

**SAFETY DATA SHEET**

According to Regulation (EC) No 1907/2006 and its amendments

SECTION 1: Identification of the substance and of the company/undertaking**1.1 Product identifier**

Product name: ClearFlo L1- R (D)

Type of product: Mixture

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

Identified uses: Processing aid for industrial applications.

Uses advised against: None.

1.3 Details of the supplier of the safety data sheet

Company: GPC Clear Solutions Limited
Unit 57, Riverside Estate,
Sir Thomas Longley Road,
Medway City Estate, Rochester,
Kent ME2 4DP

Telephone: 01634 326920
Telefax: 01634 570469
Email: sales@gpcclearsolutions.co.uk

1.4 Emergency telephone number

Emergency number: 01634 326920 (Office Hours Only)

National Poison Information Service: NHS Direct: 111 ; Scotland: NHS 24 – 08454 242424

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008:

Aquatic Chronic 3;H412

2.2 Label elements

Labelling according to Regulation (EC) 1272/2008

Hazard pictogram(s): None

Hazard statement(s):	H412 – Harmful to aquatic life with long lasting effects
Precautionary statement(s):	P273 – Avoid release to the environment
Additional elements:	None

2.3 Other hazards

Spills produce extremely slippery surfaces.

PBT and vPvB assessment:
Does not fulfill the criteria according to Annex XIII of REACH.

For explanation of abbreviations see Section 16.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable, this product is a mixture.

3.2 Mixtures

Hazardous components

Polyethyleneimine dithiocarbamate

Concentration/-range:	3.75 - 12.5%
EC-No:	Polymer
REACH Registration Number:	Not applicable (polymer)
Classification according to Regulation (EC) No. 1272/2008:	Aquatic Chronic 3;H412

For explanation of abbreviations see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:
Move to fresh air. No hazards which require special first aid measures.

Skin contact:
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In case of persistent skin irritation, consult a physician.

Eye contact:
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Alternatively, rinse immediately with Diphoterine[®]. Get prompt medical attention.

Ingestion:
Rinse mouth with water. Do Not induce vomiting. Get medical attention immediately if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

None under normal use.

4.3 Indication of any immediate medical attention and special treatment needed.

None reasonably foreseeable.

Other information:

None.

SECTION 5: Fire-fighting measures**5.1 Extinguishing media**

Suitable extinguishing media:

Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder.

Unsuitable extinguishing media:

None

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products:

Thermal decomposition may produce: nitrogen oxides (NO_x), carbon oxides (CO_x), sulfur oxides (SO_x). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

5.3 Advice for fire-fighters.

Protective measures:

Wear self-contained breathing apparatus and protective suit.

Other information:

Spills produce extremely slippery surfaces.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions:

Do not touch or walk through spilled material. Spills produce extremely slippery surfaces.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/Protective Protection).

Emergency procedures:

Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

6.2 Environmental precautions

Do not contaminate water.

6.3 Methods and material for containment and clean up

Small spills:

Do not flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Large spills:

Do not flush with water. Dam up. Clean up promptly by scoop or vacuum.

Residues:

Soak up with inert absorbent material. After cleaning, flush away traces with water.

6.4 Reference to other sections

SECTION 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 13: Disposal considerations;

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Renders surfaces extremely slippery when spilled. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat sources of ignition. Freezing will affect the physical condition and may damage the material.

7.3 Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National occupational exposure limits:

None known.

Derived No and Minimum Effect Levels (DNELs/DMELs)

None known

Predicted no-effect concentrations (PNECs)

None known.

8.2 Exposure controls

Appropriate engineering controls:

Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Individual protection measures, such as personal protective equipment:

Eye/face protection

Safety glasses with side-shields.

Skin protection:

Wear overalls and/or chemical apron and rubber footwear where physical contact can occur.

Hand protection:

PVC or other plastic material gloves.

Respiratory protection:

No personal respiratory protective equipment normally required.

Additional advice:

Wash hands and face before breaks and immediately after handling the product. Wash hands before breaks and at the end of workday.

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Appearance	Liquid, Red
Odour:	Rotten egg-like
Odour Threshold:	No data available
pH:	10-11.5
Melting point/freezing point:	<-7°C
Initial boiling point and boiling range:	> 100°C
Flash point:	Does not flash
Evaporation rate:	No data available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits:	Not expected to create explosive atmospheres.
Vapour pressure:	2.3kPa @ 20°C
Vapour density:	0.804 g/litre @ 20°C
Relative density:	1.0 - 1.3
Solubility(ies):	Completely miscible
Partion coefficient:	< 0
Autoignition temperature:	Does not self-ignite (based on chemical structure)
Decomposition temperature:	> 150°C
Viscosity:	See Technical Bulletin.
Explosive properties:	Not expected to be explosive based on the chemical structure.
Oxidising properties:	Not expected to be oxidizing based on the chemical structure.

9.2 Other information

None

SECTION 10: Stability and reactivity**10.1 Reactivity**

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

Protect from frost, heat and sunlight.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Thermal decomposition may produce nitrogen oxides (NO_x), carbon oxides (CO_x), sulphur oxides (SO_x), hydrogen cyanide (hydrocyanic acid)

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Information on the product as supplied:**

Acute oral toxicity:	LD50/oral/rat > 5000 mg/kg
Acute dermal toxicity:	LD50/dermal/rat > 5000 mg/kg
Acute inhalation toxicity:	Testing by the inhalation route is inappropriate because exposure of humans via inhalation is unlikely; the substance has no vapour pressure and there is practically no exposure to inhalable aerosols.
Skin corrosion/irritation:	Non-irritating to skin.
Serious eye damage/eye irritation:	Slightly irritating.
Respiratory/skin sensitization:	Not sensitizing to skin. No respiratory sensitization has been observed in the workplace.
Mutagenicity:	By analogy with similar substances, this substance is not expected to be toxic for reproduction.
STOT – single exposure:	No known effects.
STOT – repeated exposure:	No known effect.
Aspiration hazard:	No hazards resulting from the material as supplied.

Relevant information on the hazardous components:

Acute oral toxicity:	LD50/oral/rat > 2000 mg/kg.
Acute dermal toxicity:	LD50/dermal/rat > 2000 mg/kg (Estimated)
Acute inhalation toxicity:	The product is not expected to be toxic by inhalation.
Skin corrosion/irritation:	Not irritating.
Serious eye damage/eye irritation:	Not irritating.

Respiratory/skin sensitization:	The product is not expected to be sensitizing.
Mutagenicity:	Not mutagenic.
Carcinogenicity:	Not carcinogenic.
Reproductive toxicity:	Not toxic for reproduction.
STOT – single exposure:	No known effects.
STOT – repeated exposure:	No known effects.
Aspiration hazard:	No known effects.

SECTION 12: Ecological information**12.1 Toxicity**Information on the product as supplied:

Acute toxicity to fish:	LC50/Fish/96 hours = 10-100mg/l
Acute toxicity to invertebrates:	EC50/Daphnia magna/48 hours = 10-100mg/l
Acute toxicity to algae:	IC50/Algae/72 hours = 10-100mg/l
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	No data available.
Effects on terrestrial organisms:	No data available. Exposure to soil is unlikely.
Sediment toxicity:	No data available. Exposure to sediment is unlikely.

Relevant information on the hazardous components:Polyethyleneimine dithiocarbamate

Acute toxicity to fish:	LC50/Fish/96 hours = 10 – 100 mg/l
Acute toxicity to invertebrates:	EC50/Daphnia/48 hours = 10 – 100 mg/l
Acute toxicity to algae:	IC50/Algae/72 hours = 10 – 100 mg/l
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	No data available.
Effects on terrestrial organisms:	No data available.
Sediment toxicity:	No data available.

12.2 Persistence and degradabilityInformation on the product as supplied:

Degradation: Not readily biodegradable.

Hydrolysis: Does not hydrolyse.

Photolysis: No data available.

Relevant information on the hazardous components:Polyethyleneimine dithiocarbamate

Degradation: Not readily biodegradable.

Hydrolysis: Does not hydrolyse.

Photolysis: No data available.

12.3 Bioaccumulative potentialInformation on the product as supplied:

The product is not expected to bioaccumulate.

Partition co-efficient (Log Pow): < 0

Bioconcentration factor (BCF): No data available.

Relevant information on the hazardous components:Polyethyleneimine dithiocarbamate

Partition co-efficient (Log Pow): < 0

Bioconcentration factor (BCF): No data available.

12.4 Mobility in soilInformation on the product as supplied:

Exposure to soil is not to be expected.

Relevant information on the hazardous components:Polyethyleneimine dithiocarbamate

Koc: No data available.

12.5 Results of PBT and vPvB assessment**PBT assessment**

Does not fulfill the criteria according to Annex XIII of REACH

vPvB assessment

Does not fulfill the criteria according to Annex XIII of REACH

12.6 Other adverse effects

None

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Waste from residues/unused products:**

Dispose in accordance with local and national regulations.

Contaminated packaging:

Rinse empty containers with water and use the rinse water to prepare working solution. If recycling is not practicable, dispose of in compliance with local regulations.

Recycling:

Store containers and offer for recycling of material when in accordance with the local regulations.

SECTION 14: Transport information**Land transport (ADR/RID)**

Not classified

Sea transport (IMDG)

Not classified

Air transport (IATA)

Not classified

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

All components of this product have been registered or pre-registered with the European Chemicals Agency or are exempt from registration.

15.2 Chemical safety assessment

A Chemical Safety Assessment for the product has been carried out by the person responsible for producing this Safety Data Sheet. All relevant information used to conduct this assessment are included in this Safety Data Sheet as well any resulting Risk Reduction Measures.

SECTION 16: Other information

This data sheet contains changes from the previous version in section(s)

SECTION 15. Regulatory information, SECTION 16. Other Information.

Key or legend to abbreviations and acronyms used in the safety data sheet:

Abbreviations

Aquatic Chronic 3 = Hazardous to the aquatic environment Chronic Category Code 3

H-Phrases

H412 – Harmful to aquatic life with long lasting effects

This SDS was prepared in accordance with the following:

Regulation (EC) N° 1907/2006, as amended

Regulation (EC) N° 1272/2008, as amended

Version: 17.01.a

LDMS042

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

ANNEX(ES)

This product is not hazardous as supplied and/or does contain hazardous components:

- Which require REACH registration; or,
- Which demonstrate relevant effects which would require a chemical safety assessment; or,
- Which are present at concentrations above their cut-off value.

Therefore, according to Regulation (EC) No 1907/2006, Article 31, paragraph 7, an Exposure Scenario is not required as an annex to the Safety Data Sheet.