



SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

GUARDIAN SPA

Product no.

230001,

REACH registration number

Not applicable

Other means of identification

Authorization number:

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

Relevant identified uses of the substance or mixture

Disinfection chemical for use in SPAs

Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

APPEARTEX/ GUARDSON AB

Sofierogatan 3A

412 51 GÖTEBORG

SWEDEN

Tel: +46 31 703 59 50

Fax: +46 31 703 59 51

Contact person

Alfredo Diez

E-mail

Alfredo @appeartex.com

SDS date

08-12-2014

SDS Version

1.0

1.4. Emergency telephone number

Use your national or local emergency number

See section 4 "First aid measures"

SECTION 2: Hazards identification

▼ 2.1. Classification of the substance or mixture

Harmful. Dangerous for the environment. // R51/53, R48/20, R43, R40, R36

See full text of H/R-phrases in section 2.2.

2.2. Label elements

▼ Hazard pictogram(s)



▼ Hazard statement(s)

Irritating to eyes. (R36)



According to EC-Regulation 1907/2006 (REACH)

Limited evidence of a carcinogenic effect. (R40)
 May cause sensitisation by skin contact. (R43)
 Harmful: danger of serious damage to health by prolonged exposure through inhalation. (R48/20)
 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (R51/53)

▼ Safety statement(s)	General Prevention	Keep out of the reach of children. (S2) Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). (S23) Do not empty into drains. (S29) Wear suitable gloves. (S37) Avoid release to the environment. Refer to special instructions/safety data sheets. (S61) Avoid contact with skin and eyes. (S24/25)
	Response	If swallowed, seek medical advice immediately and show this container or label. (S46)
	Storage	-
	Disposal	Dispose of this material and its container to hazardous or special waste collection point. (S56)

▼ Identity of the substances primarily responsible for the major health hazards

Active substance: Methanamine, N-methyl-, polymer med 2-(chloromethy)oxirane 30 g/L
 Active substance: Poly(iminocarbonimidoyliminocarbonimidoylimino-1,6-hexanediyl), hydrochloride 78 g/L

2.3. Other hazards

▼ Additional labelling

Contains Modifierad Polyetylenimin. May produce an allergic reaction.

▼ Additional warnings

Tactile warning.

VOC

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SECTION 3: Composition/information on ingredients

▼ 3.1/3.2. Substances

NAME:	Poly(iminocarbonimidoyliminocarbonimidoylimino-1,6-hexanediyl), hydrochloride
IDENTIFICATION NOS.:	CAS-no: 32289-58-0 Index-no: 616-207-00-X
CONTENT:	5-15%
DSD CLASSIFICATION:	Carc3;R40 Xn;R20/22 Xi;R41 R43 T;R48/23 N;R50/53
CLP CLASSIFICATION:	Acute Tox. 4, STOT RE 1, Eye Dam. 1, Skin Sens. 1, Carc. 2, Aquatic Acute 1, Aquatic Chronic 1 H302, H317, H318, H351, H372, H400, H410 (M-acute = 10) (M-chronic = 10)
NAME:	Methanamine, N-methyl-, polymer med 2-(chloromethy)oxirane
IDENTIFICATION NOS.:	CAS-nr: 25988-97-0
CONTENT:	1-5%
DSD CLASSIFICATION:	Xn;R22 N;R50/53
CLP CLASSIFICATION:	Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1 H302, H400, H410
NAME:	Modifierad Polyetylenimin
IDENTIFICATION NOS.:	CAS-no: 1003006-64-1
CONTENT:	<1%
DSD CLASSIFICATION:	Xn;R22 Xi;R41 R43 N;R50/53
CLP CLASSIFICATION:	Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1 H302, H317, H318, H400, H410
NAME:	Glutaminsyra N,N-diättiksyra, tetranatriumsalt
IDENTIFICATION NOS.:	CAS-nr: 051981-21-6
CONTENT:	<1%
DSD CLASSIFICATION:	-
CLP CLASSIFICATION:	-

(*) See full text of H/R-phrases in chapter 16. Occupational limits are listed in section 8, if these are available.

Other informations

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor, if in doubt about the injured person's condition or if the symptoms continue. Never give an unconscious person water or similar.

Inhalation

Get the injured person into fresh air. Make sure there is always someone with the injured person. Prevent shock by keeping the injured person warm and calm. If the person stops breathing, give mouth-to-mouth resuscitation. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes with water (20-30°C) for at least 15 minutes. Call a doctor.

Ingestion

Give the person plenty to drink and stay with the person. If the person feels unwell, contact a doctor immediately and take this safety data sheet or the label from the product with you. Do not induce vomiting unless recommended by the doctor. Hold head facing down so that no vomit runs back into the mouth and throat.

Burns

Rinse with water until the pain stops and continue for 30 minutes.

4.2. Most important symptoms and effects, both acute and delayed

Carcinogenic effects: This product contains substances which are considered or proven to be carcinogenic. The substances are either classified as carcinogenic or are listed by the Danish Working Environment Authority as substances thought to be carcinogenic. These substances are all covered by the DWEA's regulations on work involving the risk of cancer. The danger may lie in inhalation, skin contact or ingestion.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

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

No special

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

No special

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

SECTION 6: Accidental release measures



According to EC-Regulation 1907/2006 (REACH)

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances. Avoid inhalation of vapours from waste material.

6.2. Environmental precautions

Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. Avoid discharge to lakes, streams, sewers, etc. In the event of a leakage to the surroundings, contact the local environmental authorities.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

6.4. Reference to other sections

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original.

Storage temperature

NA

7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

No data available

DNEL / PNEC

No data available.

8.2. Exposure controls

No control is necessary if the product is used in a normal way.

General recommendations

Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom.

Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

Exposure limits

There are no maximum exposure limits for the substances contained in this product.

Appropriate technical measures

Take ordinary precautions when using the product. Avoid inhalation of gas or dust.

Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment





According to EC-Regulation 1907/2006 (REACH)

Generally

Only CE-marked personal protection equipment should be used. Use only CE marked protective equipment.

Respiratory Equipment

If the ventilation at the work place is not sufficient, use a half or whole mask with an appropriate filter or an air-supplied respiratory protector. The choice depends on the concrete work situation and how long you will be using the product.

▼ Skin protection

Special work clothing should be used.

Hand protection

Use protective gloves. The concrete work situation is not known. Contact the suppliers of the gloves for help on the glove type. Please note that elastic gloves stretch when used. The thickness of the gloves, and therefore their penetration time, will be reduced. Moreover, the temperature of the glove in use is about 35°C, while the standard test, EN 374-3, is done at 23°C. The penetration time is therefore reduced by a factor of 3.

Eye protection

Use face shield. Use safety glasses with a side shield as an alternative.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Form	Colour	Odour	pH	Viscosity	Density (g/cm ³)
Liquid		-	5-6	-	-

Phase changes

Melting point (°C)	Boiling point (°C)	Vapour pressure (mm Hg)
-	-	-

Data on fire and explosion hazards

Flashpoint (°C)	Ignition (°C)	Self ignition (°C)
-	-	-

Explosion limits (Vol %)	Oxidizing properties
-	-

Solubility

Solubility in water	n-octanol/water coefficient
Soluble	-

9.2. Other information

Solubility in fat	Additional information
-	N/A

SECTION 10: Stability and reactivity**10.1. Reactivity**

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section on "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

Do not expose to heat (e.g. sunlight), because it can lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reductants agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**



According to EC-Regulation 1907/2006 (REACH)

Acute toxicity

Substance	Species	Test	Route of exposure	Result
PHMB	Rat	OECD 423	Oral	>2000 mg/kg
PHMB(Rat	OECD 402	Dermalt	>2000 mg/kg
PHMB (20%)	Rat	OECD 403	Inanadning aerosol	1,85 mg/kg
(PHMB (20%))	Guinea Pig	OECD 406	Dermalt	inte hud-sensibiliserande
Betaines, C12-14-alkyldimethyl	Rat		Oral	>2000 uppskattat värde.
Modifierad polyetylenimin	Rat	OECD 423	Oral	500 mg/kg.
Modifierad polyetylenimin	Rat		Dermal	>2000 mg/kg.
Poly(iminocarbonimidoyliminoca..l	Rat	LD50	Oral	>2000 mg/kg
	Rat	LD50	Oral	>2000 mg/kg

Skin corrosion/irritation

No data available

▼ Serious eye damage/irritation

Irritating to eyes.

Respiratory or skin sensitisation

May cause sensitisation by skin contact.

Germ cell mutagenicity

No data available.

Carcinogenicity

Limited evidence of a carcinogenic effect.

Reproductive toxicity

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

▼ Long term effects

Carcinogenic effects: This product contains substances which are considered or proven to be carcinogenic. The substances are either classified as carcinogenic or are listed by the Danish Working Environment Authority as substances thought to be carcinogenic. These substances are all covered by the DWEA's regulations on work involving the risk of cancer. The danger may lie in inhalation, skin contact or ingestion.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Test duration	Result
PHMB	Fisk	OECD 203	96h	LD50=1-10mg/l
PHMB	Daphnia	OECD 202	96h	EC50=0,1mg/l
PHMB	Alg	OECD 201	72h	EC50=1-10mg/l
PHMB	Aktiv slam	OECD 209	3h	EC50=161mg/l
PHMB	daggmask	OECD 207	3h	LC50= >1000mg/kg jord
Betaines, C12-14-alkyldimethyl	Oncorhyncus nykiss		96h	LC50=1-10mg/l
Betaines, C12-14-alkyldimethyl	Daphnia		48h	EC50=1-10mg/l
Betaines, C12-14-alkyldimethyl	Alg		72h	IC50=1-10mg/l



According to EC-Regulation 1907/2006 (REACH)

Modifierad polyetylenimin	Fisk	96h	LC50=0,15mg/l
Modifierad polyetylenimin	Fisk		NOEC=0,1mg/l
Modifierad polyetylenimin	Daphnia	48h	EC50=0,37mg/l
Modifierad polyetylenimin	Alg	72h	EbC50=0,68mg/l
Modifierad polyetylenimin	Alg		ErC50=1,5mg/l
Modifierad polyetylenimin	Alg		NOEC=0,4mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data available.			

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BFC
No data available.			

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

This product contains ecotoxic substances which can have damaging effects on water-organisms. This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

The product is covered by the regulations on dangerous waste.

Waste

EWC code
070704

Specific labelling

-

Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

SECTION 14: Transport information

Not listed as dangerous goods under ADR and IMDG regulations.

14.1 – 14.4

ADR/RID	14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group	Notes		
	3082	Environmentally Hazardous substnaces N.O.S.:	9	III			
IMDG	UN-no.	Proper Shipping Name	Class	PG*	EmS	MP**	Hazardous constituent
	3082	Environmentally Hazardous substnaces N.O.S.:	9	III	F_A F-S		Polyhexametylene biguanide
IATA/ICAO	UN-no.	Proper Shipping Name	Class	PG*			
	3082	Environmentally Hazardous substnaces N.O.S.:	9	III			

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant



According to EC-Regulation 1907/2006 (REACH)

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC. For exceptions, see the Danish Working Environment Authority's Executive Order No. 239 of 6 April 2005.

Demands for specific education

-

Additional information

-

Sources

EC regulation 1907/2006 (REACH)

Directive 2000/532/EC

EC Regulation 1272/2008 (CLP)

15.2. Chemical safety assessment

No

SECTION 16: Other information'

Full text of H/R-phrases as mentioned in section 3

R22 - Harmful if swallowed.

R40 - Limited evidence of a carcinogenic effect.

R41 - Risk of serious damage to eyes.

R43 - May cause sensitisation by skin contact.

R20/22 - Harmful by inhalation and if swallowed.

R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H319 - Causes serious eye irritation.

H351 - Suspected of causing cancer.

H372 - Causes damage to organs through prolonged or repeated exposure.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

H412 - Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

Other symbols mentioned in section 2

-

Other

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

The safety data sheet is validated by

Alfredo Diez, Appeartex AB

Date of last essential change (First cipher in SDS version)

08-12-2014

Date of last minor change (Last cipher in SDS version)



GUARDSON

According to EC-Regulation 1907/2006 (REACH)

08-12-2014

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