

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

Product code : Activ Superstat
Trades code : A04-010
Product line: Tintolav

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

anti-static cleaning Strengtheners perchloroethylene

Sectors of use:

Industrial Manufacturing[SU3], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.com

Email tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112
Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

The UK National Poisons Emergency number +44 (0)870 600 6266
London: Emergency 24 hour telephone +44 (0) 207188 0100

SECTION 2. Hazards identification**2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS05, GHS07

Hazard Class and Category Code(s):
Skin Irrit. 2, Eye Dam. 1

Hazard statement Code(s):
H315 - Causes skin irritation.
H318 - Causes serious eye damage.

If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
GHS05 - Danger



Hazard statement Code(s):

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+P352 - IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER/doctor/physician

P332+P313 - If skin irritation occurs: Get medical advice/attention.

Contains:

Coconut diethanolamide, diethanolamine, Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized, Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, Alcohols, C12-14, ethoxylated, Eucalyptus globulus oil, turpentine, oil, dipentene

Contains (Reg.EC 648/2004):

15% < 30% non-ionic surfactants, 5% < 15% cationic surfactants, < 5% perfumes, Composti di ammonio quaternario, benzil-C12-16-alchilidimetil, cloruri

For professional use only

2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
2-(2-butoxyethoxy)ethanol	> 50 <= 75%	Eye Irrit. 2, H319	603-096-00-8	112-34-5	203-961-6	
Coconut diethanolamide	> 20 <= 30%	Skin Irrit. 2, H315; Eye Dam. 1, H318		68603-42-9	271-657-0	
Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	> 5 <= 10%	Skin Irrit. 2, H315; Eye Irrit. 2, H319			931-216-1	
Fatty alcohol ethoxylate	> 5 <= 10%	Acute Tox. 4, H302; Eye Dam. 1, H318		64425-86-1		02-2119548 515-35-000 0
diethanolamine	> 1 <= 5%	Acute Tox. 4, H302; Skin Irrit. 2, H315;	603-071-00-1	111-42-2	203-868-0	

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
		Eye Dam. 1, H318; STOT RE 2, H373				
propan-2-ol	> 0,1 <= 1%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	603-117-00-0	67-63-0	200-661-7	
Alcohols, C12-14, ethoxylated	> 0,1 <= 1%	Eye Dam. 1, H318; Aquatic Acute 1, H400		68439-50-9		
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - FEMA 0	> 0,1 <= 1%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 100 100		68424-85-1	270-325-2	
ethanol	<= 0,1%	Flam. Liq. 2, H225	603-002-00-5	64-17-5	200-578-6	

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):

Take contaminated clothing Immediately off.

Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.

In case of contact with skin, wash immediately with water and soap.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

If skin irritation occurs: Get medical advice/attention.

Immediately call a POISON CENTER/doctor/physician

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:

Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear mask, gloves and protective clothing.

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provision of sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.

If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities.

Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

Rapidly recover the product, wear a mask and protective clothing

Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.

Prevent it from entering the sewer system.

6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors

Wear protective gloves/protective clothing/eye protection/face protection.

At work do not eat or drink.

See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and direct exposure of sunlight.

7.3. Specific end use(s)

Industrial Manufacturing:
Handle with extreme caution.
Store in a well ventilated place away from heat sources.

Public domain (administration, education, entertainment, services, craftsmen):
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

CVE: TWA 10 ppm 67.5 mg/m³ STEL 15 ppm 101.2 mg/m³

MAK DFG 10 ppm 67 mg/m³

diethanolamine:

TLV: 2 mg/m (cute) (ACGIH 2002).

Mak: cancerogenicit class: Class 3A; Sh, H (2002)

propan-2-ol:

TLV: TWA 200 ppm 400 ppm as STEL A4 (not classifiable as a human carcinogen); (ACGIH 2004).

MAK: 200 ppm 500 mg/m peak limitation Category: II (2); Risk group for pregnancy: C; (DFG 2004).

ethanol:

Component CAS-No. Value Control parameters

Basis

Ethanol-17-64 TWA 5 ppm 1.000

1.920 mg/m³

UK. EH40 WEL-Workplace Exposure Limits

Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

- Substance: Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
DNEL

Systemic effects Long term Workers inhalation = 44 (mg/m³)

Systemic effects Long term Workers dermal = 312,5 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 13 (mg/m³)

Systemic effects Long term Consumers dermal = 187,5 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 7,5 (mg/kg bw/day)

PNEC

Sweet water = 0,00191 (mg/l)

sediment Sweet water = 0,58 (mg/kg/sediment)

Sea water = 0,000191 (mg/l)

intermittent emissions = 0,0191 (mg/l)

STP = 2,96 (mg/l)

ground = 0,115 (mg/kg ground)

- Substance: ethanol

DNEL

Systemic effects Long term Workers inhalation = 950 (mg/m³)

8.2. Exposure controls

Appropriate engineering controls:
Industrial Manufacturing:
No specific monitoring foreseen

Public domain (administration, education, entertainment, services, craftsmen):
No specific monitoring foreseen

Individual protection measures:



(a) Eye / face protection
When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection
Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with the legislation and good laboratory practices. Wash and dry your hands.
Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.
Full contact
Material: nitrile rubber
minimum thickness: 0.11 mm
permeation time: 480 min

(ii) Other
When handling the pure product wear full protective skin clothing.

(c) Respiratory protection
Not needed for normal use.

(d) Thermal hazards
No hazard to report

Environmental exposure controls:
Related to contained substances:
diethanolamine:
Do not let this chemical contaminates the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Pale yellow liquid	
Odour	characteristic	

Physical and chemical properties	Value	Determination method
Odour threshold	not determined	
pH	7,5 - 8,5 sol. 1%	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	> 100 °C	
Flash point	> 100 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	nonflammable	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	1,00 - 1,100	
Solubility	totally soluble in drycleaning machines	
Water solubility	miscible in water	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

9.2. Other information

Content of VOC ready to use condition: 1,03 %

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

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

It can ignite in contact with oxidants mineral acids.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

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

ATE(mix) oral = 41.191,0 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: ethanol: LD50 Oral-rat-7.060 mg/kg

Remarks: Lungs, Thorax, or Respiration: Other changes.

LC50 Inhalation-rat-10:0-20000 ppm

(b) skin corrosion/irritation: If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

Coconut diethanolamide: Irritating

diethanolamine: irritating

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result: Method: DOT Corrosive

Exposure time: 12:0 am

ethanol: Skin-rabbit

Result: Irritating to skin. -12:0 am

(c) serious eye damage/irritation: If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

ethanol: Eyes-rabbit

Result: Mild eye irritation-12:0 am

(Draize Test)

2-(2-butoxyethoxy)ethanol: Eyes-rabbit Result: Mild eye irritation-24h

Coconut diethanolamide: Acute Irritation\Corrosion eyes

diethanolamine: Severely irritating

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result: Caustic Method: DOT

(d) respiratory or skin sensitization: Coconut diethanolamide: Non-sensitizing

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: Buehler guinea pig Test Classification: Did not cause sensitization on laboratory animals.

Result: not sensitizing Method: OECD Test Guideline 406

(e) germ cell mutagenicity: 2-(2-butoxyethoxy)ethanol: Mutagenicity-Bacterial,,: negative +/-activation

Chromosomal aberration,,: negative +/-activation

Mutagenicity-Mammalian,,: negative +/-activation

(f) carcinogenicity: Coconut diethanolamide: IARC Group 2B carcinogen-possible carcinogenic to humans

diethanolamine: IARC: Group 3-3: not classifiable regarding its carcinogenicity for man

(g) reproductive toxicity: ethanol: Reproductive toxicity-Human-female-Oral

Effects on Newborn: Apgar score (human only). Effects on Newborn: Other measures or neonatal effects.

Effects on Newborn: Drug dependence.

(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.

(i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.

(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

INHALATION RISK: A harmful contamination of air has reached slowly for evaporation of this substance at 20 °C; However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to eyes the effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/symptoms dry SKIN.

EYE Redness. Pain.

LD50 (rat) Oral (mg/kg body weight) = 1720

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2700

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 374

Coconut diethanolamide:

Ingestion: oral rat LD50: > 2,000 mg/kg

Eye contact: irritating to the eye (rabbit). Can cause irreversible damage to the eye.

Skin contact: moderately irritating for a single application (4 h-rabbit)

Readily biodegradable in accordance with the criteria of Directive 67/548 and subsequent modifications.

LD50 (rat) Oral (mg/kg body weight) = 5000

Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Fatty alcohol ethoxylate:

LD50 (rat) Oral (mg/kg body weight) = 3100

diethanolamine:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.

INHALATION RISK: A dangerous air contamination will not be reached or the sar only very slowly by evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is corrosive to the eyes.

Effects of REPEATED EXPOSURE or long-term repeated or prolonged Contact may cause skin sensitization. The substance may have effects on the liver kidneys ACUTE HAZARDS/symptoms EYES Reddening. Pain. Severe deep burns.

INGESTION abdominal pain. Burning sensation.

N O T and not bring home work clothes.

LD50 (rat) Oral (mg/kg body weight) = 710

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1220

propan-2-ol:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C; However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to the eyes and the respiratory tract the substance may cause effects on the central nervous system, causing depression. Much greater exposure to the OEL may lead to unconsciousness.

Effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/Symptoms INHALATION Cough. Vertigo. Drowsiness. Headaches. Sore throat. See If Swallowed.

CUTE CUTE.

EYE Redness.

INGESTION abdominal pain. Difficulty in breathing. Nausea. State of unconsciousness. Vomiting. (Further see inhalation).

N O T and use of alcoholic beverages enhances the harmful effect.

LD50 (rat) Oral (mg/kg body weight) = 2100

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2100

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 29

Alcohols, C12-14, ethoxylated:

Oral > LD50 2000 mg/kg (rat)

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,6

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

LD50 (rat) Oral (mg/kg body weight) = 344

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3340

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 5

ethanol:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is irritating to the eyes. Inhalation of high vapour can cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features. The substance may have an effect on the high central nervous system respiratory tract, causing irritation, headaches, fatigue and lack of concentration. See Notes.

ACUTE HAZARDS/Symptoms INHALATION Cough. Headaches. Fatigue. Drowsiness.

CUTE CUTE.

EYE Redness. Pain. Burning.

SWALLOWED burning sensation. Headaches. Confusion. Vertigo. State of unconsciousness.

N O T and consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ethanol ingestion can cause cirrhosis of the liver.

LD50 (rat) Oral (mg/kg body weight) = 7060

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 20000

SECTION 12. Ecological information

12.1. Toxicity

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

Toxic to fish LC50-lepomis macrochirus-1,300 mg/l-96 h CL0-Leuciscus idus (dare or Golden)-> 1,000 mg/l-48 h Toxic to daphnia and other aquatic invertebrates: EC50 Daphnia magna (water Flea grande)-2850 mg/l-48 h for Toxic Algae Desmodium subspicatus CI50-(green)-100 mg/l >-12:0 am Toxic to bacteria LC50-Acinetobacter-1,170 mg/l-4:0 pm C(E)L50 (mg/l) = 1300

Coconut diethanolamide:

Acute/prolonged toxicity to fish: (83d) 2.52 mg/l (brachydanio rerio)

Acute toxicity to Aquatic Invertebrates: EC50 (12:0 am) 2.8 mg/l (daphnia Magna)

Primary: Biodegradability > 90% (OECD)

Easy Biodegradability: 60% > (manometric Tests, O2 consumption)

Theoretical O2 demand (thod) 2.52 mg O2/mg.

Chemical O2 demand (COD): 2.51 mg O2/mg.

C(E)L50 (mg/l) = 2,39

Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:

fish, LC50: 1.91 mg / l (OECD 203 (96h) read-across)

daphnia, EC50: 2.23 mg / l (EU Method C.2 (48h) read-across)

alga, CI50: 2.14 mg / l (OECD 201 (72h) read-across)

seaweed, NOEC: 1.48 mg / l (OECD 201)

C(E)L50 (mg/l) = 1,48

Fatty alcohol ethoxylate:

Ittiotossicit:

LC50 (96 h) 1-10 mg/l, Brachydanio rerio

Aquatic invertebrates:

EC50 (48 h) 1-10 mg/l Daphnia magna

Aquatic plants:

EC50 (72 h) 1-10 mg/l Scenedesmus subspicatus

Microorganisms/effects on activated sludge:

CE10 > 1,000 mg/l, activated sludge (DEV-L2)

Chronic toxic to aquatic invertebrates:

NOEC (21 d), 0.33 mg/l Daphnia magna

C(E)L50 (mg/l) = 1

diethanolamine:

The substance is harmful to aquatic organisms.

Aquatic toxic

Specification: EC50 (2.2-IMINODIETANOLO; CAS No.: 111-42-2)

Parametro: Daphnia

Daphnia magna

Value = 55 mg/l

For. test: 48 h

Specification: EC50 (2.2-IMINODIETANOLO; CAS No.: 111-42-2)

Parametro: Algae

Pseudokirchneriella subcapitata

Value = 2.2 mg/l

For. test: 96 h

Specification: LC50 (2.2-IMINODIETANOLO; CAS No.: 111-42-2)

Parametro: Fish

Pimephales promelas

Value = 1460 mg/l

For. test: 96 h

C(E)L50 (mg/l) = 2,2

propan-2-ol:

The less dense water product and completely miscible at 20 C.

Is lost by evaporation within one day. Large volumes can penetrate into the soil and contaminate groundwater.

C(E)L50 (mg/l) = 1000

Alcohols, C12-14, ethoxylated:

EC50 < 1 mg/l (Literaturwert)

NOEC/21 d 0.77 mg/l (Daphnia magna)

C(E)L50 (mg/l) = 0,19

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

C(E)L50 (mg/l) = 0,01 100

100

ethanol:

C(E)L50 (mg/l) = 11200

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The substance miscible in water and would leach into the groundwater, be lost in groundwater and be biologically degraded.

85% (28 d, Ready Biodegradability: Modified MITI Test (s)) readily biodegradable

Fatty alcohol ethoxylate:

Disposal considerations:

> = 90% the bismuth active substance (OECD guideline 303A)

60% > CO₂ formation of theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, c. 4-C)

Readily biodegradable (according to OECD criteria).

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Biodegradability:

OECD Confirmatory > 90% Test Method: OECD 303 A Modified SCAS Test Exposure time: 99% 7 d > Method: OECD Test 302 Evolution CO₂ Concentration: 5 mg/litre Exposure time: 28 d Result: Readily biodegradable.

95.5% Method: OECD 301 B

12.3. Bioaccumulative potential

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The substance is not expected to bioaccumulate.

12.4. Mobility in soil

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The high idrosolubilit and low octanol/water partition coefficient indicates that adsorption to suspended solids and sediments are not significant

12.5. Results of PBT and vPvB assessment

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

12.6. Other adverse effects

No adverse effects

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

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information

14.1. UN number

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

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

It is not intended to carry bulk

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

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

Restrictions relating to the product or to substances contained in annex XVII to Regulation (EC) 1907/2006.

3 product section.

Substances.

Point. 55 BUTYL DIGLYCOL

REGULATION (EU) No 1357/2014 - waste:

HP4 - Irritant — skin irritation and eye damage

HP14 - Ecotoxic

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information**16.1. Other information**

Points modified compared to previous release: 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.2. Label elements, 2.3. Other hazards, 4.3. Indication of any immediate medical attention and special

treatment needed, 7.1. Precautions for safe handling, 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the hazard statements exposed to point 3

- H319 = Causes serious eye irritation.
- H315 = Causes skin irritation.
- H318 = Causes serious eye damage.
- H302 = Harmful if swallowed.
- H373 = May cause damage to organs through prolonged or repeated exposure .
- H225 = Highly flammable liquid and vapour.
- H336 = May cause drowsiness or dizziness.
- H400 = Very toxic to aquatic life.
- H312 = Harmful in contact with skin.
- H314 = Causes severe skin burns and eye damage.

Classification based on data of all mixture components

Main normative references:

Directive 1999/45/EC
Directive 2001/60/EC
Regulation 1272/2008/EC
Regulation 2010/453/EC

** The information contained herein is based on our knowledge at the date above.

Related solely to the product and do not constitute a guarantee of a particular quality.

It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.
