

according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

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

1.1. Product identifier ATLAS FUGA EPOKSYDOWA - składnik B

Substance / mixture mixture

UFI DYSS-26EE-MN0T-E52A

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

#### Mixture's intended use

Hardener for epoxy resins.

# Mixture uses advised against

The product should not be used in ways other then those referred in Section 1.

#### Main intended use

PC-ADH-8 Multi-component adhesives and sealants

Secondary uses

PC-ADH-2 Adhesives and sealants - building and construction works (except cement based

adhesives)

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

**Supplier** 

Name or trade name ATLAS sp. z o.o.

Address Św.Teresy 105, Łódź, 91-222

Poland

 VAT Reg No
 PL9471936467

 Phone
 +48 42 631 89 45

 E-mail
 msds@atlas.com.pl

 Web address
 www.atlas.com.pl

Competent person responsible for the safety data sheet

Name ATLAS sp. z o.o. E-mail msds@atlas.com.pl

1.4. Emergency telephone number

National Health Service (NHS) 111

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

# 2.1. Classification of the substance or mixture

## Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Skin Corr. 1, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of all classifications and hazard statements is given in the section 16.

#### Most serious adverse effects on human health and the environment

May cause an allergic skin reaction. Causes serious eye damage. Causes severe skin burns and eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

## 2.2. Label elements

# Hazard pictogram



Signal word

Danger



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

#### Hazardous substances

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine 3-aminomethyl-3,5,5-trimethylcyclohexylamine

#### **Hazard statements**

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P280 Wear protective gloves.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

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 doctor.

P391 Collect spillage.

P501 Dispose of contents/container to by handing over to the person authorized to dispose of

waste or by returning to the supplier.

#### Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger. Container must be fitted with child-resistant fastening.

#### 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

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

#### 3.2. Mixtures

#### Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

| Identification numbers   | Substance name  | Content in % weight | Classification according to<br>Regulation (EC) No 1272/2008   | Note |
|--|---|---------------------|---|------|
| CAS: 1226892-45-0<br>Registration number:<br>01-2119487006-38                                      | Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine   | 59-64               | Skin Corr. 1C, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) | 1    |
| CAS: 68082-29-1<br>EC: 500-191-5   | Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine | 25-30               | Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Eye Dam. 1, H318<br>Aquatic Chronic 2, H411                            | 1    |
| Index: 612-067-00-9<br>CAS: 2855-13-2<br>EC: 220-666-8<br>Registration number:<br>01-2119514687-32 | 3-aminomethyl-3,5,5-<br>trimethylcyclohexylamine  | 18-19               | Acute Tox. 4, H302+H312<br>Skin Corr. 1B, H314<br>Skin Sens. 1, H317<br>Eye Dam. 1, H318<br>Aquatic Chronic 3, H412 |      |

## Notes

Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.

Full text of all classifications and hazard statements is given in the section 16.



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

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

#### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

#### If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

#### If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water or shower. Rinse cautiously with water for several minutes.

#### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

#### If swallowed

RINSE THE MOUTH WITH WATER IMMEDIATELY AND LET THE PERSON DRINK 2-5 dl of cold water to reduce the heating effect of the corrosive substance. Consuming larger amounts of liquid is not advisable as it may induce vomiting and potential inhaling of the corrosive substances in the lungs. The affected person must not be forced to drink, particularly if already feeling pain in the mouth or throat. In this case let the affected person only rinse the mouth with water. DO NOT PROVIDE ACTIVATED CARBON! Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible.

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

### If inhaled

Inhaling vapours can cause corrosion of the breathing system.

### If on skin

Causes severe skin burns. May cause an allergic skin reaction.

### If in eyes

Causes serious eye damage.

### If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

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

# 5.1. Extinguishing media

### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

#### Unsuitable extinguishing media

Water - full jet.

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

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

#### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

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

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

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

### 6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

#### 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

#### 6.4. Reference to other sections

See the Section 7, 8 and 13.

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

#### 7.1. Precautions for safe handling

Do not inhale aerosols. Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

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

Store in tightly closed containers in a dedicated, cool, dry and well ventilated room. Store locked up. Storage temperature from +5 degrees C to +30 degrees C

### 7.3. Specific end use(s)

not available

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

### 8.1. Control parameters

The mixture contains no substances for which occupational exposure limits are set.

#### DNEL

3-aminomethyl-3,5,5-trimethylcyclohexylamine

| Workers / consumers | Route of exposure | Value                  | Effect                   | Determining method |
|---------------------|-------------------|------------------------|--------------------------|--------------------|
| Workers             | Inhalation        | 20.1 mg/m <sup>3</sup> | Systemic acute effects   |                    |
| Workers             | Inhalation        | 20.1 mg/m <sup>3</sup> | Local acute effects      |                    |
| Consumers           | Oral              | 0.526 mg/kg<br>bw/day  | Systemic chronic effects |                    |

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Workers / consumers | Route of exposure | Value                  | Effect                   | Determining method |
|---------------------|-------------------|------------------------|--------------------------|--------------------|
| Workers             | Oral              | 3.9 mg/kg              | Systemic chronic effects |                    |
| Workers             | Dermal            | 1.1 mg/kg              | Systemic chronic effects |                    |
| Workers             | Inhalation        | 0.97 mg/m <sup>3</sup> | Systemic acute effects   |                    |
| Consumers           | Oral              | 0.56 mg/kg             | Systemic chronic effects |                    |

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

| Workers / consumers | Route of exposure | Value                 | Effect                   | Determining method |
|---------------------|-------------------|-----------------------|--------------------------|--------------------|
| Workers             | Inhalation        | 29 mg/m <sup>3</sup>  | Systemic chronic effects |                    |
| Workers             | Dermal            | 4.2 mg/kg             | Systemic chronic effects |                    |
| Consumers           | Inhalation        | 8.7 mg/m <sup>3</sup> | Systemic chronic effects |                    |
| Consumers           | Dermal            | 2.5 mg/kg             | Systemic chronic effects |                    |
| Consumers           | Oral              | 2.5 mg/kg             | Systemic chronic effects |                    |



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

#### **PNEC**

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

| Route of exposure                             | Value       | Determining method |
|---|-------------|--------------------|
| Drinking water                                | 0.06 mg/l   |                    |
| Seawater                                      | 0.006 mg/l  |                    |
| Water (intermittent release)                  | 0.23 mg/l   |                    |
| Microorganisms in wastewater treatment plants | 3.18 mg/l   |                    |
| Freshwater sediment                           | 5.784 mg/kg |                    |
| Sea sediments                                 | 0.578 mg/kg |                    |
| Soil (agricultural)                           | 1.121 mg/kg |                    |

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Route of exposure                             | Value        | Determining method |
|---|--------------|--------------------|
| Drinking water                                | 0.00434 mg/l |                    |
| Seawater                                      | 0.00043 mg/l |                    |
| Water (intermittent release)                  | 0.0434 mg/l  |                    |
| Microorganisms in wastewater treatment plants | 3.84 mg/l    |                    |
| Freshwater sediment                           | 434.02 mg/kg |                    |
| Sea sediments                                 | 43.4 mg/kg   |                    |
| Soil (agricultural)                           | 86.78 mg/kg  |                    |

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

| Route of exposure                             | Value        | Determining method |
|---|--------------|--------------------|
| Drinking water                                | 0.0307 mg/l  |                    |
| Seawater                                      | 0.00307 mg/l |                    |
| Microorganisms in wastewater treatment plants | 2.3 mg/l     |                    |
| Freshwater sediment                           | 119.8 mg/kg  |                    |
| Sea sediments                                 | 11.98 mg/kg  |                    |
| Soil (agricultural)                           | 9.44 mg/kg   |                    |
| Oral  | 20 mg/kg     |                    |

### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

### Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

#### Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

## **Respiratory protection**

Mask with a filter in a poorly ventilated environment.

# Thermal hazard

Data not available.

# **Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

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

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



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

7.0 Revision date Version

Physical state liquid Color yellow Odour characteristic Melting point/freezing point data not available Boiling point or initial boiling point and boiling range >100 °C

Flammability data not available Lower and upper explosion limit data not available

Flash point >100 °C

Auto-ignition temperature data not available Decomposition temperature data not available 11-12 (undiluted) Kinematic viscosity data not available Solubility in water partially soluble Partition coefficient n-octanol/water (log value) data not available Vapour pressure data not available

Density and/or relative density

data not available Density 1 g/cm3 (20 °C) Relative density Relative vapour density data not available Particle characteristics data not available gel

Form

#### 9.2. Other information

not available

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

### 10.1. Reactivity

May react with strong oxidizing agents.

## 10.2. Chemical stability

The product is stable under normal conditions.

# 10.3. Possibility of hazardous reactions

Unknown.

#### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

## 10.5. Incompatible materials

Protect against strong acids and bases as well as oxidizing substances, aldehydes, ketones and epoxy resins.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

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

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the mixture.

### **Acute toxicity**

Based on available data the classification criteria are not met.

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Route of exposure | Parameter | Method   | Value       | Time of exposure | Species                    | Sex |
|-------------------|-----------|----------|-------------|------------------|----------------------------|-----|
| Oral              | LD50      | OECD 423 | >2000 mg/kg |                  | Rat (Rattus<br>norvegicus) | F   |
| Dermal            | LD50      | OECD 402 | >2000 mg/kg |                  | Rat (Rattus<br>norvegicus) | F/M |



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

### Corrosivity

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Route of exposure | Result                                   | Method   | Time of exposure | Species |
|-------------------|--|----------|------------------|---------|
| Eye               | Highly irritating,<br>Serious eye damage | OECD 405 |                  | Rabbit  |

### **Irritation**

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Route of exposure | Result     | Time of exposure | Species |
|-------------------|------------|------------------|---------|
| Dermal            | Irritating |                  |         |

### Skin corrosion/irritation

Causes severe skin burns.

## Serious eye damage/irritation

Causes serious eye damage.

### Respiratory or skin sensitisation

May cause an allergic skin reaction.

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Route of exposure | Result      | Method   | Time of exposure | Species | Sex |
|-------------------|-------------|----------|------------------|---------|-----|
| Dermal            | Sensitizing | OECD 429 |                  | Mouse   |     |

### Germ cell mutagenicity

Based on available data the classification criteria are not met.

#### Carcinogenicity

Based on available data the classification criteria are not met.

#### Reproductive toxicity

Based on available data the classification criteria are not met.

# Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

# Repeated dose toxicity

3-aminomethyl-3,5,5-trimethylcyclohexylamine

| Route of exposure | Parameter | Result | Value    | Time of exposure | Species                    | Sex |
|-------------------|-----------|--------|----------|------------------|----------------------------|-----|
| Oral              |           |        | 60 mg/kg | 216 hour         | Rat (Rattus<br>norvegicus) | F/M |



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Route of exposure | Parameter | Result | Value | Time of exposure | Species                    | Sex |
|-------------------|-----------|--------|-------|------------------|----------------------------|-----|
| Oral              | NOAEL     |        | 1000  |                  | Rat (Rattus<br>norvegicus) | F/M |

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

| Route of exposure | Parameter | Result | Value | Time of exposure | Species                 | Sex |
|-------------------|-----------|--------|-------|------------------|-------------------------|-----|
| Oral              | NOAEL     |        | ≥300  |                  | Rat (Rattus norvegicus) | F/M |

#### **Aspiration hazard**

Based on available data the classification criteria are not met.

#### 11.2. Information on other hazards

not available

## **SECTION 12: Ecological information**

## 12.1. Toxicity

#### **Acute toxicity**

Very toxic to aquatic life with long lasting effects.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

| Parameter | Method   | Value     | Time of exposure | Species                                   | Environmen<br>t |
|-----------|----------|-----------|------------------|---|-----------------|
| LC50      |          | 110 mg/l  | 96 hour          | Fishes (Leuciscus idus)                   | Freshwater      |
| EC50      | OECD 202 | 23 mg/l   | 48 hour          | Daphnia (Daphnia<br>magna)                | Freshwater      |
| EC50      |          | 37 mg/l   | 72 hour          | Algae                                     | Freshwater      |
| EC 10     |          | 1120 mg/l | 18 hour          | Microorganisms<br>(Pseudomonas<br>putida) | Freshwater      |

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Parameter | Method   | Value     | Time of exposure | Species                           | Environmen<br>t  |
|-----------|----------|-----------|------------------|-----------------------------------|------------------|
| LC50      | OECD 203 | 7.07 mg/l | 96 hour          | Fishes (Branchydanio rerio)       | Freshwater       |
| EC50      | OECD 202 | 7.07 mg/l | 48 hour          | Daphnia (Daphnia<br>magna)        | Freshwater       |
| EC50      | OECD 201 | 4.34 mg/l | 72 hour          | Algae (Selenastrum capricornutum) | Freshwater       |
| EC50      | OECD 209 | 384 mg/l  | 3 hour           | Microorganisms                    | Activated sludge |

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

| Parameter | Method   | Value       | Time of exposure | Species  | Environmen<br>t |
|-----------|----------|-------------|------------------|--|-----------------|
| LC50      | OECD 203 | 0.19 mg/l   | 96 hour          | Fishes (Branchydanio rerio)                                | Freshwater      |
| EC50      | OECD 202 | 0.18 mg/l   | 48 hour          | Daphnia (Daphnia<br>magna)                                 | Freshwater      |
| EC50      | OECD 201 | 0.0638 mg/l | 72 hour          | Algae and other aquatic plants (Selenastrum capricornutum) | Freshwater      |



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

| Parameter | Method   | Value      | Time of exposure | Species        | Environmen<br>t  |
|-----------|----------|------------|------------------|----------------|------------------|
| EC50      | OECD 209 | 109.4 mg/l | 3 hour           | Microorganisms | Activated sludge |
| NOEC      | OECD 222 | 944 mg/kg  | 1344 hour        | Eisenia fetida |                  |

### **Chronic toxicity**

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

| Parameter | Method   | Value       | Time of exposure | Species                    | Environmen<br>t |
|-----------|----------|-------------|------------------|----------------------------|-----------------|
| NOEC      | OECD 211 | 0.0320 mg/l | 21 day           | Daphnia (Daphnia<br>magna) | Freshwater      |

## 12.2. Persistence and degradability

## **Biodegradability**

3-aminomethyl-3,5,5-trimethylcyclohexylamine

| Parameter | Method | Value | Time of exposure | Environment      | Result               |
|-----------|--------|-------|------------------|------------------|----------------------|
|           |        | 8 %   | 28 day           | Activated sludge | Hardly biodegradable |

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Parameter | Method    | Value  | Time of exposure | Environment      | Result               |
|-----------|-----------|--------|------------------|------------------|----------------------|
|           | OECD 301B | 0-70 % | 74 day           | Activated sludge | Hardly biodegradable |

Reaction products of C18 unsaturated fatty acids with tetraethylene pentamine

| Parameter | Method | Value | Time of exposure | Environment | Result        |
|-----------|--------|-------|------------------|-------------|---------------|
|           |        |       |                  |             | Biodegradable |

not available

# 12.3. Bioaccumulative potential

3-aminomethyl-3,5,5-trimethylcyclohexylamine

| Parameter | Method   | Value | Time of exposure | Species | Environment | Surrounding temperature [°C] |
|-----------|----------|-------|------------------|---------|-------------|------------------------------|
| Log Pow   | OECD 107 | 0.99  |                  |         |             | 23°C                         |

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

| Parameter | Method | Value | Time of exposure | Species | Environment | Surrounding temperature [°C] |
|-----------|--------|-------|------------------|---------|-------------|------------------------------|
| Log Pow   |        | 10.34 |                  |         |             |                              |

Data not available.

## 12.4. Mobility in soil

3-aminomethyl-3,5,5-trimethylcyclohexylamine

| Parameter | Value | Environment | Surrounding temperature |
|-----------|-------|-------------|-------------------------|
| Koc       | 928   |             |                         |



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

Data not available.

#### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### 12.6. Endocrine disrupting properties

not available

#### 12.7. Other adverse effects

Data not available.

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

#### 13.1. Waste treatment methods

Danger of environmental contamination, follow the applicable regulations on waste disposal. Store unused product and contaminated packaging in closed containers for waste collection and hand over for disposal to a specialized company authorized to conduct such activity. Do not pour unused product into drains. Must not be disposed of together with municipal waste. Empty packaging can be used for energy purposes in a waste incineration plant or collected in a landfill with an appropriate classification. Perfectly cleaned packaging can be recycled. The classification of waste may change depending on where it is generated.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances \*

#### Packaging waste type code

15 01 10 packaging containing residues of or contaminated by hazardous substances \*

(\*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

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

# 14.1. UN number or ID number

UN 2735

### 14.2. UN proper shipping name

AMINES, LIQUID, CORROSIVE, N.O.S. (contains reaction products of C18 unsaturated fatty acids with tetraethylene pentamine )

### 14.3. Transport hazard class(es)

8 Corrosive substances

## 14.4. Packing group

III - substances presenting low danger

### 14.5. Environmental hazards

ves

## 14.6. Special precautions for user

Reference in the Sections 4 to 8.

# 14.7. Maritime transport in bulk according to IMO instruments

not available

### **Additional information**

Hazard identification No.

UN number

Classification code

Safety signs



C7

8+hazardous for the environment





according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021

Revision date Version 7.0

Road transport - ADR

Special provisions 274
Limited quantities 5 L
Excepted quantities E1

**Packaging** 

Packing instructions P001, IBC03, LP01, R001

Mixed packing provisions MP19

Portable tanks and bulk containers

Guidelines T7

Special provisions TP1, TP28

ADR tank

Tank code L4BN
Vehicles for tank carriage AT
Transport category 3
Tunnel restriction code (E)

Special provision for

packages V12

Railway transport - RID

Special provisions 274
Excepted quantities E1

**Packaging** 

Packing instructions P001, IBC03, LP01, R001

Mixed packing provisions MP19

Portable tanks and bulk containers

Guidelines T7

Special provisions TP1, TP28

**RID Tanks** 

Tank code L4BN Transport category 0

Special provision for

packages W 12

Air transport - ICAO/IATA

Packaging instructions for limited amount Y841
Packaging instructions passenger 852
Cargo packaging instructions 856

Marine transport - IMDG

EmS (emergency plan) F-A, S-B MFAG 320

# **SECTION 15: Regulatory information**

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

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Environmental Protection Act 1990 as amended. Clean Air Act 1993 as amended. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

# 15.2. Chemical safety assessment

not available

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

A list of standard risk phrases used in the safety data sheet

H314 Causes severe skin burns and eye damage.



according to Regulation (EC) No 1907/2006 (REACH) as amended

# ATLAS FUGA EPOKSYDOWA - składnik B

| Creation date | 18th February 2021      |         |     |  |
|---------------|-------------------------|---------|-----|--|
| Revision date |                         | Version | 7.0 |  |
| H315          | Causes skin irritation. |         |     |  |

H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasti

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.
 H302+H312 Harmful if swallowed or in contact with skin.

### Guidelines for safe handling used in the safety data sheet

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P280 Wear protective gloves.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

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 doctor.

P391 Collect spillage.

P501 Dispose of contents/container to by handing over to the person authorized to dispose of

waste or by returning to the supplier.

## Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

### Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by road

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and

mixtures

DNEL Derived no-effect level

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50% of the population EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan EU European Union

EuPCS European Product Categorisation System
IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying Dangerous

Chemicals

IC50 Concentration causing 50% blockade
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the

population

 $LD_{50}$  Lethal dose of a substance in which it can be expected death of 50% of the population

LOAEL Lowest observed adverse effect concentration

LOAEL Lowest observed adverse effect level log Kow Octanol-water partition coefficient

MARPOL International Convention for the Prevention of Pollution From Ships

NOAEC No observed adverse effect concentration

NOAEL No observed adverse effect level NOEC No observed effect concentration

NOEL No observed effect level



according to Regulation (EC) No 1907/2006 (REACH) as amended

## ATLAS FUGA EPOKSYDOWA - składnik B

Creation date 18th February 2021
Revision date Version 7.0

OEL Occupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic

PNEC Predicted no-effect concentration

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN Model

Regulations

UVCB Substances of unknown or variable composition, complex reaction products or biological

materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity

Aquatic Acute Hazardous to the aquatic environment

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Eye Dam. Serious eye damage Skin Corr. Skin corrosion Skin Irrit. Skin irritation Skin Sens. Skin sensitization

#### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

#### Recommended restrictions of use

not available

### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

### The changes (which information has been added, deleted or modified)

This data sheet replaces version 6.0 of August 31, 2018. Section update: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

#### More information

Classification procedure - calculation method.

### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.