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

· 1.1 Product identifier

· Product name: SMART PLASTIC

· Product status:

· Product identifier

Caprolactone Lactide Copolymer

CAS No.: 65408-67-5 EC No.: polymer

- Registration number The product is exempt from Reach registration (polymer).
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture Adhesives
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Deluxe Materials Ltd.

Unit 13, Cufaude Business Park, Cufaude Lane, Bramley, Tadley

Hampshire RG26 5DL United Kingdom

Tel. +44 (0) 1256 883 944

www.deluxematerials.com

- · Further information obtainable from: info@deluxematerials.com
- · 1.4 Emergency telephone number:

Europe: (+)1 760 476 3961 (Contract No. : 334101) United Kingdom: (+)44 01256 883 944 office hours only

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The substance is not classified according to the CLP regulation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

The substance is not classified as hazardous to health or the environment according to the substance directive.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Not applicable.
- · Hazard pictograms Not applicable.
- · Signal word Not applicable.
- · Hazard statements Not applicable.
- · Precautionary statements Not applicable.
- · Hazard description: No special hazards are associated with this product.
- 2.3 Other hazards

Caution - substance not yet fully tested.

Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

- · Results of PBT and vPvB assessment
- · PBT: No.
- · vPvB: No.

- GE

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SECTION 3: Composition/information on ingredients

3.1 Substances Yes.

* Chemical components:

65408-67-5 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with 2-oxepanone

> 99%

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: First aid measures not required, but get fresh air for personal comfort.
- · After skin contact:

First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.

- · After eye contact: Rinse opened eye under running water.
- · After swallowing:

Rinse mouth with water.

If a large quantity has been ingested or you feel unwell, get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents:

Water

Foam

Carbon dioxide

Fire-extinguishing powder

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Monomer (2-Oxepanone, Hexan-6-Olide, CAS 502-44-3)

- · 5.3 Advice for firefighters
- · Protective equipment:

Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear safety glasses, gloves, protective clothing and rubber boots for hygienic reasons.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Clean the affected area carefully; suitable cleaners are:

water

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Wear personal protective equipment according to section 8 if risk of exposure.

Keep away from heat and direct sunlight.

- · Information about fire and explosion protection: Not applicable.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- DNELs Not determined.
- PNECs Not determined.

· 8.2 Exposure controls

- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

· Respiratory protection:

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P1

· Protection of hands:

Protective gloves not really required. However, we recommend using protective gloves made of rubber.

· Material of gloves

PVC gloves

Chloroprene rubber, CR

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Safety glasses

- · Body protection: Normal work clothes for the chemical industry (long legs and sleeves).
- · Limitation and supervision of exposure into the environment Not applicable.

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· Risk management measures

Exposure scenarios are not available since not classified as dangerous for health or environment according to CLP Regulation (EC) No 1272/2008.

SECTION 9: Physical and chemical properties

. 9 1	Information	on basic	nhysical	and	chemical	properties

General Information

· Appearance:

Form: Solid.
Colour: White
Odour: Faint

· Change in condition

Melting point/Melting range: Not determined. Boiling point/Boiling range: Not determined.

· Flash point: Not determined.

· Flammability (solid, gaseous): Not determined.

· Ignition temperature:

Decomposition temperature: 200 ℃

Danger of explosion: Not explosive.

• Explosion limits: Not applicable.

Oxidizing properties Not oxidizing.Vapour pressure: Not applicable.

Density at 20 °C: 1.1 g/cm³

· Solubility in / Miscibility with

water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable.

• **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity

There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.

- · 10.2 Chemical stability The product is stable at normal conditions.
- Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid Heat
- · 10.5 Incompatible materials:

Avoid contact with acids.

Avoid contact with bases.

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· 10.6 Hazardous decomposition products:

Possible decomposition and release of monomer at temperatures above 200°C.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values:

No information available.

The polymer is not bioavailable because of its molecular size.

- Primary irritant effect:
- · on the skin: No information available.
- · on the eve: No information available.
- · Sensitisation No sensitising effects known.
- · Repeated dose toxicity No information available.
- · Carcinogenicity: No information available.
- · Mutagenicity: No information available.
- · Reproductive toxicity: No information available.
- · Remark:

Caution - substance not yet fully tested.

Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity:

No information available.

The polymer is not bioavailable because of its molecular size.

- · 12.2 Persistence and degradability No information available.
- · Other information: The product is readily biodegradable.
- · 12.3 Bioaccumulative potential No information available.
- · 12.4 Mobility in soil No information available.
- · Additional ecological information:
- · General notes: Do not allow product to reach ground water, water course or sewage system.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: No.
- · vPvB: No.
- · 12.6 Other adverse effects No further relevant information available.
- · Remark:

Caution - substance not yet fully tested.

Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

The product is not classified as hazardous waste.

Incinerate at a licensed installation.

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· European waste catalogue

16 03 06 organic wastes other than those mentioned in 16 03 05

· Uncleaned packaging:

Contaminated packaging materials must be disposed of in the same manner as the product.

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- · 14.1 UN Number
- · ADR, ADN, IMDG, IATA
- 14.2 Proper shipping name (Technical Name)
- · ADR, ADN, IMDG, IATA
- · 14.3 Transport hazard class(es)
- · ADR, ADN, IMDG, IATA
- · Class
- · 14.4 Packing group
- · ADR, IMDG, IATA
- · 14.5 Environmental hazards:
- Marine pollutant (environmentally hazardous mark) :
- 14.6 Special precautions for user Not applicable.
- · 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

• Transport/Additional information: Not dangerous goods according to the above specifications.

No

SECTION 15: Regulatory information

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

Not applicable.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This Safety Data Sheet is not a Product Specification. It is based on our present knowledge and experience and it is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.