according to Regulation (EC) No. 1907/2006

# DOW CORNING

# MOLYKOTE(R) DX PASTE

Version Revision Date: SDS Number: Date of last issue: 18.03.2017 2.1 07.07.2017 862316-00011 Date of first issue: 01.12.2014

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

1.1 Product identifier

Trade name : MOLYKOTE(R) DX PASTE

Product code : 0000000001288563

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

Use of the Sub- : Lubricants and lubricant additives

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : Dow Corning Europe S.A.

rue Jules Bordet - Parc Industriel - Zone C

B-7180 Seneffe

Telephone : English Tel: +49 611237507

Deutsch Tel: +49 611237500 Français Tel: +32 64511149 Italiano Tel: +32 64511170 Español Tel: +32 64511163

E-mail address of person

responsible for the SDS

: sdseu@dowcorning.com

#### 1.4 Emergency telephone number

Dow Corning (Barry U.K. 24h) Tél: +44 1446732350 Dow Corning (Wiesbaden 24h) Tél: +49 61122158 Dow Corning (Seneffe 24h) Tel: +32 64 888240

#### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute aquatic toxicity, Category 1 H400: Very toxic to aquatic life.

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting ef-

fects.

## 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

according to Regulation (EC) No. 1907/2006



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Signal word : Warning

Hazard statements : H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

### 2.3 Other hazards

None known.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature : Inorganic and organic compounds

Mixture

#### **Hazardous components**

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Distillates (petroleum), hy- drotreated heavy naphthenic	64742-52-5 265-155-0 649-465-00-7	Asp. Tox. 1; H304	>= 30 - < 50
N-Tallow Alkyltrimethylenedia- mine Oleate	61791-53-5 263-186-4	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	>= 2.5 - < 10
Zinc oxide	1314-13-2 215-222-5 030-013-00-7 01-2119463881-32	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 1 - < 2.5

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

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and use the recommended personal protective equipment

when the potential for exposure exists.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes.

Get medical attention.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

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

None known.

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

Treatment : Treat symptomatically and supportively.

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod- :

ucts

Carbon oxides Metal oxides

Oxides of phosphorus Nitrogen oxides (NOx) Fluorine compounds

## 5.3 Advice for firefighters

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

according to Regulation (EC) No. 1907/2006

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Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Follow safe handling advice and personal protective equip-

ment recommendations.

## 6.2 Environmental precautions

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

## 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

#### **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not swallow.

Avoid contact with eyes.

according to Regulation (EC) No. 1907/2006



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Handle in accordance with good industrial hygiene and safety

oractice.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures : Ensure that eye flushing systems and safety showers are

located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Keep in properly labelled containers. Store in accordance with

the particular national regulations.

Advice on common storage : Do not store with the following product types:

Strong oxidizing agents

#### 7.3 Specific end use(s)

 $\hbox{Specific use(s)} \qquad \qquad \hbox{:} \quad \hbox{These precautions are for room temperature handling. Use at}$ 

elevated temperature or aerosol/spray applications may re-

quire added precautions.

## **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

## Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
Zinc oxide	Workers	Skin contact	Long-term systemic effects	83 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	5 mg/m3
	Consumers	Skin contact	Long-term systemic effects	83 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	2.5 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0.83 mg/kg bw/day

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Distillates (petroleum), hy-	Oral (Secondary Poisoning)	9.33 mg/kg food
drotreated heavy naphthenic		
Distillates (petroleum), solvent	Oral (Secondary Poisoning)	9.33 mg/kg food
refined heavy naphthenic		
Distillates (petroleum), hy-	Oral (Secondary Poisoning)	9.33 mg/kg food
drotreated heavy paraffinic		
Zinc oxide	Fresh water	20.6 μg/l
	Marine water	6.1 µg/l

according to Regulation (EC) No. 1907/2006



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Sewage treatment plant	52 μg/l
Fresh water sediment	117.8 mg/kg
Marine sediment	56.5 mg/kg
Soil	35.6 mg/kg

#### 8.2 Exposure controls

#### **Engineering measures**

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Personal protective equipment

Eye protection : Wear the following personal protective equipment:

Safety glasses

Hand protection

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the

end of workday.

Skin and body protection : Skin should be washed after contact.

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Combined particulates, ammonia/amines and organic vapour

type (AK-P)

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Appearance : paste

Colour : white

Odour : slight

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Initial boiling point and boiling

range

Not applicable

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Flash point : > 200 °C

Method: closed cup

Evaporation rate : Not applicable

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit / Upper

flammability limit

: No data available

Lower explosion limit / Lower : No data available

flammability limit

Vapour pressure Not applicable

Relative vapour density : No data available

: 1.14 Relative density

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

: No data available

: No data available Auto-ignition temperature

Decomposition temperature No data available

Viscosity

Viscosity, dynamic Not applicable

Explosive properties Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

Molecular weight : No data available

Particle size : No data available

Self-ignition : The substance or mixture is not classified as pyrophoric. The

substance or mixture is not classified as self heating.

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Not classified as a reactivity hazard.

according to Regulation (EC) No. 1907/2006

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#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

#### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

Information on likely routes of : Skin contact

exposure Ingestion

Eye contact

Acute toxicity

Not classified based on available information.

## **Components:**

#### Distillates (petroleum), hydrotreated heavy naphthenic:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Method: OECD Test Guideline 402

## N-Tallow Alkyltrimethylenediamine Oleate:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

oxicity

Remarks: Based on data from similar materials

according to Regulation (EC) No. 1907/2006

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Zinc oxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5.7 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

#### Skin corrosion/irritation

Not classified based on available information.

#### **Components:**

#### Distillates (petroleum), hydrotreated heavy naphthenic:

Species: Rabbit

Result: No skin irritation

## N-Tallow Alkyltrimethylenediamine Oleate:

Species: Rabbit Result: Skin irritation

Remarks: Based on data from similar materials

#### Zinc oxide:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

## Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

## Distillates (petroleum), hydrotreated heavy naphthenic:

Species: Rabbit

Result: No eye irritation

## N-Tallow Alkyltrimethylenediamine Oleate:

Species: Rabbit

Method: OECD Test Guideline 405

Result: Irritation to eyes, reversing within 21 days Remarks: Based on data from similar materials

### Zinc oxide:

Species: Rabbit

Method: OECD Test Guideline 405

Result: No eye irritation

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## Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

## **Respiratory sensitisation**

Not classified based on available information.

#### Components:

## Distillates (petroleum), hydrotreated heavy naphthenic:

Test Type: Buehler Test Exposure routes: Skin contact

Species: Guinea pig Result: negative

## N-Tallow Alkyltrimethylenediamine Oleate:

Test Type: Maximisation Test Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Remarks: Based on data from similar materials

## Zinc oxide:

Test Type: Maximisation Test Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

#### Germ cell mutagenicity

Not classified based on available information.

## Components:

## Distillates (petroleum), hydrotreated heavy naphthenic:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

: Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

: Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection Method: OECD Test Guideline 474

according to Regulation (EC) No. 1907/2006



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Result: negative

## N-Tallow Alkyltrimethylenediamine Oleate:

Genotoxicity in vitro : Test Type: in vitro micronucleus test

Method: OECD Test Guideline 487

Result: negative

Remarks: Based on data from similar materials

: Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

Zinc oxide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay)

Species: Rat

Application Route: Inhalation Method: OECD Test Guideline 474

Result: negative

#### Carcinogenicity

Not classified based on available information.

## Components:

### Distillates (petroleum), hydrotreated heavy naphthenic:

Species: Mouse

Application Route: Skin contact Exposure time: 78 weeks

Result: negative

Carcinogenicity - Assess- : Classified based on DMSO extract content < 3% (Regulation

ment (EC) 1272/2008, Annex VI, Part 3, Note L)

#### Reproductive toxicity

Not classified based on available information.

### **Components:**

### Distillates (petroleum), hydrotreated heavy naphthenic:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 421

Result: negative

according to Regulation (EC) No. 1907/2006



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Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Skin contact

Result: negative

## N-Tallow Alkyltrimethylenediamine Oleate:

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 414

Result: negative

Remarks: Based on data from similar materials

Zinc oxide:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion
Method: OECD Test Guideline 416

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Hamster

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

## STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### Components:

#### N-Tallow Alkyltrimethylenediamine Oleate:

Exposure routes: Ingestion Target Organs: small intestine

Assessment: Shown to produce significant health effects in animals at concentrations of >10 to

100 mg/kg bw.

#### Zinc oxide:

Exposure routes: inhalation (dust/mist/fume)

Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d

or less.

#### Repeated dose toxicity

#### **Components:**

## Distillates (petroleum), hydrotreated heavy naphthenic:

Species: Rat

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NOAEL: > 0.98 mg/l

Application Route: inhalation (dust/mist/fume)

Exposure time: 28 Days

## N-Tallow Alkyltrimethylenediamine Oleate:

Species: Rat NOAEL: 5 mg/kg LOAEL: 20 mg/kg

Application Route: Ingestion Method: OECD Test Guideline 407

Remarks: Based on data from similar materials

#### Zinc oxide:

Species: Rat NOAEL: 1.5 mg/m3

Application Route: inhalation (dust/mist/fume)

Exposure time: 3 Months

Method: OECD Test Guideline 413

### **Aspiration toxicity**

Not classified based on available information.

#### **Components:**

#### Distillates (petroleum), hydrotreated heavy naphthenic:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

#### **SECTION 12: Ecological information**

### 12.1 Toxicity

#### Components:

## Distillates (petroleum), hydrotreated heavy naphthenic:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

NOELR (Pseudokirchneriella subcapitata (green algae)): 100

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mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Toxicity to microorganisms : NOEC : >= 1.93 mg/l

Exposure time: 10 min

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 10 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test substance: Water Accommodated Fraction

N-Tallow Alkyltrimethylenediamine Oleate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 0.1 - 1 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 0.1 - 1 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to algae : EC50 : > 0.01 - 0.1 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

NOEC : > 0.01 - 0.1 mg/l Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

M-Factor (Acute aquatic tox- :

icity)

10

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

EC10: > 1 mg/l

Species: Daphnia (water flea) Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

EC10: > 0.1 - 1 mg/l

Species: Daphnia magna (Water flea)

Remarks: Based on data from similar materials

Zinc oxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 330 - 780 μg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 6.9 - 16.2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

according to Regulation (EC) No. 1907/2006



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Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 136 μg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Selenastrum capricornutum (green algae)): 24 µg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

- 1

Toxicity to microorganisms : EC50 : 5.2 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC: 199 µg/l

Exposure time: 30 d

Species: Oncorhynchus mykiss (rainbow trout) Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 37 µg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Remarks: Based on data from similar materials

M-Factor (Chronic aquatic

toxicity)

: 1

## 12.2 Persistence and degradability

## **Components:**

## Distillates (petroleum), hydrotreated heavy naphthenic:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 31 % Exposure time: 28 d

Method: OECD Test Guideline 301F

### N-Tallow Alkyltrimethylenediamine Oleate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 65 % Exposure time: 28 d

Method: OECD Test Guideline 301D

Remarks: Based on data from similar materials

## 12.3 Bioaccumulative potential

#### **Components:**

Zinc oxide:

Bioaccumulation : Species: Fish

according to Regulation (EC) No. 1907/2006

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Bioconcentration factor (BCF): 177

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

Not relevant

#### 12.6 Other adverse effects

No data available

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

## **SECTION 14: Transport information**

#### 14.1 UN number

ADN : UN 3077
ADR : UN 3077
RID : UN 3077
IMDG : UN 3077
IATA : UN 3077

### 14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(N-Tallow Alkyltrimethylenediamine Oleate, Zinc oxide)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(N-Tallow Alkyltrimethylenediamine Oleate, Zinc oxide)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(N-Tallow Alkyltrimethylenediamine Oleate, Zinc oxide)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(N-Tallow Alkyltrimethylenediamine Oleate, Zinc oxide)

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IATA : Environmentally hazardous substance, solid, n.o.s.

(N-Tallow Alkyltrimethylenediamine Oleate, Zinc oxide)

## 14.3 Transport hazard class(es)

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

## 14.4 Packing group

#### **ADN**

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

### **ADR**

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

### **RID**

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

#### **IMDG**

Packing group : III
Labels : 9
EmS Code : F-A, S-F

### IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

### IATA (Passenger)

Packing instruction (passen- : 956

ger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

## 14.5 Environmental hazards

## **ADN**

Environmentally hazardous : yes

**ADR** 

according to Regulation (EC) No. 1907/2006

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Environmentally hazardous : yes

**RID** 

Environmentally hazardous : yes

**IMDG** 

Marine pollutant : yes

IATA (Passenger)

Marine pollutant : yes

IATA (Cargo)

Marine pollutant : yes

14.6 Special precautions for user

Not applicable

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

Remarks : Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on

the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

: Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EC) No 850/2004 on persistent organic pol-

lutants

Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Quantity 1 Quantity 2
E1 ENVIRONMENTAL 100 t 200 t

HAZARDS

34 Petroleum products: (a) 2,500 t 25,000 t

gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same

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purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)

The components of this product are reported in the following inventories:

NZIoC : All ingredients listed or exempt.

PICCS : All ingredients listed or exempt.

ENCS/ISHL : All components are listed on ENCS/ISHL or exempted from

inventory listing.

IECSC : All ingredients listed or exempt.

REACH : For purchases from Dow Corning EU legal entities, all ingredi-

ents are currently pre/registered or exempt under REACH. Please refer to section 1 for recommended uses. For purchases from non-EU Dow Corning legal entities with the intention to export into EEA please contact your DC representa-

tive/local office.

TSCA : All chemical substances in this product are either listed on the

TSCA Inventory or are in compliance with a TSCA Inventory

exemption.

KECI : All ingredients listed, exempt or notified.

AICS : All ingredients listed or exempt.

DSL : All chemical substances in this product comply with the CEPA

1999 and NSNR and are on or exempt from listing on the Ca-

nadian Domestic Substances List (DSL).

TCSI : All ingredients listed or exempt.

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H304 : May be fatal if swallowed and enters airways.

H315 : Causes skin irritation.

H319 : Causes serious eye irritation.

H373 : May cause damage to organs through prolonged or repeated

exposure.

H400 : Very toxic to aguatic life.

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

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H411 Toxic to aquatic life with long lasting effects.

#### Full text of other abbreviations

Aquatic Acute Acute aquatic toxicity Aquatic Chronic Chronic aquatic toxicity Asp. Tox. Aspiration hazard Eye Irrit. Eye irritation Skin Irrit. Skin irritation

STOT RE Specific target organ toxicity - repeated exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

## **Further information**

compile the Safety Data

Sources of key data used to : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

Sheet cy, http://echa.europa.eu/

Classification of the mixture: Classification procedure:

H400 Calculation method Aquatic Acute 1 Aquatic Chronic 3 H412 Calculation method

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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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