

SAFETY DATA SHEET

CLEARFLO PED4320

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier:

- Trade Name: **CLEARFLO PED4320**
- 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:

Supplier: GPC CLEAR SOLUTIONS LIMITED
Unit 57
Riverside Estate
Sir Thomas Longley Road
Medway City Estate
Rochester
Kent
ME2 4DP
United Kingdom

Telephone Number: +44 (0) 1634 326920

Mobile: +44 (0) 7787564967

Email: sales@gpcclearsolutions.co.uk

1.4 Emergency Telephone Number (Office hours only):

GPC Clear Solution Ltd (Office hours only): +44 (0) 7787564967

National Poison Information Service: NHS Direct: 0845 4647 or 111 (24/24, 7/7)
Scotland: NHS 24-08454 24 24 24 (24/24, 7/7)

SAFETY DATA SHEET

CLEARFLO PED4320

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

- Classification according to Regulation (EC) 1272/2008: Not classified.

2.2 Label elements:

Labelling according to Regulation (EC) 1272/2008:

- Hazard pictogram(s): None.
- Signal word: None.
- Hazard statement(s): None.
- Precautionary statement(s): None.
- Additional elements: EUH210 – Safety data sheet available on request.

2.3 Other hazards:

Spills produce extremely slippery surfaces.

- PBT and vPvB assessment: Not PBT or vPvB according to the criteria of Annex XIII of REACH.

For explanation of abbreviations see Section 16.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: Not applicable, this product is a mixture.

3.2 Mixtures

Hazardous components

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics

- Concentration/ -range: 20 – 40%

SAFETY DATA SHEET

CLEARFLO PED4320

- **ECHA List Number:**
(Assigned by ECHA to substances without an EC Number): 927-632-8
- **REACH Registration Number:** 01-2119457736-27-XXXX
- **Classification according to Regulation (EC) No.1272/2008:** Asp. Tox. 1;H304, EUH066
- **Notes:** Does not result in classification of the mixture if the kinematic viscosity is greater than 20.5 mm²/s measured at 40°C.

Isotridecanol, ethoxylated

- **Concentration/-range:** < 6%
- **EC-No:** Polymer.
- **REACH Registration Number:** Not applicable (polymer).
- **Classification according to Regulation (EC) No.1272/2008:** Acute Tox. 4;H302, Eye Dam. 1;H318

Alkanes, C11-15-iso-

- **Concentration/ -range:** < 3%
- **ECHA List Number**
(Assigned by ECHA to substances without an EC Number): 920-901-0
- **REACH Registration Number:** 01-2119456810-40-XXXX
- **Classification according to Regulation (EC) No. 1272/2008:** Asp. Tox. 1;H304, EUH066
- **Notes:** Does not result in classification of the mixture if the kinematic viscosity is greater than 20.5 mm²/s measured at 40°C.

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

CLEARFLO PED4320

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. Get medical attention immediately.
- **Ingestion:** Rinse mouth with water. Do NOT induce vomiting. Call a physician or poison control centre immediately.

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.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media:

- **Suitable extinguishing media:** Water. Water spray. Foam. Carbon dioxide (CO₂). Dry Powder. Warning! Spills produce extremely slippery surfaces.
- **Unsuitable extinguishing media:** None known.

5.2 Special hazards arising from the substance or mixture:

- **Hazardous decomposition products:** Ammonia. Carbon oxides (CO_x). Nitrogen oxides (NO_x). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

SAFETY DATA SHEET

CLEARFLO PED4320

5.3 Advice for firefighters:

- **Protective measures:** Wear self-contained breathing apparatus and protective suit.
- **Other information:** Spills produce extremely slippery surfaces.

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/Personal 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 cleaning 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:** Clean up promptly by scoop or vacuum. Do not flush with water. Dam up.
- **Residues:** 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;

SAFETY DATA SHEET

CLEARFLO PED4320

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 and sources of ignition. Freezing will affect the physical condition and may damage the material.
Incompatible with oxidizing agents. |
| 7.3 | Specific end use(s): | This information is not available. |

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 (PNEC): | 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: | |
| | a) Eye/face protection: | Safety glasses with side-shields. |
| | b) Skin protection: | |
| | i) Hand protection: | PVC or other plastic material gloves. |
| | ii) Other: | Wear coveralls and/or chemical apron and rubber footwear where physical contact can occur. |

SAFETY DATA SHEET

CLEARFLO PED4320

- c) **Respiratory protection:** No personal respiratory protective equipment normally required.
- d) **Additional advice:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash hands before breaks and immediately after handling the product.
- **Environmental exposure controls:** Do not allow uncontrolled discharge of product into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

- **Appearance:** Viscous liquid, Milky.
- **Odour:** No data available.
- **pH:** Not applicable.
- **Melting point/freezing point:** < 5°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:** 2.3 kPa @ 20°C
- **Relative density:** 0.804 g/L @ 20°C
- **Relative density:** 1.0 – 1.2 (See Technical Bulletin or Product Specifications for a more precise value, if available).
- **Solubility(ies):** Completely miscible.

SAFETY DATA SHEET

CLEARFLO PED4320

- **Partition coefficient:** Not applicable.
- **Autoignition temperature:** No data available.
- **Decomposition temperature:** > 150°C
- **Viscosity:** > 20.5 mm²/s @ 40°C
- **Explosive properties:** Not expected to be explosive based on the chemical structure.
- **Oxidizing properties:** Not expected to be oxidising based on the chemical structure.

9.2 **Other information:** None.

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:** Oxidising agents may cause exothermic reactions.
- 10.4 **Conditions to avoid:** Protect from frost, heat and sunlight.
- 10.5 **Incompatible materials:** Oxidizing agents.
- 10.6 **Hazardous decomposition products:** Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO_x), carbon oxides (CO_x). Ammonia (NH₃). Hydrogen cyanide (hydrocyanic acid).

11. TOXICOLOGICAL INFORMATION

11.1 **Information on the product as supplied:**

Information on the product as supplied:

- **Acute oral toxicity:** LD50/oral/rat > 5000 mg/kg (Estimated).
- **Acute dermal toxicity:** LD50/dermal/rat > 5000 mg/kg (Estimated).

SAFETY DATA SHEET

CLEARFLO PED4320

- **Acute inhalation toxicity:** The product is not expected to be toxic by inhalation.
- **Skin corrosion/irritation:** Non-irritating to skin.
- **Serious eye damage/eye irritation:** Not irritating (OECD 437).
- **Respiratory/skin sensitisation:** Not 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:** Due to the viscosity, this product does not present an aspiration hazard.

Relevant information on the hazardous components

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics

- **Acute oral toxicity:** LD50/oral/rat > 5000 mg/kg (OECD 401)
- **Acute dermal toxicity:** LD50/dermal/rabbit > 3160 mg/kg (OECD 402).
- **Acute inhalation toxicity:** LC0/inhalation/4 hours/rat \geq 5366 mg/m³ (aerosol/mist) (OECD 403) (Based on result obtained from tests on analogous products).
- **Skin corrosion/irritation:** Not irritating (OECD 404)
Repeated exposure may cause skin dryness or cracking.
- **Serious eye damage/eye irritation:** Not irritating (OECD 405).
- **Respiratory/skin sensitisation:** By analogy with similar products, this product is not expected to be sensitizing. (OECD 406).
- **Mutagenicity:** Not mutagenic (OECD 471, 474, 475, 476, 483).
- **Carcinogenicity:** By analogy with similar substances, this substance is not expected to be carcinogenic.

SAFETY DATA SHEET

CLEARFLO PED4320

Based on the absence of mutagenicity, it is unlikely that the substance is carcinogenic.

- **Reproductive toxicity:** Based on available data, product is not expected to be toxic for reproduction.
NOAEL/rat >= 300 ppm (OECD 421)
Prenatal Development Toxicity Study (OECD 414)
-NOAEL/Maternal toxicity/rat >= 5220 mg/kg/day
-NOAEL/Developmental toxicity/rat >= 5220 mg/kg/day
 - **STOT – Single exposure:** No known effects.
 - **STOT – Repeated exposure:** No known effects.
 - **Aspiration hazard:** May be fatal if swallowed and enters airways.
- Isotridecanol, ethoxylated*
- **Acute oral toxicity:** LD50/oral/rat = 500 – 2000 mg/kg
 - **Acute dermal toxicity:** LD50/dermal/rabbit > 2000 mg/kg
 - **Acute inhalation toxicity:** No data available.
 - **Skin corrosion/irritation:** Not irritating (OECD 404).
 - **Serious eye damage/eye irritation:** Causes serious eye irritation (OECD 405).
 - **Respiratory/skin sensitisation:** The results of testing on guinea pigs showed this material to be non-sensitizing.
 - **Mutagenicity:** In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.
 - **Carcinogenicity:** Based on the absence of mutagenicity, it is unlikely that the substance is carcinogenic.
 - **Reproductive toxicity:** Based on available data, product is not expected to be toxic for reproduction.
Two-Generation Reproduction Toxicity (OECD 416)
-NOAEL/rat > 250 mg/kg/day
Prenatal Development Toxicity Study (OECD 414)
-NOAEL/Maternal toxicity/rat > 50 mg/kg/day
-NOAEL/Developmental toxicity/rat > 50 mg/kg/day
 - **STOT – Single exposure:** No known effects.

SAFETY DATA SHEET

CLEARFLO PED4320

- **STOT – Repeated exposure:** Based on available data, product is not expected to demonstrate chronic toxic effects.
NOAEL/oral/rat/600 days = 50 mg/kg./day
- **Aspiration hazard:** No known effects.

Alkanes, C11-15-iso
- **Acute oral toxicity:** LD50/oral/rat > 5000 mg/kg (OECD 401)
- **Acute dermal toxicity:** LD50/dermal/rat > 5000 mg/kg (OECD 402)
- **Acute inhalation toxicity:** LC50/inhalation/8 hours/rat > 5000 mg/m³ (vapours) (OECD 403)
- **Skin corrosion/irritation:** Not irritating (OECD 404)
Repeated exposure may cause skin dryness or cracking.
- **Serious eye damage/eye irritation:** Not irritating (OECD 405).
- **Respiratory/skin sensitisation:** By analogy with similar products, this product is not expected to be sensitizing (OECD 406).
No respiratory sensitization has been observed in the workplace.
- **Mutagenicity:** Negative in the Ames Test (OECD 471). Negative in the In vitro Mammalian Cell Gene Mutation Test (OECD 476). Negative in the In Vitro Mammalian Chromosome Aberration, Test (OECD 473). Negative in the Rodent Dominant Lethal Test (OECD 478). Not mutagenic (OECD 474, 479).
- **Carcinogenicity:** By analogy with similar substance, this substance is not expected to be carcinogenic. (OECD 453).
- **Reproductive toxicity:** By analogy with similar substance, this substance is not expected to be toxic for reproduction (OECD 413, 414, 415).
- **STOT – Single exposure:** No known effects.
- **STOT – Repeated exposure:** By analogy with similar products, this product is not expected to demonstrate chronic toxic effects (OECD 413).
NOAEL/oral/rat/90 days >= 3000 mg/kg/day (OECD 408) (Based on results obtained from tests on analogous products).
- **Aspiration hazard:** May be fatal if swallowed and enters airways.

SAFETY DATA SHEET

CLEARFLO PED4320

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Information on the product as supplied:

- **Acute toxicity to fish:** LC50/Fish/96 hours = 10 – 100 mg/L (Estimated).
- **Acute toxicity to invertebrates:** EC50/Daphnia magna/48 hours = 10 – 100 mg/L (Estimated).
- **Acute toxicity to algae:** Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
- **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

Relevant information on the hazardous components

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics

- **Acute toxicity to fish:** LC50/Fish/96 hours > 1028 mg/L
- **Acute toxicity to invertebrates:** EC50/Invertebrates/48 hours > 3193 mg/L
- **Acute toxicity to algae:** IC50/Algae/72 hours = 993 mg/L
- **Chronic toxicity to fish:** NOEC/Oncorhynchus mykiss/28 days > 1000 mg/L (Estimated)
- **Chronic toxicity to invertebrates:** NOEC/Daphnia magna/21 days > 1000 mg/L (Estimated)
- **Toxicity to microorganisms:** EC50/activated sludge/3 hours > 100 mg/L (OECD 209)
- **Effects on terrestrial organisms:** No data available.
- **Sediment toxicity:** NOEC/Sediment/10 days = 126 mg/kg (PARCOM)

SAFETY DATA SHEET

CLEARFLO PED4320

Isotridecanol, ethoxylated

- **Acute toxicity to fish:** LC50/Cyprinus carpio/96 hours = 1 – 10 mg/L (OECD 203)
- **Acute toxicity to invertebrates:** EC50/Daphnia/48 hours = 1 – 10 mg/L (OECD 202)
- **Acute toxicity to algae:** IC50/Desmodesmus subspicatus/72 hours = 1 – 10 mg/L (OECD 201)
- **Chronic toxicity to fish:** No data available.
- **Chronic toxicity to invertebrates:** NOEC/Daphnia magna/21 days > 1 mg/L (OECD 202)
- **Toxicity to microorganisms:** EC10/activated sludge/17 hours > 10000 mg/L (DIN 38412-8)
- **Effects on terrestrial organisms:** No data available.
- **Sediment toxicity:** No data available.

Alkanes, C11-15-iso-

- **Acute toxicity to fish:** LC0/Oncorhynchus mykiss/96 hours > 1000 mg/L (OECD 203) (Based on results obtained from tests on analogous products).
- **Acute toxicity to invertebrates:** EC0/Daphnia magna/48 hours > 1000 mg/L (OECD 202) (Based on results obtained from test on analogous products).
- **Acute toxicity to algae:** NOEC/Pseudokirchneriella subcapitata/72 hours = 1000 mg/L (OECD 201) (Based on results obtained from tests on analogous products).
- **Chronic toxicity to fish:** NOEC/Oncorhynchus mykiss/28 days = 0.316 mg/L (Estimated).
- **Chronic toxicity to invertebrates:** NOEC/Daphnia magna/21 days = 1 mg/L (OECD 211)
- **Toxicity to microorganisms:** EC50/Tetrahymena pyriformis/48 h > 1000 mg/L.
- **Sediment toxicity:** Exposure to sediment is unlikely.

12.2 Persistence and degradability

Information on the product as supplied

- **Degradation:** Readily biodegradable.

SAFETY DATA SHEET

CLEARFLO PED4320

- **Hydrolysis:** At natural pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.
- **Photolysis:** No data available.

Relevant information on the hazardous components:

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics

- **Degradation:** Readily biodegradable. 82% / 24 days (OECD 301 F) ; 74% / 28 days (OECD 306).
- **Hydrolysis:** Does not hydrolyse.
- **Photolysis:** Half-life: 0.254 – 0.850 days.

Isotridecanol, ethoxylated

- **Degradation:** Readily biodegradable. > 60% / 28 days (OECD 301 B)
- **Hydrolysis:** Does not hydrolyse.
- **Photolysis:** No data available.

Alkanes, C11-15-iso-

- **Degradation:** Inherently biodegradable. 31.5% / 28 days (OECD 301 F)
- **Hydrolysis:** Does not hydrolyse.
- **Photolysis:** No data available.

12.3 Bioaccumulative potential

- **Information on the product as supplied:** The product is not expected to bioaccumulate.
- **Partition co-efficient (Log Pow):** Not applicable.
- **Bioconcentration factor (BCF):** No data applicable.

Relevant information on the hazardous components

SAFETY DATA SHEET

CLEARFLO PED4320

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics

- Partition co-efficient (Log Pow): No data available.
- Bioconcentration factor (BCF): 22 L/kg

Isotrdecanol, ethoxylated

- Partition co-efficient (Log Pow): > 3
- Bioconcentration factor (BCF): No data available.

Alkanes, C11-15-iso-

- Partition co-efficient (Log Pow): No data available.
- Bioconcentration factor (BCF): No data available.

12.4 Mobility in soil

- Information on the product as supplied: No data available.

Relevant information on the hazardous components

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics

- Koc: No data available.

Isotrdecanol, ethoxylated

Koc: > 5000

Alkanes, C11-15-iso-

- Koc: No data available.

12.5 Results of PBT and vPvB assessment:

- PBT assessment: Not PBT according to the criteria of Annex XIII of REACH.
- vPvB assessment: Not vPvB according to the criteria of Annex XIII of REACH.

12.6 Other adverse effects: None known.

SAFETY DATA SHEET

CLEARFLO PED4320

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 the 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.

14. TRANSPORT INFORMATION

- 14.1 **Land transport (ADR/RID):** Not classified.
- 14.2 **Sea transport (IMDG):** Not classified.
- 14.3 **Air transport (IATA):** Not classified.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations 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 this 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 as any resulting Risk Reduction Measures.

SAFETY DATA SHEET

CLEARFLO PED4320

16. OTHER INFORMATION

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

SECTION 5: Fire-fighting measures, SECTION 8. Exposure controls/personal protection, SECTION 15. Regulatory information, SECTION 16. Other information.

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

Acronyms

PBT = persistent, bioaccumulative and toxic

STOT = Specific target organ toxicity

vPvB = Very persistent and very bioaccumulative

Abbreviations

Acute Tox. 4 = Acute toxicity, Hazard Category 4

Asp. Tox 1 = Aspiration hazard, Hazard Category 1

Eye Dam 1 = Serious eye damage/eye irritation, Hazard Category 1

Hazard statement

H302 – Harmful if swallowed

H304 – May be fatal if swallowed and enters airways

H318 – Causes serious eye damage

EUH066 – Repeated exposure may cause skin dryness or cracking

Training Advice

Do not handle until all safety precautions have been read and understood.

16.4 This SDS was prepared in accordance with the following:

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

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

Version: 18.01.a

DDCC019

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 a guidance for safe handling, use, process, storage, transportation, disposal and release and is 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.

SAFETY DATA SHEET

CLEARFLO PED4320

ANNEX(ES)

This product is not hazardous as supplied and/or does not 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.