

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: REWOQUAT W 3690 PG

Chemical name: Solution of a cationic surfactant

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses: Industrial Use

industrial Use

```
Uses advised against: None known.
```

1.3 Details of the supplier of the safety data sheet

Company Name	: Evonik Nutrition & Care GmbH Goldschmidtstr. 100 45127 Essen Germany
Telephone	: +49 201 173 01
Fax	: +49 201 173 3000
E-mail	: productsafety-cs@evonik.com

1.4 Emergency telephone number:

24-Hour Health	:	+49 2365 49 2232
Emergency		+49 2365 49 4423 (Fax)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards		
Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye irritation Environmental Hazards	Category 2	H319: Causes serious eye irritation.
Acute hazards to the aquatic environment	Category 1	H400: Very toxic to aquatic life.
Chronic hazards to the aquatic environment	Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label Elements





Signal Words:	Warning
Hazard Statement(s):	H315: Causes skin irritation. H319: Causes serious eye irritation. H410: Very toxic to aquatic life with long lasting effects.
Precautionary Statement	ts
Prevention:	P273: Avoid release to the environment. P280: Wear protective gloves/eye protection/face protection.
Response:	P302+P352: IF ON SKIN: Wash with plenty of water. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
2.3 Other hazards	None known.

SECTION 3: Composition/information on ingredients

Chemical name:

Solution of a cationic surfactant

3.2 Mixtures

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Imidazolium compounds, 2-C17- unsatdalkyl- 1-(2-C18- unsatd. amidoethyl)- 4,5-dihydro-N- methyl, Me sulfates	>=75 - <=100%	1335203-21- 8	931-745-8	01- 2119582803- 32	No data available.	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

This substance is listed as SVHC

Classification

Chemical name	Classification	Notes
Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	Skin Irrit.: 2: H315; Eye Irrit.: 2: H319; Aquatic Acute: 1: H400; Aquatic Chronic: 1: H410;	No data available.

CLP: Regulation No. 1272/2008.

The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures



General:	Remove contaminated clothing immediately and store/dispose of safely	
4.1 Description of first aid meas Inhalation:	ures Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.	
Skin Contact:	In case of contact with skin wash off immediately with plenty of water Consult a doctor if skin irritation persists.	
Eye contact:	In case of contact with eyes rinse thoroughly with water. Summon a doctor immediately.	
Ingestion:	Thoroughly clean the mouth with water Call for medical advice immediately; show this safety data sheet	
4.2 Most important symptoms and effects, both acute and delayed:	The following symptoms may occur: - gastrointestinal complaints	
4.3 Indication of any immediate Hazards:	medical attention and special treatment needed No data available.	
Treatment:	If swallowed, flush stomach.	
SECTION 5: Firefighting measure	S	
General Fire Hazards:	Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Cool endangered containers with water spray jet.	
5.1 Extinguishing media Suitable extinguishing media:	foam, carbon dioxide, dry powder, water spray.	
Unsuitable extinguishing media:	Full water jet	

5.2 Special hazards arising from the substance or mixture:	In the event of fire the following can be released: - Nitrogen oxides (NOx) - Sulphur oxides - carbon dioxide, carbon monoxide
5.3 Advice for firefighters Special fire fighting procedures:	Cool endangered containers by water spray Vapours can form an explosive mixture with air.
Special protective equipment for fire-fighters:	Do not inhale explosion and/or combustion gases Use self-contained breathing apparatus and wear protective suit
SECTION 6: Accidental release m	easures
6.1 Personal precautions, protective equipment and emergency procedures:	High risk of slipping due to leakage/spillage of product. Use personal protective equipment.
6.1.1 For non-emergency personnel:	No data available.

6.1.2 For emergency No data available. responders:



6.2 Environmental Precautions:	Do not allow to enter drains or waterways Do not discharge into the subsoil/soil.
6.3 Methods and material for containment and cleaning up:	Pick up with absorbent material (e.g. general-purpose binder). Dispose of absorbed material in accordance with the regulations.
6.4 Reference to other sections:	For further information on exposure monitoring and disposal see sections 8 and 13.
SECTION 7: Handling and storage	:
7.1 Precautions for safe handling:	Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. when working with the product vapors/aerosols may be evolved; therefore a local exhaust and ventilation are recommended.
7.2 Conditions for safe storage, including any incompatibilities:	Keep container tightly closed in a cool, well-ventilated place. Protect from heat and direct sunlight
7.3 Specific end use(s):	See chapters "Protective Measures for Safe Handling" and "Safe Storage Conditions" or, if available, the enclosed Exposure Scenario

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

DNEL-Values

Critical component	Туре	Route of Exposure	Health Warnings	Remarks
Imidazolium compounds, 2- C17-unsatdalkyl-1-(2-C18- unsatd. amidoethyl)-4,5- dihydro-N-methyl, Me sulfates	Workers	inhalation, long term	systemic effects; 44 mg/m3	
	Workers	dermal, long-term	systemic effects; 12.5 mg/kg	
	Workers	inhalative, acute	systemic effects; 132 mg/m3	
	Consumers	oral, long-term	systemic effects; 7.5 mg/kg	
	Consumers	inhalation, long term	systemic effects; 13 mg/m3	
	Consumers	dermal, long-term	systemic effects; 7.5 mg/kg	
	Consumers	dermal, acute	acute effects;	No DNEL/DMEL values on file.
	Consumers	inhalative, acute	local effects;	No DNEL/DMEL values on file.
	Consumers	inhalative, acute	systemic effects; 39 mg/m3	

PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
Imidazolium compounds, 2- C17-unsatdalkyl-1-(2-C18- unsatd. amidoethyl)-4,5- dihydro-N-methyl, Me sulfates	Fresh water	2 µg/l	



marine water	0.2 μg/l	
Wastewater treatment	5.64 mg/l	
plant		
freshwater sediment	18.5 mg/kg	
marine water sediment	1.85 mg/kg	
soil	15.1 mg/kg	

8.2 Exposure controls

Appropriate Engineering Controls:	No data available.	
Individual protection meas	sures, such as personal protective equipment	
Eye/face protection:	tightly fitting safety glasses	

Hand Protection:	Additional Information: Examples of suitable gloves are those made by the company Kächele-Cama Latex GmbH, Am Kreuzacker 9, D-36124 Eichenzell, e-mail vertrieb@kcl.de, with subsequent specification (test according to EN374); specific workplace conditions must be separately taken into account., These recommendations apply only to the product mentioned in the material data safety sheet that we supply and the purpose that we indicate. Material: gloves made of natural latex Break-through time: 480 min Glove thickness: 1 mm Material: gloves made of chloroprene (CR, e.g. Neoprene) Break-through time: 480 min Glove thickness: 0.65 mm Material: gloves made of nitril (NBR) Break-through time: 480 min Glove thickness: 0.4 mm Material: gloves made of butyl (IIR) Break-through time: 480 min Glove thickness: 0.7 mm Material: protective gloves made of fluorinated rubber (FKM, e.g. Viton) Break-through time: 480 min Glove thickness: 0.7 mm
Skin and Body Protection:	light protective clothing a protective ointment is recommended.
Respiratory Protection:	in case of formation of vapours/aerosols: Respiratory protection mask with combination filter A-P2
Hygiene measures:	Remove soiled or soaked clothing immediately. Keep away from foodstuffs and beverages. Do not eat, drink or smoke when working.
Environmental Controls:	The environmental regulations on the control and monitoring of environmental exposures are to be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Appearance

Appearance	
Physical state:	liquid
Form:	liquid, transparent
Color:	Yellow
Odor:	Characteristic
Odor Threshold:	not determined
pH:	4.0 - 5.5 (50 g/l, 20 °C) Isopropanol/water
Freezing point:	approx15 °C



Boiling Point:	not measured
Flash Point:	110 °C (DIN EN 22719 (DIN 51758))
Evaporation Rate:	not determined
Flammability (solid, gas):	no data available
Flammability Limit - Upper (%):	12.6 %(V) Solvent
Flammability Limit - Lower (%):	2.6 %(V) Solvent
Vapor pressure:	Not measured
Vapor density (air=1):	not measured
Density:	approx. 0.998 g/cm3 (20 °C) (DGF-C-IV-2)
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	(20 °C) Dispersible
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Self Ignition Temperature:	not determined
Decomposition Temperature:	not measured
Kinematic viscosity:	No data available.
Dynamic viscosity:	approx. 500 mPa.s (20 °C, Brookfield)
9.2 Other information	
Explosive properties:	not determined
Oxidizing properties:	not determined
Minimum ignition temperature:	not measured

SECTION 10: Stability and reactivity

Metal Corrosion:

10.1 Reactivity:	see section "Possibility of hazardous reactions"
10.2 Chemical Stability:	The product is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Evolution of explosive gases/vapours.
10.4 Conditions to avoid:	Unknown
10.5 Incompatible Materials:	Unknown
10.6 Hazardous Decomposition Products:	None with proper storage and handling.

not measured

SECTION 11: Toxicological information

Information on likely routes of exposure	
Inhalation:	If handled correctly, not a relevant route of exposure. Information on effects are given below.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.
Ingestion:	If handled correctly, not a relevant route of exposure. Information on effects are given below.

11.1 Information on toxicological effects



Acute toxicity

-	
Oral Product:	LD 50 (Rat): > 15,200 mg/kg Figure relates to the main component LD 50 (Rat): > 2,000 mg/kg (OECD 423)
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	LD 50 (Rat): > 15,200 mg/kg LD 50 (Rat): > 2,000 mg/kg LD 50 (Rat): > 2,000 mg/kg
Dermal Product:	LD 50 (Rat) > 2,000 mg/kg (OECD Test Guideline 402) Figure relates to the main component, (analogy)
Components: Imidazolium compounds, 2-C17- unsatdalkyl-1-(2-C18- unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	LD 50 (Rat): > 2,000 mg/kg
Inhalation Product:	no data available
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
Repeated dose toxicity Product: Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	NOAEL (Rat, Oral, in the feed.): 100 mg/kg NOAEL (Rat, Oral, in the feed.): 100 mg/kg
Skin Corrosion/Irritation: Product:	Irritating.
	OECD 404 (Rabbit): Irritating. Figure relates to the main component
Components: Imidazolium compounds, 2-C17- unsatdalkyl-1-(2-C18- unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	OECD 404 (Rabbit): Irritating.
Serious Eye Damage/Eye Irritation:	Irritant
Product: Components:	OECD 405 (rabbit eye): Irritant (analogy) Figure relates to the main component



Imidazolium compounds, 2-C17- unsatdalkyl-1-(2-C18- unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	Irritating. OECD 405 (Rabbit): Irritating.
Respiratory or Skin Sensitization: Product:	non-sensitizing
	(Guinea Pig)non-sensitizing Figure relates to the main component
Components: Imidazolium compounds, 2-C17- unsatdalkyl-1-(2-C18- unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	(Guinea Pig)non-sensitizing
Germ Cell Mutagenicity	
In vitro Product:	bacterial reverse mutation assay (e.g. Ames test) (OECD 471): negative Values refer to the main component. gene mutation (OECD 476): negative Values refer to the main component.
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	Ames test (OECD 471): negative The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). gene mutation (OECD 476): negative
In vivo Product:	No data available.
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
Carcinogenicity Product:	No data available.
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
Reproductive toxicity Product:	No data available.
Components:	



Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
Specific Target Organ Toxici Product:	i ty - Single Exposure no data available
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
Specific Target Organ Toxici Product:	i ty - Repeated Exposure no data available
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
Aspiration Hazard Product:	Not classified
Components: Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
Other adverse effects:	The substance has no mutagenic activity (Ames Test) Toxicological data

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product:

LC 50 (Leuciscus idus, 96 h): 1.8 mg/l (OECD 203) Figure relates to the main component

refer to the main component. Regulation (EC) No. 1272/2008 Causes skin

irritation. Causes serious eye irritation.

Components

Imidazolium compounds, 2-C17-unsatd.-alkyl-1-(2-C18-unsatd. amidoethyl)-4,5-dihydro-N-methyl, Me

LC 50 (Leuciscus idus (Golden orfe), 96 h): 1.8 mg/l (OECD 203)

sulfates

Aquatic Invertebrates Product:

EC 50 (Daphnia magna, 48 h): 0.105 mg/l (OECD 202) Figure relates to the main component



Components Imidazolium

EC 50 (Daphnia magna (Water flea), 48 h): 0.105 mg/l (OECD 202)
No data available.
No data available.
EC 50 (activated sludge, 3 h): 564 mg/l (OECD 209) Figure relates to the main component
EC 50 (activated sludge, 3 h): 564 mg/l (OECD 209)
No data available.
No data available.
NOEC (Daphnia magna, 63 d): > 0.1 mg/l Information refers to the main component.
NOEC (Daphnia magna (Water flea), 21 d): > 0.145 mg/l (OECD 211) Own test result.
No data available.
No data available.



12.2 Persistence and Degradability

Biodegradation Product:	The product is not readily biodegradable according to OECD criteria.
BOD/COD Ratio Product	No data available.
Components Imidazolium compounds, 2-C17-unsatdalkyl-1-(2- C18-unsatd. amidoethyl)- 4,5-dihydro-N-methyl, Me sulfates	No data available.
12.3 Bioaccumulative potential Product:	No data available.
12.4 Mobility in soil:	No data available.
12.5 Results of PBT and vPvB assessment: Imidazolium compounds, 2-C17- unsatdalkyl-1-(2- C18-unsatd. amidoethyl)-4,5- dihydro-N-methyl, Me sulfates	No data available. Non-classified vPvB substance Non- classified PBT substance
12.6 Other adverse effects:	Do not allow to enter soil, waterways or waste water canal. Ecological data refer to the main components The product is classified as extremely hazardous to waters (according to the German Regulation on the Classification of Substances Hazardous to Waters (WwSV).

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
General information:	No data available.
Disposal methods:	In accordance with local authority regulations, take to special waste incineration plant
Contaminated Packaging:	If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

SECTION 14: Transport information

14.1 UN number			
ADR	:	UN 3082	
RID	:	UN 3082	
IMDG	:	UN 3082	
ΙΑΤΑ	:	UN 3082	
14.2 UN proper shipping name			
ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
			11/14



		(quaternary ammonium compounds)
RID		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
		N.O.S.
		(quaternary ammonium compounds)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
		(quaternary ammonium compounds)
ΙΑΤΑ	:	Environmentally hazardous substance, liquid, n.o.s. (quaternary ammonium compounds)
14.3 Transport haz	vard class(es)	(quaternaly animerian compound)
ADR		9
	:	
RID		9
IMDG	:	9
	:	9
14.4 Packing grou	p	
ADR Packing group	:	111
Classification (
	cation Number :	
Labels	:	9
RID Packing group	:	111
Classification (Code :	M6
Hazard Identifi Labels	cation Number :	90 9
IMDG		5
Packing group	:	III
Labels	:	9
EmS Code Remarks	:	F-A, S-F Stowage category A
		5 5 5
IATA (Cargo a		
Packing instrue aircraft)	ction (cargo :	964
Packing instruc		Y964
Packing group Labels	:	III 9MI
	ger and cargo	
aircraft)		
Packing instrue (passenger air		964
Packing instruct		Y964
Packing group Labels	:	
Labels 14.5 Environmenta	al hazards	9MI
ADR		
Environmental	ly hazardous :	yes
RID		
Environmental	ly hazardous :	yes
GB 202	20-06-08	



IMDG Marine pollutant : yes IATA (Passenger and cargo aircraft)

Environmentally hazardous : yes

IATA (Cargo aircraft only) Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:

E1. Hazardous to the aquatic environment 100 t 200 t

National Regulations

15.2 Chemical safety No chemical safety assessment was carried out for this product. **assessment:**

International regulations

SECTION 16: Other information

Abbreviations and acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; AGW - Occupational exposure limit; ASTM - American Society for Testing and Materials; AwSV - Ordinance on facilities for handling substances that are hazardous to water; BSB - Biochemical oxygen demand; c.c. - closed cup; CAS - Chemical Abstract Services; CESIO - European Committee of Organic Surfactants and their Intermediates; CSB - Chemical oxygen demand; DMEL - Derived minimum effect level; DNEL - Derived no effect level: EbC50 - median concentration in terms of reduction of growth; EC -Effective concentration; EINECS - European Inventory of Existing Commercial Chemical Substances; EN - European norm; ErC50 - median concentration in terms of reduction of growth rate: GGVSEB - German ordinance for road, rail and inland waterway transportation of dangerous goods; **GGVSee -** German ordinance for sea transportation of dangerous goods; GLP - Good Laboratory Practice; GMO - Genetic Modified Organism; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; ISO - International Organization For Standardization; LD/LC lethal dosis/concentration; LOAEL - Lowest observed adverse effect level; LOEL - Lowest observed effect level; M-Factor - multiplying factor; NOAEL - No observed adverse effect level; NOEC - no observed effect concentration; NOEL - no observed effect level; o.c. - open cup; OECD - Organisation for Economic Cooperation and Development; OEL - Occupational Exposure Limit; PBT - Persistent, bioaccumulative, toxic; PNEC - Predicted no effect concentration; REACH - REACH registration; RID - Convention concerning International Carriage by Rail; **SVHC** - Substances of Very High Concern; **TA** - Technical Instructions; TRGS - Technical Rules for Hazardous Substances; vPvB - very persistent, very



bioaccumulative; WGK - Water Hazard Class

Key literature references and No data available. sources for data:

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 as amended.	Classification procedure
Skin irritation, Category 2	On basis of test data
Serious eye irritation, Category 2	On basis of test data
Acute hazards to the aquatic environment, Category 1	On basis of test data
Chronic hazards to the aquatic environment, Category 1	On basis of test data

Wording of the H-statements in section 2 and 3

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Training information:

Comply with national laws regulating employee instruction.

SDS No.: Disclaimer:

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.