GREEN VALLEY LABORATORY

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878, Regulation (EC) No 1272/2008 (CLP), and the OSHA Hazard Communication Standard, 29 CFR 1910.1200

SECTION 1 - Identification

1.1 Product identifier

GHS Product Identifier	BioQuat SG
INCI Name	Polyquaternium-81
Other means of identification	polySuga Quat S-1210P
Chemical description	Quaternised polymeric alkyl polyglucoside, aqueous solution
CAS No.	1309865-12-0
Product form	Mixture - liquid

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

Identified use(s)	Conditioning surfactant for cosmetic and personal care formulations. Industrial and professional use.
Uses advised against	Other than identified

1.3 Details of the supplier of the Safety Data Sheet

Supplier Name	Green Valley Laboratory
Address	435 Hartford Pike, Killingly, CT 06241, USA
Contact	Help@dauphineorganics.com
Phone	n/a

1.4 Emergency telephone number

Emergency Phone No.	CHEMTREC Emergency Call Center +1 800-424-9300 (US & Canada) - +1 703-527-3887 (Europe)

SECTION 2 - Hazard Identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008 (CLP) - Physical hazards	Not classified
Regulation (EC) No 1272/2008 (CLP) - Human health	Eye Irrit. 2, H319
Regulation (EC) No 1272/2008 (CLP) - Environment	Not determined - see Section 12
OSHA Hazard Communication Standard, 29 CFR 1910.1200	Serious eye damage / eye irritation, Category 2A

Classification basis: no safety data sheet specific to this trade material was available at the date of issue. The classification above is taken by read-across from the published safety data sheet for the adjacent grade in the same polymeric alkyl polyglucoside quaternary series (Polyquaternium-80, CAS 1309865-14-2), supported by the published eye and skin irritation test data for this grade summarised in Section 11. It is conservative and should be confirmed against material-specific data when these are supplied.

2.2 Label elements

Basis	According to Regulation (EC) No 1272/2008 (CLP)
Signal word	WARNING

Hazard statement	H319 - Causes serious eye irritation
Hazard Pictogram	

Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling.
P280 - Wear eye and face protection.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice and attention.

2.3 Other hazards

No other hazards identified.

SECTION 3 - Composition / Information on Ingredients

3.2 Mixtures

Ingredient	%W/W	CAS No.	Classification (EC) No 1272/2008
Polyquaternium-81	30 (typical solids)	1309865-12-0	Eye Irrit. 2, H319
Water	Balance	7732-18-5	Not classified

Polyquaternium-81 is a polymerised alkyl polyglucoside backbone derivatised with quaternary ammonium groups (stearyl and lauryl alkyl chains). The full text of each hazard statement is given in Section 16.

Note on the classification column: no published classification exists for CAS 1309865-12-0 as such. The entry shown is the read-across classification described in Section 2.1 and is applied here to the classifiable component of the mixture; it is not a substance classification taken from a source specific to this CAS number.

SECTION 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Ingestion	Rinse mouth thoroughly with water. If symptoms persist, call a physician. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Redness. May cause redness and tearing of the eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media	Dry chemical, carbon dioxide or water spray.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: carbon oxides, nitrogen oxides (NOx), hydrogen chloride gas. Sensitivity to mechanical impact: none. Sensitivity to static discharge: none.

5.3 Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill or leak.

6.2 Environmental precautions

Prevent product from entering drains. Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up	Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

6.4 Reference to other sections

For further information refer to Sections 8 and 13.

SECTION 7 - Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes or clothing. Use personal protection equipment. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep from freezing. Store in sealed containers at temperatures not exceeding 49 °C (120 °F).

7.3 Specific end use(s)

Conditioning surfactant for cosmetic and personal care formulations. No further information available.

SECTION 8 - Exposure Controls / Personal Protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies. No reportable biological exposure limits apply.

8.2 Exposure controls

Engineering controls	Showers. Eyewash stations. Ventilation systems.
Eye / face protection	Wear safety glasses with side shields (or goggles).
Hand protection	Wear suitable gloves.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear liquid
Colour, Gardner	2
Odour	Characteristic
Odour threshold	No information available
pH (10% aqueous)	7.0
Solids, %	30.0

Viscosity, cP	500
Water solubility (a)	Soluble in water
Melting point / freezing point (a)	Less than or equal to 0 °C (32 °F)
Initial boiling point (a)	Greater than 100 °C (212 °F)
Flash point (a)	Greater than 93.3 °C (200 °F), Pensky-Martens Closed Cup
Flammability (a)	Not flammable
Autoignition temperature (a)	Not applicable
Partition coefficient (a)	Not applicable - mixture
Explosive properties (a)	No information available
Oxidising properties (a)	No information available

9.2 Other information

(a) Value taken by read-across from the published safety data sheet for the adjacent grade in the same polymeric alkyl polyglucoside quaternary series (Polyquaternium-80); indicative only. All other values are the published typical properties for this grade and are not lot-specific analytical results.

SECTION 10 - Stability and Reactivity

10.1 Reactivity	No information available.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None under normal processing.
10.4 Conditions to avoid	Extremes of temperature and direct sunlight. Freezing.
10.5 Incompatible materials	None known based on information supplied.
10.6 Hazardous decomposition products	Carbon monoxide. Carbon dioxide. Hydrocarbons.

SECTION 11 - Toxicological Information

11.1 Information on likely routes of exposure

Eye contact	Causes serious eye irritation.
Skin contact	No specific test data indicating dermal irritation.
Inhalation	No specific test data for the mixture is available.
Ingestion	No specific test data for the mixture is available.

11.2 Published test data for this grade

Endpoint	Method	Result
Eye irritation	HET-CAM (Hen's Egg Test - Chorioallantoic Membrane), score 12.50	Moderate ocular irritation potential
Acute skin irritation	48 hour occlusive skin patch test, 53 human subjects	No visible skin reaction; no potential for dermal irritation
Skin sensitisation	Repeat Insult Patch Test (HRIPT)	No potential for dermal irritation or allergic contact sensitisation

11.3 Delayed, immediate and chronic effects

Skin corrosion / irritation	Based on available data, the classification criteria are not met.
Serious eye damage / irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.

Aspiration hazard	Based on available data, the classification criteria are not met.

Except where marked as published test data for this grade, the statements above are taken by read-across from the published safety data sheet for the adjacent grade in the same series.

SECTION 12 - Ecological Information

12.1 Toxicity

No ecotoxicological data specific to this trade material are available. The following data are carried across from the published safety data sheet for the adjacent grade in the same polymeric alkyl polyglucoside quaternary series (Polyquaternium-80, CAS 1613322-25-0, alternate CAS 1309865-14-2), on the same basis as Sections 2, 4 to 8, 10, 11, 13 and 14.

Fish - Pimephales promelas, 96 h	EC50 = 2.4 mg/L (read-across, Polyquaternium-80)
Crustacea - Daphnia magna, 48 h	EC50 = 34 mg/L (read-across, Polyquaternium-80)
Algae / aquatic plants	No data available
Toxicity to microorganisms	No data available

Note on the read-across source: that safety data sheet is internally inconsistent on aquatic hazard. It states "Toxic to aquatic life" under other information in Section 2, while its Section 12 summary states that the material is not considered to be harmful to aquatic life. The fish EC50 of 2.4 mg/L falls within the Aquatic Acute Category 2 band of Regulation (EC) No 1272/2008 (1 mg/L < L(E)C50 ≤ 10 mg/L). The environmental classification of this material is therefore reported as not determined in Section 2.1 pending material-specific aquatic toxicity data, and the material is to be handled as if harmful to aquatic life.

12.2 Persistence and degradability

No data specific to this material are available. Read-across (Polyquaternium-80): inherently biodegradable and ultimately biodegradable.

12.3 Bioaccumulative potential

No data specific to this material are available. Read-across (Polyquaternium-80): bioconcentration factor (BCF) < 500; not likely to bioaccumulate.

12.4 - 12.6 Mobility in soil, PBT and vPvB assessment, other adverse effects

No data are available. Avoid release to the environment and prevent product from entering drains.

SECTION 13 - Disposal Considerations

13.1 Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14 - Transport Information

DOT (49 CFR)	Not regulated
IATA	Not regulated
IMDG	Not regulated
Special precautions for user	No additional information available

Transport status for the modes listed above is taken by read-across from the published safety data sheet for the adjacent grade in the same series. That document covers road/rail (49 CFR), air and sea transport only; European ADR and RID classification has not been determined for this material.

SECTION 15 - Regulatory Information

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

Regulation (EC) No 1272/2008 (CLP)	Eye Irrit. 2, H319 (see Section 2 for the basis)
OSHA Hazard Communication Standard, 29 CFR 1910.1200	Classified - serious eye damage / eye irritation, Category 2A

Inventory status as published for this grade

United States	TSCA - listed
Canada	NDSL - listed

European Union	REACH - listed
New Zealand	NZIoC - listed

Listing status for other jurisdictions has not been verified and is therefore not stated.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this mixture.

SECTION 16 - Other Information

Full text of hazard statements referred to in Sections 2 and 3

H319 - Causes serious eye irritation.

Regulations and public references used

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP)
Regulation (EC) No 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
OSHA Hazard Communication Standard, 29 CFR 1910.1200
US DOT 49 CFR, IATA and IMDG transport regulations
Published technical data sheet for this grade (Polyquaternium-81, CAS 1309865-12-0): typical properties, irritation and sensitisation testing, storage conditions and inventory listings
Published safety data sheet for the adjacent grade in the same polymeric alkyl polyglucoside quaternary series (Polyquaternium-80, CAS 1309865-14-2), used for read-across where no data specific to this grade were available

Abbreviations

CLP: Classification, Labelling and Packaging. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. HET-CAM: Hen's Egg Test - Chorioallantoic Membrane. HRIPT: Human Repeat Insult Patch Test. STOT: specific target organ toxicity. PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative. TSCA: Toxic Substances Control Act inventory. NDSL: Canadian Non-Domestic Substances List. NZIoC: New Zealand Inventory of Chemicals.

Preparation note

This Safety Data Sheet was compiled from the published technical data sheet for this grade together with the published safety data sheet for the adjacent grade in the same series. No safety data sheet specific to this trade material was available at the date of issue. Review and update this document when material-specific safety data are received.

DISCLAIMER

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Green Valley Laboratory I 435 Hartford Pike, Killingly, CT 06241, USA I Help@dauphineorganics.com