instructions and information provided by the glove manufacturer concerning use, care and replacement of the gloves. Replace protective gloves immediately upon damage or at the first signs of wear. As far as possible, plan work procedures so that wearing gloves will not be necessary.
Recommended gloves should be made of	Nitrile
Material thickness	>0,4 mm
Permeation time	>480 min
Respiratory protection	If the occupational exposure limits are exceeded, suitable respiratory protective equipment must be worn. If no occupational exposure limits are defined, sufficiently effective respiratory protective measures must be taken in the presence of aerosols and vapours.
Thermal hazards	None known
Environmental exposure controls	Not a known environmental hazard. Apply reasonable and responsible controls as needed to prevent large-scale exposure to the environment.

SECTION 9: *Physical and chemical properties*

9.1 Information on basic physical and chemical properties

Physical state	Solid (Powder)
Colour	White
Odour	Characteristic.
Melting point/freezing point	No test data available.
Boiling point	Over 200 °C
Flammability	Combustible Dust
Lower and upper explosion limit	LOWER Not applicable UPPER Not applicable
Flash point	Over 100 °C
Auto-ignition temperature	No test data available
Decomposition temperature	> 250 °C
pH	No test data available
Kinematic viscosity	Not applicable
Solubility	Not readily soluble in water
Partition coefficient n-octanol / water (log value)	No test data available
Vapour pressure	Not applicable
Density	1,26 g/cm³ [20 °C]
Relative vapour density	No test data available
Particle characteristics	Liquid adsorbed onto a powder, may form agglomerates.

9.2 Other information

This product is regulated as a combustible dust in the United States, Canada, and Mexico.

SECTION 10: *Stability and reactivity*

10.1 Reactivity

General information: This product does not pose a significant reactivity hazard when stored appropriately (see Section 7).

10.2 Chemical stability
General information — This product is stable when stored appropriately (see Section 7).

10.3 Possibility of hazardous reactions
General information — No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid
General information — All ignition sources, heat and open flames.

10.5 Incompatible materials
General information — Strong oxidizing or reducing agents

10.6 Hazardous decomposition products
General information — Thermal disintegration depends to a great extent on the external conditions. A complex mixture of solids, liquids and gases forms in the air, including among other substances carbon dioxide, carbon monoxide, when this material is burnt or is thermally or oxidatively degraded.

SECTION 11: *Toxicological information*

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
General information — The toxicological data mentioned are derived from a similar product.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Acrylic polymer	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >5000 mg/kg	- -
Silica, Amorphous, Precipitated	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >5000 mg/kg	- -

Remarks — Not considered to be toxic to humans.

Irritation/Corrosion

Skin — Frequent persistent contact with the skin can cause mild, but reversible, irritation.

Eyes — High dust concentrations can lead to mechanical irritation of the eyes due to foreign body effects.

Sensitiser

Skin — No evidence of sensitizing effects.

Respiratory — No evidence of sensitizing effects.

Mutagenicity

Remarks — No evidence of mutagenic effects.

Carcinogenicity

Remarks — No evidence of carcinogenic effects.

Reproductive toxicity

Remarks — No evidence that the substance is toxic for reproduction.

Teratogenicity

Remarks — No evidence that the substance may cause birth defects.

Specific target organ toxicity (single exposure)

Remarks — Not available.

Specific target organ toxicity (repeated exposure)

Remarks — Not available.

Aspiration hazard

Remarks — Not available.

Potential chronic health effects

Remarks No evidence of chronic toxicity.

11.2 Information on other hazards

Remarks None known.

SECTION 12: *Ecological information*

12.1 Toxicity

General information Not known to be harmful to aquatic life. The information on this was derived from products of similar structure or composition.

Acute toxicity

Product/ingredient name	Result	Species	Exposure
Acrylic polymer	LC50 >10000 mg/l EC50 >10000 mg/l	Fish - Lepomis macrochirus Daphnia – Daphnia magna	96 hours 24 hours
Silica, Amorphous, Precipitated	LC50 >10000 mg/l EC50 >10000 mg/l	Fish - Lepomis macrochirus Daphnia – Daphnia magna	96 hours 24 hours

Remarks No ecotoxic effects are known for this product.

12.2 Persistence and degradability

Remarks Not available.

12.3 Bioaccumulative potential

Remarks Not available

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) Not available.

12.5 Results of PBT and vPvB assessment

PBT Not applicable.

vPvB Not applicable.

12.6 Endocrine disrupting properties No known significant effects or critical hazards.

12.7 Other adverse effects No known significant effects or critical hazards.

SECTION 13: *Disposal considerations*

13.1 Waste treatment methods

Product

Methods of disposal The generation of waste should be avoided or minimised wherever possible. Dispose of in accordance with local, state and federal regulations. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers may retain some product residues. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Incineration in suitable incineration plant. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Packaging

Methods of disposal The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: *Transport information*

General information The product does not constitute a hazardous good in national/international road, rail, sea and air transport.

14.1 UN number or ID number Not applicable.

14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

SECTION 15: *Regulatory information*

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

Substances mentioned on the so-called "candidate list of substances of very high concern (SVHC) for authorisation" published by the EChA are not intentionally added to this product. Therefore it is not expected, that these substances are present in amounts of ≥ 0,1% in this product.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable

REACH Registration

All components of this product are REACH registered per ECHA requirements.

15.2 Chemical Safety Assessment

The product meets the polymer criteria as specified in REACH. According to article 2(9) it is therefore exempt from title II and VI of the REACH regulation.

SECTION 16: *Other information*

Abbreviations and acronyms	ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
Full text of abbreviated H statements	Not applicable.
Full text of classifications [CLP/GHS]	Not applicable.
Full text of abbreviated R phrases	Not applicable.
Full text of classifications [DSD/DPD]	Not applicable.

DISCLAIMER This product is intended for industrial use only and should be used in accordance with the manufacturer's recommendations. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the (EC) No. 1907/2006 (REACH), Annex II.

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REASON FOR REVISION Revised to meet the criteria of Regulation 2020/878.

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