

SAFETY DATA SHEETS

Client Name : Supagard

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

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 : /
Telephone : /
Fax : /
E-mail address : /

Emergency telephone number

Emergency phone : /

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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

Suitable Fire Extinguishing Media	: Foam, carbon dioxide, dry chemical extinguishers.
Characteristic	: 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.
Hazardous combustion products	: Carbon monoxide, carbon dioxide, nitrogen oxides and etc.
Fire-Fighting method & media	: Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.
Firefighters special protective equipment	: Wear full protective suit.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	: 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.
Environment precautions	: Prevent to enter sewage, soil, river and sea.
Clean up procedures	: 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 ³	3 mg/m ³	3 mg/m ³	3 mg/m ³
	Dermal	-	-	-	-
Tetrapropo	Inhalation	No hazard identified	85 mg/m ³	No hazard identified	85 mg/m ³

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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 ³	No hazard identified	6.1 mg/m ³	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)
Dodecamethylcyclohexasiloxane	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
Dodecamethylcyclhexasiloxane	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.