

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat



Version	1.0 / CN	VA-No.
Revision date	---	
Print Date	3/20/2017	
Page	1 / 11	

1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name	: REWOQUAT WE 18
Chemical Name	: Solution of a TEA-Esterquat

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

Relevant applications identified	: Additives for textile
Applications which are not advised	: None known.

1.3. Details of the supplier of the safety data sheet

Company	: Evonik Specialty Chemicals (Shanghai) Co. Ltd. 68 Lianhe Road (D3 Block), SCIP 201507 SHANGHAI China
Telephone	: +86 (0)21 6119-1586
Telefax	: +86 (0)21 6119-1264
E-mail	: productsafety-china@evonik.com

1.4. Emergency telephone number

Emergency information	: +86 532 8388-9090 (China 24h)
-----------------------	---------------------------------

2. Hazards identification**2.1. Emergency Overview**

Colour: yellowish, dull, Odour: of isopropanol, Vapours can form an explosive mixture with air., Evolution of explosive gases/vapours. Flammable. No health hazards known. No environmental hazards known. The following symptoms may occur: - gastrointestinal complaints, Depending on the dose inhalation and/or ingestion may cause: headache, inebriation, unconsciousness. If swallowed, flush stomach.

2.2. Classification of the substance or mixture**Classification according to GHS Regulation.**

Flammable liquids	Category 3	H226
Acute aquatic toxicity	Category 2	H401

2.3. Label elements

Symbol(s)	:
-----------	---



Signal word	: Warning
hazard statement	: H226 - Flammable liquid and vapour. H401 - Toxic to aquatic life.
Precautionary Statement (Prevention)	: P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking. P243 - Take precautionary measures against static discharge. P273 - Avoid release to the environment. P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
Precautionary Statement (Response)	: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat

Version **1.0 / CN**

VA-No.

Revision date

Print Date

3/20/2017

Page

2 / 11**2.4. Most important symptoms and effects, both acute and delayed**

Symptoms : The following symptoms may occur:
- gastrointestinal complaints
Depending on the dose inhalation and/or ingestion may cause: headache, inebriation, unconsciousness.

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

If swallowed, flush stomach.

2.6. Physical and chemical hazards

Flammable. Vapours can form an explosive mixture with air., Evolution of explosive gases/vapours.

2.7. Health hazards

No health hazards known.

2.8. Environmental hazards

No environmental hazards known.

2.9. Other hazards

None known

3. Composition/information on ingredients

Solution of a TEA-Esterquat

3.1. Substances

-

3.2. Mixtures

Information on ingredients / Hazardous components according to GHS.

Chemical Name	CAS-No.	Concentration	Classification
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	-	>= 75 %	H401, 2 , Acute aquatic toxicity
Propan-2-ol	67-63-0	< 25 %	H225, 2 , Flammable liquids H336, 3 , Specific Target Organ Toxicity - Single exposure H319, 2 , Eye irritation

Texts of H phrases, see in Chapter 16

4. First aid measures**4.1. Description of first aid measures**

General advice : Remove contaminated clothing immediately and store/dispose of safely

Inhalation : 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

Eye contact : In case of contact with eyes rinse thoroughly with plenty of water. If symptoms persist, seek medical advice.

Ingestion : Thoroughly clean the mouth with water
Call for medical advice immediately; show this safety data sheet

4.2. Most important symptoms and health effects.

Symptoms : The following symptoms may occur:
- gastrointestinal complaints
Depending on the dose inhalation and/or ingestion may cause: headache,

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat



Version	1.0 / CN	VA-No.
Revision date	---	
Print Date	3/20/2017	
Page	3 / 11	

inebriation, unconsciousness.

4.3. Advice for protecting first-aid responders

no data available

4.4. Special notes to physicians.

If swallowed, flush stomach.

5. Fire-fighting measures

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 (NO_x)
- Sulphur oxides
- carbon dioxide, carbon monoxide

5.3. Fire precautions and protective measures

Do not inhale explosion and/or combustion gases

Use self-contained breathing apparatus and wear protective suit

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

Cool endangered containers with water spray jet.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.

Use personal protective equipment.

Keep away sources of ignition.

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

Allow to set, take up mechanically

Dispose of absorbed material in accordance with the regulations.

6.4. Precautionary measures to prevent the occurrence of secondary disasters.

Do not allow to enter soil, waterways or waste water canal.

Shut off ignition sources; no flares, smoking or flames in hazard area.

6.5. Reference to other sections

For further information on exposure monitoring and disposal see sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : when working with the product vapors/aerosols may be evolved; therefore a local exhaust and ventilation are recommended.

Handling : no data available

Hygiene measures : Keep away from foodstuffs and beverages.
Wash hands before breaks and after work.

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat

Version **1.0 / CN**

VA-No.

Revision date

Print Date

3/20/2017

Page

4 / 11

Do not eat, drink or smoke when working.

General protective measures : Do not inhale gases/vapours/aerosols.

7.2. Conditions for safe storage, including any incompatibilities**Prevention of fire and explosion**

Information : Keep away from sources of ignition - no smoking
Take precautionary measures against electrostatic loading.
Cool endangered containers by water spray
Vapours can form an explosive mixture with air.

Storage

Information : none

Further information on storage conditions : Keep container tightly closed in a cool, well-ventilated place
Protect from heat and direct sunlight

8. Exposure controls/personal protection**8.1. Occupational Exposure Limits****Occupational Exposure Limits for Hazardous Agents in the Workplace (GBZ 2-2007)**

Ingredients	CAS-No.	Statutory basis/list (Update)	Value type (Form of exposure; Expressed as)	Value	Note
Propan-2-ol	67-63-0	CN OEL (03 2008)	PC-STEL	700 mg/m ³	
		CN OEL (03 2008)	PC-TWA	350 mg/m ³	

8.2. Biological occupational exposure limits

Contains no substance with biological exposure limit values (China).

8.3. Monitoring methods

no data available

8.4. Engineering controls

no data available

8.5. Personal protective equipment

Appropriate engineering controls : no data available

Eye protection : tightly fitting safety glasses

Hand protection : PVC gloves

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

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

Physical state : solid

Form : Pasty

Colour : yellowish, dull

Odour : of isopropanol

Odour Threshold : not measured

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat



Version	1.0 / CN	VA-No.
Revision date	---	
Print Date	3/20/2017	
Page	5 / 11	

pH	: 2.5 - 3.5 (20 °C) 50 g/l Remarks: Isopropanol/water
Melting point	: Melting range ca. 30 - 40 °C
Boiling point	: Boiling temperature ca. 83 °C Remarks: Solvent
Flash point	: 39 °C Method: DIN 53213
Evaporation rate	: not measured
Flammability	: no data available
Upper Explosion/Ignition Limit	: 12.0 %(V) Remarks: Solvent
Lower explosion limit	: 2.0 %(V) Remarks: Solvent
Vapour pressure	: 31.6 hPa (20 °C) Method: static Remarks: Solvent 137 hPa (50 °C) Method: static Remarks: Solvent 170 hPa (55 °C) Method: static Remarks: Solvent
Relative vapour density	: not measured
Relative density	: no data available
Solubility(ies)	: not measured
Water solubility	: (40 °C) Remarks: dispersible
Partition coefficient: n-octanol/water	: not measured
Autoignition temperature	: not measured
Thermal decomposition	: not measured
Viscosity, kinematic	: no data available

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat



Version	1.0 / CN	VA-No.
Revision date	---	
Print Date	3/20/2017	
Page	6 / 11	

Viscosity, dynamic	: not determined
Explosive properties	: not measured
Oxidising properties	: not measured
Density	: ca. 0.963 g/cm ³ (55 °C) Method: DGF-C-IV-2

9.2. Other information

Metal corrosion	: not measured
Ignition temperature	: 425 °C Remarks: Solvent

10. Stability and reactivity

10.1. Chemical stability

The product is stable under normal conditions.

10.2. Possibility of hazardous reactions

Evolution of explosive gases/vapours.

10.3. Conditions to avoid

Unknown

10.4. Incompatible materials

Unknown

10.5. Hazardous decomposition products

None with proper storage and handling.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: LD50 Species: Rat Dose: > 2,000 mg/kg Method: OECD Test Guideline 401
-----------------------	--

Acute toxicity (inhalation)	: no data available
-----------------------------	---------------------

Acute toxicity (dermal)	: LD50 Species: Rat Dose: > 2,000 mg/kg Method: OECD Test Guideline 402
-------------------------	--

Irritation/corrosion of the skin	: Species: rabbit Result: non-irritant Method: OECD 404 Exposure duration: 4 h
----------------------------------	---

Serious eye damage/ eye irritation	: Species: rabbit Result: non-irritant Method: OECD 405 Remarks: Undiluted product Species: rabbit
------------------------------------	--

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat

Version **1.0 / CN**

VA-No.

Revision date ---

Print Date **3/20/2017**Page **7 / 11**

Result: non-irritant

Method: OECD 405

Remarks: The information refers to studies with the main component in the solvent.

Tested as 90 % solution

Species: rabbit eye

Result: irritant

Method: OECD 405

Remarks: The information refers to studies with the main component in the solvent.

Tested as 85 % solution

Respiratory/skin sensitization : Result: non-sensitizing

Repeated dose toxicity : Species: rat
Application Route: Oral
Exposure duration: 90 d
NOAEL: 300 mg/kg
Method: OECD 408

CMR assessment

Carcinogenicity : no data available

Mutagenicity : no data available

Teratogenicity : no data available

Toxicity to reproduction : no data available

Genotoxicity in vitro : gene mutation
Metabolic activation: with
Result: negative
Method: OECD 476

bacterial reverse mutation assay (e.g. Ames test)

Metabolic activation: with

Result: negative

Method: OECD 471

Specific Target Organ Toxicity - Single exposure : no data available

Specific Target Organ Toxicity - Repeated exposure : no data available

Aspiration hazard : No aspiration toxicity classification

Other information : Toxicological data refer to the main component.
REGULATION (EC) No 1272/2008
Proper use provided, no adverse health effects have been observed or have been come to our knowledge.

12. Ecological information**Ecotoxicology Assessment**

Acute aquatic toxicity : no data available

Chronic aquatic toxicity : no data available

12.1. Toxicity

Aquatic toxicity, fish : Species: Oncorhynchus mykiss
Exposure duration: 96 h
LC50: 1.91 mg/l
Method: OECD 203
GLP: Yes

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat

Version **1.0 / CN**

VA-No.

Revision date

Print Date

3/20/2017

Page

8 / 11

Aquatic toxicity, invertebrates : Species: Daphnia magna
Exposure duration: 48 h
EC50: 2.23 mg/l
Method: OECD 202

Aquatic toxicity, algae / aquatic plants : Species: Scenedesmus subspicatus
Exposure duration: 72 h
ErC50: 2.14 mg/l
Method: OECD 201
GLP: Yes

Species: Scenedesmus subspicatus
Exposure duration: 72 h
NOEC: 0.65 mg/l
Method: OECD 201
GLP: Yes

Toxicity in microorganisms : no data available

chronic toxicity in fish : no data available

Chronic toxicity in aquatic invertebrates : no data available

Toxicity in organisms which live in the soil : no data available

Toxicity in terrestrial plants : no data available

Toxicity to Above-Ground Organisms : no data available

12.2. Persistence and degradability

Photodegradation : no data available

Biological degradability : Biological degradability: 66 %
Exposure duration: 28 d
Method: OECD 301 D
Remarks: The product is readily biodegradable according to OECD criteria.

Physico-chemical removability : no data available

Biochemical Oxygen Demand (BOD) : no data available

Chemical Oxygen Demand (COD) : 1.328.000 mg/l
Method: DIN 38409 T. 41

relation of BOD/COD : no data available

Dissolved organic carbon (DOC) : no data available

Adsorbed organic bound halogens (AOX) : no data available

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat



Version	1.0 / CN	VA-No.
Revision date	---	
Print Date	3/20/2017	
Page	9 / 11	

Distribution among environmental compartments : no data available

12.3. Bioaccumulative potential

Bioaccumulation : no data available

12.4. Mobility in soil

Environmental distribution : no data available

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment : no data available

12.6. Other adverse effects

General Information : Ecological data refer to the main components
Do not allow the product to enter soil or water ways.
The product is considered to be a weak water pollutant (German law).

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

Product : 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.

14. Transport information**China Road/Rail**

Not dangerous according to transport regulations.

14.1.	UN number:	--
14.2.	UN proper shipping name:	--
14.3.	Transport hazard class(es):	--
14.4.	Packing group:	--
14.5.	Environmental hazards:	--
14.6.	Special precautions for user:	No

Air transport ICAO-TI/IATA-DGR

14.1.	UN number:	UN 1987	
14.2.	UN proper shipping name:	Alcohols, n.o.s. solution)	(Isopropanol
14.3.	Transport hazard class(es):	3	
14.4.	Packing group:	III	
14.5.	Environmental hazards:	--	
14.6.	Special precautions for user:	No	

Sea transport IMDG-Code/GGVSee (Germany)

14.1.	UN number:	UN 1987
14.2.	UN proper shipping name:	ALCOHOLS, N.O.S. (Isopropanol solution)

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat



Version	1.0 / CN	VA-No.
Revision date	---	
Print Date	3/20/2017	
Page	10 / 11	

14.3.	Transport hazard class(es):	3
14.4.	Packing group:	III
14.5.	Environmental hazards (Marine pollutant):	--
14.6.	Special precautions for user:	Yes
	EmS:	F-E,S-D
	Stowage category A	

15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Notification status**

China (IECSC) : listed/registered or exempted

Other regulations : no data available

16. Other information

Comply with national laws regulating employee instruction.

Relevant H phrases from chapter 3

H225	: Highly flammable liquid and vapour.
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness.
H401	: Toxic to aquatic life.

List of references

Revision date	: ---
Made by	: S-ESHQ, Evonik China
Approved by	: Evonik Industries AG
Reference	: MEP: Inventory of Existing Chemical Substance in China (IECSC) SAWS#Hyper toxic chemical inventory SAWS: Catalogue of Hazardous Chemicals Differentiation of great danger source (GB18218) MEP: Inventory of Dangerous Waste MOH#Inventory of highly hazardous substance State department: Regulation on management of precursor of narcotic chemicals Occupational Exposure Limit for Hazardous Agents in the Workplace GBZ 2 GB12268 List of dangerous goods MEP, Customs: Catalogue of Toxic Chemicals Prohibited or Strictly Controlled to Import or Export

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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.

SAFETY DATA SHEET (SDS) GB/T 16483 and GB/T 17519

REWOQUAT WE 18

Solution of a TEA-Esterquat



Version **1.0 / CN** VA-No.
Revision date ---
Print Date **3/20/2017**
Page **11 / 11**

Legend

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
ADNR	European agreement concerning the international carriage of dangerous goods by inland waterways (ADN)
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BetrSichV	German Ordinance on Industrial Safety and Health
c.c.	closed cup
CAS	Chemical Abstract Services
CESIO	European Committee of Organic Surfactants and their Intermediates
ChemG	German Chemicals Act
CMR	carcinogenic-mutagenic-toxic for reproduction
DIN	German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
EC50	half maximal effective concentration
GefStoffV	German Ordinance on Hazardous Substances
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
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
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
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
REACH	REACH registration
RID	Convention concerning International Carriage by Rail
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
TA	Technical Instructions
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
VCI	German chemical industry association
vPvB	very persistent, very bioaccumulative
VOC	volatile organic compounds
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK	Water Hazard Class
WHO	World Health Organization