



## SAFETY DATA SHEETS

Client Name : Supagard

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Client Address : 19-29 Gavinton Street, Muirend , Glasgow , G44 3 EF.

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Product Name : BIONIC POLYMER

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**Applicant** : Supagard

**Address** : 19-29 Gavinton Street, Muirend , Glasgow , G44 3EF

**The submitted sample and sample information was/were submitted and identified by/on the behalf of the client**

**Sample Name** : BIONIC POLYMER

**Trade Mark** : /

**Model No.** : /

**Manufacturer** : Supagard

**Job Received Date** : 2023.12.14

**Preparation Period** : 2023.12.14~2023.12.18

**Preparation standard** : REACH Regulation (EC) No 1907/2006 ANNEX II with its amendment Regulation (EC) No 1272/2008, Regulation (EU) 2015/830 and Regulation (EU) 2020/878.

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## Section 1. Chemical Product and Company Identification

### Product identifier

Product name : BIONIC POLYMER  
Alternative names : /  
Model No. : /  
Item No. /Lot. No : /  
Sample nature : Preparation  
CAS No. : Refer to section 3  
EC No. : Refer to section 3

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

Relevant identified uses : Painting  
Uses advised against : /

### Details of the supplier of the safety data sheet

Supplier : /  
Manufacturer : Supagard  
Country of origin : /  
Export to : /  
Website : [www.supagard.com](http://www.supagard.com)  
Telephone : 0141 633 5933  
Fax : /  
E-mail address : [james.smyth@supagard.com](mailto:james.smyth@supagard.com)

### Emergency telephone number

Emergency phone : 0141 633 5933 (Office Hours Only)

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## Section 2. Hazards identification

### Hazards Classification

In accordance with Regulation (EC) No 1272/2008 (CLP) ,Regulation (EU) 2015/830 and Regulation (EU) 2020/878 is divided into the following hazard category.

- Physical hazard : Not classified as a physical hazard.
- Health hazard : Aspiration hazard (Category 1), H304
- Environment hazard : Not classified as an environment hazard.

### Label elements

Hazard pictograms

The product does not need to be labelled in accordance with Regulation (EC) No 1272/2008 (CLP), Regulation (EU) 2015/830 and Regulation (EU) 2020/878 or respective national laws.

### Other hazards

No data available.

This mixture contains no ingredients considered to be Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) at levels of 0.1% or higher.

## Section 3. Composition/Information on Ingredients

Chemical Name	Molecular formula	Percent of Content (%)	CAS No.	EC No.
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Silicone oil AK350#	$C_6H_{18}OSi_2$	10-20	63148-62-9	613-156-5
Silicone oil AK12500#	$C_6H_{18}OSi_2$	15-25	63148-62-9	613-156-5
Sillitin N85	/	1-5	92704-41-1	296-473-8
Exxsol D80	/	20-30	64742-47-8	265-149-8
Tetrapropoxysilane	$C_{12}H_{28}O_4Si$	1-5	682-01-9	211-659-0
Dodecamethylcyclohexasiloxane	$C_{12}H_{36}O_6Si_6$	20-30	540-97-6	208-762-8
Water	$H_2O$	20-30	7732-18-5	231-791-2

Hazardous ingredients according to Regulation (EC) No 1272/2008, Regulation (EU) 2015/830 and Regulation (EU) 2020/878.:

Component	CAS No.	EC No.	Index-No.	Classification
Exxsol D80	64742-47-8	265-149-8	649-422-00-2	Asp. Tox. 1, H304

## Section 4. First Aid Measures

- Skin touch** : IF on skin, remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If the constant stimulation or pain, seek medical advice immediately.
- Eyes touch** : IF IN EYES: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Inhalation** : In case of breathing difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration and seek medical advice immediately.
- Ingestion** : If swallowed, rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting. In the event of spontaneous vomiting, clear the airway and seek

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immediate medical attention.

## **Most important symptoms and effects, both acute and delayed**

The severity of the symptoms described will vary depending on the intensity and duration of exposure.

## **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## **Section 5. Fire Fighting Measures**

<b>Suitable Fire Extinguishing Media</b>	: Foam, carbon dioxide, dry chemical extinguishers.
<b>Characteristic</b>	: Hazardous combustion products may include carbon monoxide, nitrogen oxides and etc. The vapor is heavier than air, spreads along the ground and distant ignition is possible.
<b>Hazardous combustion products</b>	: Carbon monoxide, carbon dioxide, nitrogen oxides and etc.
<b>Fire-Fighting method &amp; media</b>	: Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.
<b>Firefighters special protective equipment</b>	: Wear full protective suit.

## **Section 6. Accidental Release Measures**

<b>Personal precautions, protective equipment and emergency procedures</b>	: Avoid inhalation, eye, or skin contact of liquid by using appropriate precautions outlined in this SDS (see section 8). Evacuate personnel to safe areas. Remove contaminated clothing. Scrap should be reclaimed for recycling.
<b>Environment precautions</b>	: Prevent to enter sewage, soil, river and sea.
<b>Clean up procedures</b>	: For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with

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an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

**Additional information** : Prevent birds or fish feeding by the drainage system, must be completely recycled.

## Section 7. Handling and Storage

**Handling** : Operators need to follow the operating procedures for operations. Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

**Storage** : Keep container tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep separate with the oxidizing agent. Equip with relevant type and quantities of the extinguishment instruments. Keep the sample as an easy identification.

## Section 8. Exposure Controls/Personal Protection

### Control parameters

Occupational exposure limits

Biological limit values : No data available.

### Exposure controls

Monitoring Method : No data available.

Appropriate engineering controls : Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Derived No Effect Level (DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects		Chronic effects	
		Local	Systemic	Local	Systemic
Sillitin N 85 92704-41-1	Inhalation	3 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>
	Dermal	-	-	-	-
Tetrapropo	Inhalation	No hazard identified	85 mg/m <sup>3</sup>	No hazard identified	85 mg/m <sup>3</sup>

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xysilane 682-01-9	Dermal	No hazard identified	12 mg/kg bw/day	No hazard identified	12 mg/kg bw/day
Dodecamet hycyclohex	Inhalation	1.22 mg/m <sup>3</sup>	No hazard identified	6.1 mg/m <sup>3</sup>	No hazard identified
asiloxane 540-97-6	Dermal	No hazard identified	No hazard identified	No hazard identified	No hazard identified

## Personal protective equipment

Respiratory Protection : If the vapour concentration exceed in the air, must wear mask, or self-contained breathing.

Eye Protection : Wear suitable chemical safety goggles.

Body Protection : Wear work clothes.

Hands Protection : Wear suitable protective gloves.

Other Protection : No smoking, dining and drinking water in the workplace. Keep good habit of hygiene. Shower and change clothes after work.

## Section 9. Physical and Chemical Properties

**Appearance** : Thick liquid

**Color** : Beige

**Odor** : Ammonia odour

**Density** : No data available

**PH** : No data available

**Flash point** : No data available

**Boiling point** : No data available

**Melting point** : No data available

**Relative density** : No data available

**Viscosity** : No data available

**Explosion Upper Limits** : No data available

**Explosion Lower Limits** : No data available

**Solubility** : No data available

## Section 10. Stability and Reactivity



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**Stability** : Stable under normal temperature and pressure.  
**Distribution of Ban** : Strong oxidizing agents.  
**Conditions to Avoid** : Flame  
**Hazardous** : None.  
**Polymerization**  
**Hazardous** : Carbon monoxide, carbon dioxide.  
**Decomposition**  
**Products**

## Section 11. Toxicological Information

### Acute Toxicity

Substance	CAS No.	Oral LD50	Inhalation LC50(4h)	Dermal LD50
Sillitin N85	92704-41-1	5000 mg/kg bw (rat)	2.07 mg/L (rat)	5000 mg/kg bw (rat)
Exxsol D80	64742-47-8	5000 mg/kg bw (rat)	5.28 mg/L (rat)	2000 mg/kg bw (rabbit)
Dodecamethylcyclon exasiloxane	540-97-6	2000 mg/kg bw (rat)	No data available	2000 mg/kg bw (rat)
Tetrapropoxysilane	682-01-9	2000 mg/kg bw (rat)	10- 16.8 mg/L(rat)	No data available

**Skin** : No data available.  
**corrosion/irritation**  
**Serious eye** : No data available.  
**damage/eye irritation**  
**Respiratory or skin** : No data available.  
**sensitisation**  
**Germ cell mutagenicity** : No data available.  
**Carcinogenicity** :

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Substance	CAS No.	IARC	NTP
Silicone oil AK350#	63148-62-9	Not Listed	Not Listed
Silicone oil AK12500#	63148-62-9	Not Listed	Not Listed
Sillitin N85	92704-41-1	Not Listed	Not Listed
Exxsol D80	64742-47-8	Not Listed	Not Listed
Tetrapropoxysilane	682-01-9	Not Listed	Not Listed
Dodecamethylcyclohexasiloxane	540-97-6	Not Listed	Not Listed

**Reproductive toxicity** : No data available.

**Specific target organ** : No data available.

**toxicity-single**

**exposure**

**Specific target organ** : No data available.

**toxicity-repeated**

**exposure**

**Aspiration hazard** : Aspiration hazard (Category 1).

**Additional information** : No data available.

## Section 12. Ecological Information

### Acute aquatic toxicity

Substance	CAS No.	Toxicity to fish	Toxicity to aquatic invertebrates	Toxicity to aquatic algae
Sillitin N85	92704-41-1	LC50 (4 days) 100 mg/L	EC50 (48 h) 100 mg/L	EC50 (72 h) 410 - 2 500 mg/L
Exxsol D80	64742-47-8	LL50 (4 days) 2 - 5 mg/L	EL50 (48 h) 1.4 mg/L	EL50 (72 h) 1 - 3 mg/L
Tetrapropoxysilan-e	682-01-9	LC50 (4 days) 201 - 245 mg/L	EC50 (48 h) 75 - 90 mg/L	EC50 (72 h) 22 - 161 mg/L

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Dodecamethylcyclohexasiloxane	540-97-6	No data available	No data available	EC50 (72 h) 2 µg/L
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## Chronic aquatic toxicity

Substance	CAS No.	Toxicity to fish	Toxicity to aquatic invertebrates	Toxicity to aquatic algae
Sillitin N85	92704-41-1	NOEC (30 days) 100 - 300 mg/L	NOEC (21 days) 1 g/L	No data available
Exxsol D80	64742-47-8	No data available	EL50 (21 days) 810 - 890 µg/L	No data available
Tetrapropoxysilan-e	682-01-9	No data available	No data available	No data available
Dodecamethylcyclohexasiloxane	540-97-6	NOEC (3 months) 14 µg/L	NOEC (21 days) 4.6 µg/L	No data available

**Persistence and** : No data available.

**Biodegradable**

**Bioconcentration or** : No data available.

**biological**

**accumulation**

**Mobility in soil** : No data available.

**PBT and vPvB assessment** : This substance contains an ingredient considered very persistent and very bioaccumulative (vPvB): dodecamethylcyclohexasiloxane, CAS No. 540-97-6, at levels of 12%.

**Other harmful effects** : No known significant effects or critical hazards.

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## Section 13. Disposal Considerations

- Waste disposal methods** : Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.  
Contaminated packaging: Dispose of as unused product.
- Attention abandoned** : Prevent materials from entering drains, sewers, or waterways.

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## Section 14. Transport Information

### Maritime transport IMDG

IMDG Class : Not regulated for transport of dangerous goods  
UN-Number : Not applicable  
Label : Not applicable  
EMS-No. : Not applicable  
Packing group : Not applicable  
Proper shipping name : Not applicable

### Land transport ADR/RID(cross-border)

Hazard class : Not regulated for transport of dangerous goods  
UN-number : Not applicable  
Label : Not applicable  
Packing group : Not applicable  
Proper shipping name : Not applicable

### Air transport ICAO-TI and IATA-DGR

ICAO-TI-II class : Not regulated for transport of dangerous goods  
UN-number : Not applicable  
Label : Not applicable  
Packing group : Not applicable  
Proper shipping name : Not applicable

**Transport Attentions** : Examine whether the package of the containers are integrate and tighten closed before transport. No divulgence, no collapse, no precipitation or no damage during the course of transportation. Don't put the goods together with oxidizer, acid and so on. The transport vehicle and ship must be cleaned and sterilized otherwise it is not allowed to assemble articles. During transport, the vehicle should prevent exposure, rain and high temperature. Under the condition of Road Transportation, the driver should drive in accordance with regulated route, do not stop over in the residential area and congested area. No slipping up in rail road. The sample is not regulated for transport of dangerous goods.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

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## Section 15. Regulatory Information

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

German regulations concerning the classification of hazard : No data available  
for water (WGK)

Substance of Very High Concern (SVHC) according to :  
Regulation (EC) No 1907/2006 (REACH) Dodecamethylcyclohexasiloxane, Cas:  
540-97-6

The conditions of restrictions according to Regulation (EC) : Not listed  
No 1907/2006 (REACH) Article 67 and Annex XVII for the  
manufacturing, placing on the market and use must be  
observed

Regulation (EC) No 1907/2006 (REACH) Annex : Not listed  
XVII( requiring Authorisation for use)

Regulation (EC) No 1907/2006 (REACH)-Pre-registered : Not listed  
substance

Regulation (EC) No. 1005/2009 on substances that deplete : Not listed  
the ozone layer

Regulation (EU) No 649/2012 concerning the export and : Not listed  
import of dangerous chemicals, Annex I

### Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.