according to Regulation (EC) No. 1907/2006

### ARALDITE® FUSION G HARDENER

| Version | Revision Date: |
|---------|----------------|
| 1.0     | 28.01.2019     |

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

#### **1.1 Product identifier**

Trade name : ARALDITE® FUSION G HARDENER

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

| Use of the        |
|-------------------|
| Substance/Mixture |

: Hardener

#### 1.3 Details of the supplier of the safety data sheet

| Company<br>Address                                  | <ul> <li>Huntsman Advanced Materials (Europe)BVBA</li> <li>Everslaan 45<br/>3078 Everberg</li> </ul> |
|---|--|
| <b>-</b>  | Belgium  |
| Telephone   | : +41 61 299 20 41   |
| Telefax   | : +41 61 299 20 40   |
| E-mail address of person<br>responsible for the SDS | : Global_Product_EHS_AdMat@huntsman.com  |

### 1.4 Emergency telephone number

| Emergency telephone number | <ul> <li>Berlin: 0049 30 19 24 0 &amp; 0049 30 30 68 6 7 11<br/>Bonn: 0049 228 19 27 0 &amp; 0049 228 28 7 3 32 11<br/>Erfurt: 0049 361 73 07 30<br/>Freiburg: 0049 761 16 24 0<br/>Göttingen: 0049 51 19 24 0 &amp; 0049 551 38 31 80<br/>Homburg: 0049 6841 19 24 0<br/>Mainz: 0049 6131 19 24 0 &amp; 0049 6131 23 24 66<br/>München: 0049 89 19 24 0<br/>Nürnberg: 0049 911 39 8 2 45 1<br/>EUROPE: +32 35 75 1234<br/>France ORFILA: +33(0)145425959<br/>ASIA: +65 6336-6011<br/>China: +86 20 39377888<br/>+86 532 83889090<br/>India: + 91 22 42 87 5333<br/>Australia: 1800 786 152<br/>New Zealand: 0800 767 437<br/>USA: +1/800/424.9300</li> </ul> |
|----------------------------|---|
|                            | 007. +1/000/424.3300  |

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

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2

H319: Causes serious eye irritation.



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#### 2.2 Label elements

| Labelling (REGULATIO | N (EC) No 1272/2008) |  |
|----------------------|----------------------|--|
| Hazard pictograms    | : 🔨                  |  |
|                      |                      |  |

| < |   | $\boldsymbol{>}$ |
|---|---|------------------|
|   | V |                  |

| Hazard statements:H319Causes serious eye irritation.Precautionary statements: <b>Prevention:</b><br>P264<br>P280<br>P280<br>P305 + P351 + P338<br>P305 + P351 + P338<br>P305 + P351 + P338<br>P337 + P313IF IN EYES: Rinse cautiously with<br>water for several minutes. Remove contact<br>lenses, if present and easy to do. Continue<br>rinsing.P337 + P313If eye irritation persists: Get medical advice/<br>attention. | Signal word              | : | Warning  |   |
|--|--------------------------|---|--|---|
| P264Wash skin thoroughly after handling.P280Wear eye protection/ face protection.Response:P305 + P351 + P338IF IN EYES: Rinse cautiously with<br>water for several minutes. Remove contact<br>lenses, if present and easy to do. Continue<br>rinsing.P337 + P313If eye irritation persists: Get medical advice/  | Hazard statements        | : | H319   | Causes serious eye irritation.  |
|  | Precautionary statements | : | P264<br>P280<br><b>Response:</b><br>P305 + P351 + P3 | Wear eye protection/ face protection.<br>338 IF IN EYES: Rinse cautiously with<br>water for several minutes. Remove contact<br>lenses, if present and easy to do. Continue<br>rinsing.<br>If eye irritation persists: Get medical advice/ |

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

#### 3.2 Mixtures

#### Hazardous components

| Chemical name                                     | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification  | Concent<br>ration<br>(% w/w) |
|---|---|---|------------------------------|
| 1,8-diazabicyclo[5.4.0]undec-7-<br>ene            | 6674-22-2<br>229-713-7                                | Acute Tox. 3; H301<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318   | >= 1 - <<br>3                |
| N,N,N',N'-Tetramethyl-2,2'-<br>oxybis(ethylamine) | 3033-62-3<br>221-220-5                                | Acute Tox. 4; H302<br>Acute Tox. 4; H332<br>Acute Tox. 3; H311<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318 | >= 1 - <<br>3                |

For explanation of abbreviations see section 16.

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

#### 4.1 Description of first aid measures

General advice

: Move out of dangerous area. Consult a physician.

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|----------------|---------------------------|---|---|
|                |                           | Treat symptom                                     | ety data sheet to the doctor in attendance.<br>natically.<br>tention if symptoms occur.   |
| lf inha        | aled                      | : If inhaled, rem<br>Get medical at               | ove to fresh air.<br>tention if symptoms occur.   |
| In cas         | se of skin contact        | wounds from c<br>difficulty.<br>If on skin, rinse | dical treatment is necessary as untreated<br>corrosion of the skin heal slowly and with<br>e well with water.<br>emove clothes.   |
| In cas         | In case of eye contact    |   | s splashed into eyes can cause irreversible<br>and blindness.<br>contact with eyes, rinse immediately with plenty<br>eek medical advice.<br>ng eyes during transport to hospital.<br>ct lenses.<br>e open while rinsing.<br>persists, consult a specialist. |
| lf swa         | If swallowed              |   | ery tract clear.<br>e vomiting.<br>/thing by mouth to an unconscious person.<br>ersist, call a physician.<br>mediately to hospital.   |

#### **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.

#### **SECTION 5: Firefighting measures**

| 5.1 Extinguishing media              |     |   |
|--------------------------------------|-----|---|
| Suitable extinguishing media         | :   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media       | :   | High volume water jet   |
| 5.2 Special hazards arising from     | the | e substance or mixture  |
| Specific hazards during firefighting | :   | Do not allow run-off from fire fighting to enter drains or water courses.                               |
| Hazardous combustion<br>products     | :   | No hazardous combustion products are known  |

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#### 5.3 Advice for firefighters

| Special protective equipment<br>for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.   |
|--|---|--|
| Specific extinguishing methods                   | : | No data is available on the product itself.  |
| Further information                              | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

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

| 6.1 Personal precautions, protective equipment and emergency procedures |  |  |  |  |
|---|--|--|--|--|
| Personal precautions :  | Use personal protective equipment.<br>Refer to protective measures listed in sections 7 and 8.   |  |  |  |
| 6.2 Environmental precautions   |  |  |  |  |
| Environmental precautions :   | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform<br>respective authorities. |  |  |  |
| 6.3 Methods and material for containment and cleaning up                |  |  |  |  |
| Methods for cleaning up :   | Soak up with inert absorbent material (e.g. sand, silica gel,<br>acid binder, universal binder, sawdust).<br>Keep in suitable, closed containers for disposal.                             |  |  |  |

#### 6.4 Reference to other sections

For disposal considerations see section 13., See Section 1 for emergency contact information., For personal protection see section 8.

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

| 7.1 Precautions for safe handling               |   |
|---|---|
| Advice on safe handling                         | <ul> <li>Do not breathe vapours/dust.<br/>Avoid contact with skin and eyes.<br/>For personal protection see section 8.<br/>Smoking, eating and drinking should be prohibited in the<br/>application area.<br/>To avoid spills during handling keep bottle on a metal tray.<br/>Dispose of rinse water in accordance with local and national<br/>regulations.</li> </ul> |
| Advice on protection against fire and explosion | : Normal measures for preventive fire protection.   |
| Hygiene measures                                | : When using do not eat or drink. When using do not smoke.  |

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Wash hands before breaks and at the end of workday.

#### 7.2 Conditions for safe storage, including any incompatibilities

|        | equirements for storage<br>reas and containers | : | Keep container tightly closed in a dry and well-ventilated<br>place. Observe label precautions. Keep in properly labelled<br>containers. |
|--------|--|---|--|
| A      | dvice on common storage                        | : | For incompatible materials please refer to Section 10 of this SDS.   |
| S      | torage class (TRGS 510)                        | : | 10, Combustible liquids  |
|        | ecommended storage<br>emperature               | : | 2 - 40 °C  |
|        | urther information on<br>torage stability      | : | Stable under normal conditions.  |
| 7.3 Sp | pecific end use(s)                             |   |  |
|        |  |   |  |

Specific use(s)

: No data available

#### **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 effects      | Value                 |
|---|-----------|-----------------|-------------------------------|-----------------------|
| N,N,N',N'-tetramethyl-<br>2,2'-oxybis(ethylamine) | Workers   | Inhalation      | Long-term systemic<br>effects | 0,16 mg/m3            |
|   | Workers   | Inhalation      | Long-term local effects       | 0,08 mg/m3            |
|   | Consumers | Inhalation      | Long-term systemic<br>effects | 0,041 mg/m3           |
|   | Consumers | Inhalation      | Long-term local effects       | 0,013 mg/m3           |
|   | Consumers | Oral            | Long-term systemic<br>effects | 0,047 mg/kg<br>bw/day |

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

| Substance name                                    | Environmental Compartment | Value      |
|---|---------------------------|------------|
| N,N,N',N'-tetramethyl-2,2'-<br>oxybis(ethylamine) | Fresh water               | 0,023 mg/l |
|   | Freshwater - intermittent | 0,23 mg/l  |
|   | Marine water              | 0,002 mg/l |
|   | Sewage treatment plant    | 7,2 mg/l   |

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| Fresh water sediment | 0,099 mg/kg dry<br>weight (d.w.) |
|----------------------|----------------------------------|
| Marine sediment      | 0,001 mg/kg dry<br>weight (d.w.) |
| Soil                 | 0,007 mg/kg dry<br>weight (d.w.) |

#### 8.2 Exposure controls

| Personal protective equipment |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|
| Eye protection                | <ul> <li>Eye wash bottle with pure water<br/>Tightly fitting safety goggles<br/>Wear face-shield and protective suit for abnormal processing<br/>problems.</li> </ul>            |  |  |  |  |
| Hand protection               |  |  |  |  |  |
| Remarks                       | : The suitability for a specific workplace should be discussed with the producers of the protective gloves.  |  |  |  |  |
| Skin and body protection      | : Impervious clothing<br>Choose body protection according to the amount and<br>concentration of the dangerous substance at the work place.                                       |  |  |  |  |
| 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                   | : Organic vapour type (A)  |  |  |  |  |

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

#### 9.1 Information on basic physical and chemical properties

| Appearance       | : liquid                                      |        |
|------------------|---|--------|
| Colour           | : light yellow                                |        |
| Odour            | : slight                                      |        |
| Odour Threshold  | : No data is available on the product i       | tself. |
| рН               | : No data is available on the product i       | tself. |
| Freezing point   | : No data is available on the product i       | tself. |
| Melting point    | : No data is available on the product i       | tself. |
|                  | : > 200 °C                                    |        |
| Flash point      | : 145 °C<br>Method: Pensky-Martens closed cup | c      |
| Evaporation rate | : No data is available on the product i       | tself. |

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|                             |  |   |   |  |  |
| Flam                        | mability (solid, gas)                        | : | No data is availa                             | able on the product itself.                              |  |
| Burni                       | ing rate                                     | : | No data is availa                             | able on the product itself.                              |  |
|                             | er explosion limit / Upper<br>nability limit | : | No data is availa                             | able on the product itself.                              |  |
|                             | er explosion limit / Lower<br>nability limit | : | No data is availa                             | able on the product itself.                              |  |
| Vapo                        | our pressure                                 | : | 0,00001 kPa (20                               | ) °C)  |  |
| Relative vapour density     |  | : | : No data is available on the product itself. |  |  |
| Relative density            |  | : | : 1,14 (20 °C)                                |  |  |
| Dens                        | Density                                      |   | 1,14 g/cm3 (20                                | °C)  |  |
|                             | bility(ies)<br>ater solubility               | : | insoluble (20 °C                              | 2)   |  |
| So                          | lubility in other solvents                   | : | No data is availa                             | able on the product itself.                              |  |
|                             | ion coefficient: n-<br>nol/water             | : | No data is availa                             | able on the product itself.                              |  |
| Auto-                       | ignition temperature                         | : | No data is availa                             | able on the product itself.                              |  |
| Deco                        | mposition temperature                        | : | No data is availa                             | able on the product itself.                              |  |
| Visco<br>Vis                | osity<br>scosity, dynamic                    | : | 10 000 - 20 000                               | mPa.s (25 °C)  |  |

Explosive properties : No data is available on the product itself. Oxidizing properties : No data is available on the product itself.

#### 9.2 Other information

No data available

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

#### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

#### **10.2 Chemical stability**

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

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#### 10.4 Conditions to avoid

Conditions to avoid

: None known.

#### 10.5 Incompatible materials

Materials to avoid

: Strong acids and strong bases Strong oxidizing agents

#### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

| Acute toxicity<br>Acute oral toxicity - Product                                   | :   | Acute toxicity estimate : > 2 000 mg/kg<br>Method: Calculation method  |  |  |  |
|---|-----|--|--|--|--|
| Acute inhalation toxicity -<br>Product  | :   | Acute toxicity estimate : > 5 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: Calculation method |  |  |  |
| Acute dermal toxicity -<br>Product  | :   | Acute toxicity estimate : > 2 000 mg/kg<br>Method: Calculation method  |  |  |  |
| Acute toxicity (other routes of administration)                                   | :   | No data available  |  |  |  |
| Skin corrosion/irritation   |     |  |  |  |  |
| Product:  |     |  |  |  |  |
| Species: Rabbit<br>Method: OECD Test Guideline 404<br>Result: No skin irritation  |     |  |  |  |  |
| Serious eye damage/eye irrit  | ati | on   |  |  |  |
| Product:  |     |  |  |  |  |
| Species: Rabbit<br>Method: OECD Test Guideline 405<br>Result: Irritating to eyes. |     |  |  |  |  |
| Respiratory or skin sensitisa   | tic | on   |  |  |  |
| Components:   |     |  |  |  |  |

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine): Exposure routes: Skin Species: Guinea pig Method: OECD Test Guideline 406



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Result: Does not cause skin sensitisation.

Assessment:

No data available

#### Germ cell mutagenicity

#### Components:

1,8-diazabicyclo[5.4.0]undec-7-ene: Genotoxicity in vitro : Te

: Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative

> : Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative

- : Test Type: Chromosome aberration test in vitro Test system: Chinese hamster fibroblasts Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 487 Result: negative
- : Test Type: comet assay Test system: Human lymphocytes Result: negative

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine):

Genotoxicity in vitro
Concentration: .08 - .18 mg/ml Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative
Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 479 Result: Not classified due to inconclusive data.
Metabolic activation: negative Method: OECD Test Guideline 482

**Result: negative** 

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#### Components:

| N,N,N',N'-tetramethyl-2,2'-oxyb | is( | ethylamine):                                 |
|---------------------------------|-----|--|
| Genotoxicity in vivo            | :   | Application Route: Intraperitoneal injection |
|                                 |     | Dose: 45 - 145 mg/kg                         |
|                                 |     | Method: OECD Test Guideline 474              |
|                                 |     | Result: negative                             |

#### Carcinogenicity

No data available

| Carcinogenicity - | : No data available |
|-------------------|---------------------|
| Assessment        |                     |

#### **Reproductive toxicity**

#### Components:

1,8-diazabicyclo[5.4.0]undec-7-ene: Effects on fertility

: Species: Rat **Application Route: Oral** General Toxicity - Parent: No observed adverse effect level: 50 mg/kg body weight Fertility: No observed adverse effect level: 150 mg/kg body weight Early Embryonic Development: No observed adverse effect level: 150 mg/kg body weight Method: OECD Test Guideline 422 GLP: yes

#### Components:

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine):

| Effects on foetal<br>development | : | Species: Rabbit<br>Application Route: Dermal<br>General Toxicity Maternal: No observed adverse effect level:<br>2,5 mg/kg body weight<br>Embryo-foetal toxicity: No observed adverse effect level: 12<br>mg/kg body weight<br>Method: OECD Test Guideline 414<br>Result: Embryotoxic effects and adverse effects on the<br>offspring were detected only at high maternally toxic doses |
|----------------------------------|---|--|
| Reproductive toxicity -          | : | No data available  |

Assessment

#### STOT - single exposure

No data available

### STOT - repeated exposure

No data available

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#### **Repeated dose toxicity**

#### Components:

1,8-diazabicyclo[5.4.0]undec-7-ene: Species: Rat NOAEL: 50 mg/kg Application Route: Oral Method: OECD Test Guideline 422

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine): Species: Rat, male and female : 8,2 Application Route: Ingestion Test atmosphere: vapour Exposure time: 336 hNumber of exposures: 6 h Method: Subacute toxicity

Repeated dose toxicity - : No data available Assessment

#### Aspiration toxicity

#### Components:

1,8-diazabicyclo[5.4.0]undec-7-ene: May be harmful if swallowed and enters airways.

#### Experience with human exposure

| General Information: | No data available |
|----------------------|-------------------|
|----------------------|-------------------|

Inhalation: No data available

Skin contact:

No data available

#### Components:

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine): Eye contact:

Ingestion: Symptoms: No data available

Blurred vision

### Toxicology, Metabolism, Distribution

No data available

### Neurological effects

No data available

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#### **Further information**

Ingestion:

No data available

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

### 12.1 Toxicity

| 2.1 | Toxicity   |     |  |  |  |  |  |  |
|-----|--|-----|--|--|--|--|--|--|
|     | <u>Components:</u><br>1,8-diazabicyclo[5.4.0]undec-7-ene:                    |     |  |  |  |  |  |  |
|     | Toxicity to fish   |     | LC50 (Leuciscus idus (Golden orfe)): 100 - 200 mg/l<br>Exposure time: 96 h   |  |  |  |  |  |
|     | Toxicity to daphnia and other aquatic invertebrates                          | :   | EC50 (Daphnia magna (Water flea)): 50 mg/l<br>Exposure time: 48 h  |  |  |  |  |  |
|     | Toxicity to algae/aquatic plants   | :   | EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l<br>Exposure time: 72 h  |  |  |  |  |  |
|     | Toxicity to microorganisms   | :   | IC50 : 330 mg/l<br>Exposure time: 17 h   |  |  |  |  |  |
|     | Toxicity to daphnia and other<br>aquatic invertebrates<br>(Chronic toxicity) | :   | >= 12 mg/l<br>Exposure time: 21 d<br>Species: Daphnia magna (Water flea)<br>Test Type: semi-static test<br>Method: OECD Test Guideline 211<br>Remarks: Aquatic toxicity is unlikely due to low solubility. |  |  |  |  |  |
|     | Ecotoxicology Assessment<br>Acute aquatic toxicity                           | :   | Harmful to aquatic life.   |  |  |  |  |  |
|     | Chronic aquatic toxicity   | :   | This product has no known ecotoxicological effects.  |  |  |  |  |  |
|     | N,N,N',N'-tetramethyl-2,2'-oxyb  | is( | ethylamine):   |  |  |  |  |  |
|     | Toxicity to fish   |     | LC50 (Brachydanio rerio (zebrafish)): ca. 131,2 mg/l<br>Exposure time: 96 h<br>Test Type: semi-static test<br>Test substance: Fresh water<br>Method: OECD Test Guideline 203                               |  |  |  |  |  |
|     | Toxicity to daphnia and other aquatic invertebrates                          | :   | EC50 (Daphnia magna (Water flea)): 102 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Test substance: Fresh water<br>Method: OECD Test Guideline 202   |  |  |  |  |  |
|     | Toxicity to algae/aquatic plants   | :   | ErC50 (Selenastrum capricornutum (green algae)): 24 mg/l<br>Exposure time: 72 h  |  |  |  |  |  |

Test Type: static test

Test substance: Fresh water

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### **ARALDITE® FUSION G HARDENER**

| Version<br>1.0 | Revision Date: 28.01.2019                                  | SDS Number:<br>400001021210            | Date of last issue: -<br>Date of first issue: 28.01.2019 |
|----------------|--|--|--|
|                |  |  |  |
|                |  | Method: OECD                           | Test Guideline 201                                       |
|                | oxicology Assessment<br>nic aquatic toxicity               | : This product ha                      | s no known ecotoxicological effects.                     |
| 12.2 Pers      | istence and degradabi                                      | lity                                   |  |
|                | ponents:   | 7                                      |  |
|                | liazabicyclo[5.4.0]undec<br>egradability                   |  |  |
|                | nemical Oxygen<br>and (BOD)                                | : < 2 mg/l                             |  |
| Cher<br>(COI   | nical Oxygen Demand<br>D)                                  | : 2 230 mg/l                           |  |
| Stabi          | ility in water   | : Hydrolysis: 0 %                      | (162 h)  |
| N,N,I          | N',N'-tetramethyl-2,2'-ox                                  | ybis(ethylamine):                      |  |
| Biode          | egradability   | Biodegradation:<br>Exposure time:      | tly biodegradable.<br>: < 10 %                           |
|                |  | Biodegradation:<br>Exposure time:      | dily biodegradable.<br>: 2 %                             |
| 2.3 Bioa       | ccumulative potential                                      |  |  |
| 1,8-d          | <b>ponents:</b><br>liazabicyclo[5.4.0]undec<br>ccumulation | : Bioconcentratio                      | n factor (BCF): < 0,4<br>not bioaccumulate.              |
|                | tion coefficient: n-<br>nol/water                          | : log Pow: 2,7                         |  |
|                | N',N'-tetramethyl-2,2'-ox<br>ccumulation                   |  | ccumulation is unlikely.                                 |
|                | tion coefficient: n-<br>nol/water                          | : log Pow: -0,34 (<br>Method: Partitic |  |
| 12.4 Mob       | ility in soil  |  |  |
|                |  |  |  |

## Components:

1,8-diazabicyclo[5.4.0]undec-7-ene:

according to Regulation (EC) No. 1907/2006

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| Distribution among         | : | log Koc: Calculation method 3,75 |
|----------------------------|---|----------------------------------|
| environmental compartments |   |                                  |

#### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

#### 12.6 Other adverse effects

No data available

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

#### 13.1 Waste treatment methods

| Product                | <ul> <li>Do not dispose of waste into sewer.<br/>Do not contaminate ponds, waterways or ditches with<br/>chemical or used container.<br/>Send to a licensed waste management company.<br/>Dispose of as hazardous waste in compliance with local and<br/>national regulations.<br/>Dispose of contents/ container to an approved waste disposal<br/>plant.</li> </ul> |
|------------------------|---|
| Contaminated packaging | <ul> <li>Empty remaining contents.</li> <li>Dispose of as unused product.</li> <li>Do not re-use empty containers.</li> </ul>   |

#### **SECTION 14: Transport information**

ΙΑΤΑ

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

#### ADR

Not regulated as dangerous goods

#### RID

Not regulated as dangerous goods

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

Not applicable for product as supplied.

according to Regulation (EC) No. 1907/2006

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#### **SECTION 15: Regulatory information** 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REACH - List of substances subject to authorisation : Not applicable (Annex XIV) REACH - List of substances subject to authorisation -: Not applicable Future sunset date REACH - Candidate List of Substances of Very High : This product does not contain Concern for Authorisation (Article 59). substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57). Water contaminating class : WGK 2 obviously hazardous to water (Germany) TA Luft List (Germany) : Total dust: Not applicable : Inorganic substances in powdered form: Not applicable : Inorganic substances in vapour or gaseous form: Not applicable : Organic Substances: Not applicable : Carcinogenic substances: Not applicable : Mutagenic: Not applicable Toxic to reproduction: Not applicable The components of this product are reported in the following inventories: DSL : All components of this product are on the Canadian DSL AICS : On the inventory, or in compliance with the inventory NZIoC : Not in compliance with the inventory ENCS : Not in compliance with the inventory KECI : Not in compliance with the inventory PICCS : On the inventory, or in compliance with the inventory **IECSC** : On the inventory, or in compliance with the inventory

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|----------------|---------------------------|-----------------------------|--|
| TCSI           |                           | : Not in compliance         | e with the inventory                                     |
| TSCA           |                           | : On the inventory,         | or in compliance with the inventory                      |

#### Inventories

AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States of America (USA))

#### 15.2 Chemical safety assessment

Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

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

| Full text of H-Statements       |                             |                                     |
|---------------------------------|-----------------------------|-------------------------------------|
| H301                            | : Toxic if swallowed.       |                                     |
| H302                            | : Harmful if swallowed.     |                                     |
| H311                            | : Toxic in contact with ski | in.                                 |
| H314                            | : Causes severe skin bur    | ns and eye damage.                  |
| H318                            | : Causes serious eye dar    | mage.                               |
| H332                            | : Harmful if inhaled.       |                                     |
| Full text of other abbreviation | ons                         |                                     |
| Acute Tox.                      | : Acute toxicity            |                                     |
| Eye Dam.                        | : Serious eye damage        |                                     |
| Skin Corr.                      | : Skin corrosion            |                                     |
| Further information             |                             |                                     |
| Classification of the mixture   | e:                          | Classification procedure:           |
| Eye Irrit. 2                    | H319                        | Based on product data or assessment |

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IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

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Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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