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

1.1. Product identifier

Identification of the substance/preparation

Pelargonic acid Halal

Chemical Name: Nonanoic acid
CAS-No: 112-05-0
EC No.: 203-931-2

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

Use of the Substance / Preparation: Intermediate.
Uses advised against: None

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification: OXEA Corporation
1505 West LBJ Freeway, Suite 400
Dallas, TX 75234
USA

Product Information: Product Stewardship
FAX: +49 (0)208 693 2053
email: psq@oxea-chemicals.com

1.4. Emergency telephone number

Emergency telephone number: +44 (0) 1235 239 670 (UK) available 24/7
in USA, call 800 424 9300
outside USA, call +1.703.527.3887, collect calls accepted available 24/7***

SECTION 2: Hazards identification

Europe

2.1. Classification of the substance or mixture

This substance is classified based on Directive 1272/2008/EC and its amendments (CLP Regulation)

Skin corrosion/irritation Category 2, H315
Serious eye damage/eye irritation Category 2, H319
Environmental hazard Aquatic Chronic 3; H412

Additional information
For full text of Hazard- and EU Hazard-statements see SECTION 16.
2.2. Label elements

Labelling according to Regulation 1272/2008/EC and its amendments (CLP Regulation).

Hazard pictograms

![Warning symbol]

**Signal word**

**Warning**

**Hazard statements**

- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H412: Harmful to aquatic life with long lasting effects.

**Precautionary statements**

- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
- P332 + P313: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313: If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

Vapour/air-mixtures are explosive at intense warming

**PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT), nor very persistent nor very bioaccumulating (vPvB)

**USA**

2.1. Classification of the substance or mixture

This substance is classified in accordance with paragraph (d) of §1910.1200 (GHS-US classification).***

- Skin corrosion/irritation Category 2, H315
- Serious eye damage/eye irritation Category 2A, H319
- Environmental hazard Aquatic Acute 3; H402

**OSHA Specified Hazards**

Not applicable.

2.2. Label elements

Labeling according to §1910.1200 (GHS-US labeling).

**Hazard symbol(s)**
SAFETY DATA SHEET

Pelargonic acid Halal 10560C

Version / Revision 2.01

Signal word Warning

Hazard statements
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H402: Harmful to aquatic life

Precautionary statements

Prevention
P264: Wash hands thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P332 + P313: If skin irritation occurs: Get medical advice/ attention.
P362 + P364: Take off contaminated clothing and wash it before reuse.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists: Get medical advice/ attention.

Disposal
P501: Dispose of contents/container in accordance with local regulation.

2.3. Other hazards

Vapour/air-mixtures are explosive at intense warming

SECTION 3: Composition / information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>REACh-No</th>
<th>1272/2008/EC</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pelargonic acid</td>
<td>112-05-0</td>
<td>01-2119529247-37</td>
<td>Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412</td>
<td>&gt; 95,5</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Keep at rest. Aerate with fresh air. When symptoms persist or in all cases of doubt seek medical advice.

Eyes
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
Skin
Wash off immediately with soap and plenty of water. When symptoms persist or in all cases of doubt seek medical advice.

Ingestion
Call a physician immediately. Do not induce vomiting without medical advice.

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

Main symptoms
cough, headache, nausea, shortness of breath.

Special hazard
Lung irritation, Lung oedema.

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

General advice
Remove contaminated, soaked clothing immediately and dispose of safely. First aider needs to protect himself.

Treat symptomatically. If ingested, flush stomach and compensate acidosis.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
foam, dry chemical, carbon dioxide (CO2), water spray

Unsuitable Extinguishing Media
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Under conditions giving incomplete combustion, hazardous gases produced may consist of:
carbon monoxide (CO)
carbon dioxide (CO2)
Combustion gases of organic materials must in principle be graded as inhalation poisons
Vapours are heavier than air and may spread along floors
Vapour/air-mixtures are explosive at intense warming

5.3. Advice for firefighters

Special protective equipment for firefighters
Fire fighter protection should include a self-contained breathing apparatus (NIOSH-approved or EN 133) and full fire-fighting turn out gear.

Precautions for firefighting
Keep people away from and upwind of fire. Cool containers / tanks with water spray. Dike and collect water used to fight fire. Water run-off can cause environmental damage.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
SAFETY DATA SHEET

Pelargonic acid Halal
10560C

For non-emergency personnel: For personal protective equipment see section 8. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Keep away from heat and sources of ignition.
For emergency responders: Personal protection see section 8.

6.2. Environmental precautions
Prevent further leakage or spillage. Do not discharge product into the aquatic environment without pretreatment (biological treatment plant). Water runoff can cause environmental damage.

6.3. Methods and material for containment and cleaning up

Methods for containment
Stop the flow of material, if possible without risk. Dike spilled material, where this is possible.

Methods for cleaning up
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Dispose of in accordance with local regulations. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

6.4. Reference to other sections
For personal protective equipment see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Provide sufficient air exchange and/or exhaust in work rooms.

Hygiene measures
When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

Advice on the protection of the environment
See Section 8: Environmental exposure controls.

Incompatible products
bases
amines
strong oxidizing agents
reducing agents

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). In case of fire, emergency cooling with water spray should be available. Ground and bond containers when transferring material. Vapour/air-mixtures are explosive at intense warming.

Technical measures/Storage conditions
Keep containers tightly closed in a cool, well-ventilated place. Handle and open container with care. Keep at temperatures between 16 and 40 °C (60 and 104 °F).

**Temperature class**
T2

### 7.3. Specific end use(s)

Distribution of substance  
Formulation  
Cleaning agent  
Lubricants and lubricant additives  
Intermediate  
laboratory chemicals  
Industrial processing of articles

### SECTION 8: Exposure controls / personal protection

#### 8.1. Control parameters

**Exposure limits European Union**

No exposure limits established.

**Exposure limits Germany**

No exposure limits established.

**Exposure limits United States of America**

No exposure limits established.

#### 8.2. Exposure controls

**Appropriate Engineering controls**

General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

**Personal protective equipment**

**General industrial hygiene practice**

Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Ensure that eyewash stations and safety showers are close to the workstation location.

**Hygiene measures**

When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

**Eye protection**

Tightly fitting safety goggles. In addition to goggles, wear a face shield if there is a reasonable chance for splash to the face.

**Hand protection**
Wear protective gloves. Recommendations are listed below. Other protective material may be used, depending on the situation, if adequate degradation and permeation data is available. If other chemicals are used in conjunction with this chemical, material selection should be based on protection for all chemicals present.

Suitable material: nitrile rubber
Evaluation: according to EN 374: level 6
Glove thickness: approx 0.55 mm
Break through time: > 480 min

Suitable material: polyvinylchloride / nitrile rubber
Evaluation: according to EN 374: level 6
Glove thickness: approx 0.9 mm
Break through time: > 480 min

Skin and body protection
Impervious clothing. Wear face-shield and protective suit for abnormal processing problems.

Respiratory protection
Respirator with filter for organic vapour. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Equipment should conform to NIOSH, EN or other applicable national standards.

Environmental exposure controls
If possible use in closed systems. If leakage can not be prevented, the substance needs to be suck off at the emersion point, if possible without danger. Observe the exposure limits, clean exhaust air if needed. If recycling is not practicable, dispose of in compliance with local regulations. Inform the responsible authorities in case of leakage into the atmosphere, or of entry into waterways, soil or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>weak</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>4.4 (0.1 g/l in water @ 25 °C (77 °F)) DIN 19268</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>13 °C (Pour point)</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>245 °C @ 1013 hPa</td>
</tr>
<tr>
<td>Flash point</td>
<td>137 °C @ 1013 hPa</td>
</tr>
<tr>
<td>Method</td>
<td>ISO 2719</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Does not apply, the substance is a liquid</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>0.8 Vol %</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>9.0 Vol %</td>
</tr>
</tbody>
</table>

Vapour pressure

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Values [hPa]</th>
<th>Values [kPa]</th>
<th>Values [atm]</th>
<th>@ °C</th>
<th>@ °F</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.1</td>
<td>0.001</td>
<td></td>
<td>20</td>
<td>68</td>
<td>DIN EN 13016-2</td>
</tr>
<tr>
<td>4.6</td>
<td>0.46</td>
<td>0.005</td>
<td>50</td>
<td>122</td>
<td></td>
<td>DIN EN 13016-2</td>
</tr>
</tbody>
</table>

Vapour density

5.5 (Air = 1) @ 20 °C (68 °F)

Relative density
SAFETY DATA SHEET

Pelargonic acid Halal
10560C

Values @ °C @ °F Method
0,905 20  68 DIN 51757

Solubility 0,3 g/l @ 20 °C, in water, OECD 105
log Pow 3,4 (measured), OECD 117
Autoignition temperature 355 °C @ 1013 hPa
   Method DIN 51794
Decomposition temperature 266 °C @ 1013 hPa
Viscosity 8,1 mPa*s @ 20 °C
   Method dynamic, ASTM D445
Oxidizing properties Does not apply, substance is not oxidising. There are no chemical groups
   associated with oxidizing properties
Explosive properties Does not apply, substance is not explosive. There are no chemical groups
   associated with explosive properties

9.2. Other information
Molecular weight 158,23
Molecular formula C9 H18 O2
Refractive index 1,433 @ 20 °C
Surface tension 31,7 mN/m (0,27 g/l @ 20°C (68°F)), OECD 115

SECTION 10: Stability and Reactivity

10.1. Reactivity
The reactivity of the product corresponds to the typical reactivity shown by the substance group as described in
any text book on organic chemistry.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Hazardous polymerisation does not occur.

10.4. Conditions to avoid
Avoid contact with heat, sparks, open flame and static discharge. Avoid any source of ignition.

10.5. Incompatible materials
bases, amines, strong oxidizing agents, reducing agents.

10.6. Hazardous decomposition products
No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Likely routes of exposure Ingestion, Inhalation, Eye contact, Skin contact
### Acute toxicity

#### Pelargonic acid (112-05-0)

<table>
<thead>
<tr>
<th>Routes of Exposure</th>
<th>Endpoint</th>
<th>Values</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>rat, male/female</td>
<td>OECD 423</td>
</tr>
<tr>
<td>Oral</td>
<td>LD0</td>
<td>2000 mg/kg</td>
<td>rat, male/female</td>
<td>OECD 423</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>rat, male/female</td>
<td>OECD 402</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD0</td>
<td>2000 mg/kg</td>
<td>rat, male/female</td>
<td>OECD 402</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50</td>
<td>&gt; 5997 mg/l</td>
<td>rat, male/female</td>
<td>OECD 403</td>
</tr>
</tbody>
</table>

#### Pelargonic acid, CAS: 112-05-0

**Assessment**

Based on available data, the classification criteria are not met for:

- Acute oral toxicity
- Acute dermal toxicity
- Acute inhalation toxicity

**STOT SE**

### Irritation and corrosion

#### Pelargonic acid (112-05-0)

<table>
<thead>
<tr>
<th>Target Organ Effects</th>
<th>Species</th>
<th>Result</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>rabbit</td>
<td>irritating</td>
<td>OECD 404</td>
</tr>
<tr>
<td>Eyes</td>
<td>rabbit</td>
<td>irritating</td>
<td></td>
</tr>
</tbody>
</table>

#### Pelargonic acid, CAS: 112-05-0

**Assessment**

The available data lead to the classification given in section 2

### Sensitization

#### Pelargonic acid (112-05-0)

<table>
<thead>
<tr>
<th>Target Organ Effects</th>
<th>Species</th>
<th>Evaluation</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>guinea pig</td>
<td>not sensitizing</td>
<td>OECD 406</td>
</tr>
<tr>
<td>Skin</td>
<td>mouse</td>
<td>not sensitizing</td>
<td>OECD 429</td>
</tr>
</tbody>
</table>

#### Pelargonic acid, CAS: 112-05-0

**Assessment**

Based on available data, the classification criteria are not met for:

- Skin sensitization
- For respiratory sensitization, no data are available

### Subacute, subchronic and prolonged toxicity

#### Pelargonic acid (112-05-0)

<table>
<thead>
<tr>
<th>Type</th>
<th>Dose</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subacute toxicity</td>
<td>NOAEL: 1000 mg/kg/d (28d)</td>
<td>rat, male/female</td>
<td>Oral Systemic toxicity</td>
</tr>
<tr>
<td>Subchronic toxicity</td>
<td>NOAEL: 5074 mg/kg/d (90d)</td>
<td>rat</td>
<td>OECD 408 Oral Systemic toxicity read across</td>
</tr>
</tbody>
</table>

#### Pelargonic acid, CAS: 112-05-0

**Assessment**

Based on available data, the classification criteria are not met for:

**STOT RE**

### Carcinogenicity, Mutagenicity, Reproductive toxicity
Pelargonic acid (112-05-0)

<table>
<thead>
<tr>
<th>Type</th>
<th>Dose</th>
<th>Species</th>
<th>Evaluation</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutagenicity</td>
<td></td>
<td>Salmonella typhimurium</td>
<td>negative (with metabolic activation) negative (without metabolic activation)</td>
<td>OECD 471 (Ames)</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td></td>
<td>human lymphocytes</td>
<td>negative (with metabolic activation) negative (without metabolic activation)</td>
<td>OECD 473 (Chromosomal Aberration)</td>
</tr>
<tr>
<td>Developmental Toxicity</td>
<td>NOAEL 1500 mg/kg/d</td>
<td>rat</td>
<td></td>
<td>OECD 414</td>
</tr>
<tr>
<td>Developmental Toxicity</td>
<td>NOAEL 425 mg/kg/d</td>
<td>rabbit</td>
<td></td>
<td>OECD 414</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>NOAEL 4700 mg/kg/d</td>
<td>mouse</td>
<td></td>
<td>OECD 416</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td></td>
<td>mouse lymphoma cells</td>
<td>negative (without metabolic activation)</td>
<td>OECD 476 (Mammalian Gene Mutation)</td>
</tr>
</tbody>
</table>

**Pelargonic acid, CAS: 112-05-0**

**CMR Classification**
The available data on CMR properties are summarized in the table above. They do not indicate a classification into categories 1A or 1B

**Evaluation**
In vitro tests showed mutagenic effects
Animal testing did not show any effects on fertility

**Pelargonic acid, CAS: 112-05-0**

**Main symptoms**
cough, headache, nausea, shortness of breath.

**Target Organ Systemic Toxicant - Single exposure**
Based on available data, the classification criteria are not met for:
STOT SE

**Target Organ Systemic Toxicant - Repeated exposure**
Based on available data, the classification criteria are not met for:
STOT RE

**Aspiration toxicity**
Due to the viscosity, this product does not present an aspiration hazard

**Note**
Handle in accordance with good industrial hygiene and safety practice. Further details on substance data can be found in the registration dossier under the following link:

**SECTION 12: Ecological information**
12.1. Toxicity

**Acute aquatic toxicity**

<table>
<thead>
<tr>
<th>Species</th>
<th>Exposure time</th>
<th>Dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pimephales promelas (fathead minnow)</td>
<td>96h</td>
<td>LC50: 104 mg/l</td>
<td>OECD 203</td>
</tr>
<tr>
<td>Daphnia magna (Water flea)</td>
<td>48h</td>
<td>EC50: 96 mg/l</td>
<td>EPA OPP 72-2</td>
</tr>
<tr>
<td>Pseudokirchneriella subcapitata</td>
<td>72h</td>
<td>EC50: 60 mg/l (Growth rate)</td>
<td>read across</td>
</tr>
<tr>
<td>Activated sludge (domestic)</td>
<td>28 d</td>
<td>NOEC: &gt;= 14 mg/l</td>
<td>OECD 301B</td>
</tr>
</tbody>
</table>

**Long term toxicity**

<table>
<thead>
<tr>
<th>Type</th>
<th>Species</th>
<th>Dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>Daphnia magna (Water flea)</td>
<td>NOEC: 18 mg/l (21d)</td>
<td>OECD 211 read across</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Daphnia magna (Water flea)</td>
<td>EC50: 47 mg/l/21d</td>
<td>OECD 211 read across</td>
</tr>
<tr>
<td>Aquatic toxicity</td>
<td>Pseudokirchneriella subcapitata</td>
<td>NOAEC: 29 mg/l (3d)</td>
<td>Growth rate read across</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

**Pelargonic acid, CAS: 112-05-0**

**Biodegradation**

68 - 75 % (28 d), activated sludge (domestic), aerobic, non-adapted, OECD 301 B.

<table>
<thead>
<tr>
<th>Type</th>
<th>Result</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrolysis</td>
<td>not expected</td>
<td></td>
</tr>
<tr>
<td>Photolysis</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Type</th>
<th>Result</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>log Pow</td>
<td>3.4</td>
<td>measured, OECD 117</td>
</tr>
<tr>
<td>BCF</td>
<td>3,162</td>
<td>calculated</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Type</th>
<th>Result</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>31.7 mN/m (0.27 g/l @ 20°C (68°F))</td>
<td>OECD 115</td>
</tr>
<tr>
<td>Adsorption/Desorption</td>
<td>log Koc: 2.02 @ pH 7 calculated</td>
<td></td>
</tr>
<tr>
<td>Distribution to environmental compartments</td>
<td>no data available</td>
<td></td>
</tr>
</tbody>
</table>
12.5. Results of PBT and vPvB assessment

Pelargonic acid, CAS: 112-05-0
PBT and vPvB assessment
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT), nor very persistent nor very bioaccumulating (vPvB)

12.6. Other adverse effects

Pelargonic acid, CAS: 112-05-0
No data available

Note
Avoid release to the environment.***

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product Information
Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal.
Hazardous waste according to European Waste Catalogue (EWC)

Uncleaned empty packaging
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

SECTION 14: Transport information

Section 14.1 - 14.6

ICAO-TI / IATA-DGR Not restricted

IMDG Not restricted

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

Product name Nonanoic acid
Ship type 3
Pollution category Y

ADR/RID Not restricted

SECTION 15: Regulatory information
SAFETY DATA SHEET

Pelargonic acid Halal
10560C

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

Regulation 1272/2008, Annex VI

Pelargonic acid, CAS: 112-05-0

Classification
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Aquatic Chronic 3; H412

Hazard pictograms
GHS07 Exclamation mark

Signal word
Warning***

Hazard statements
H315, H319, H412

DI 2012/18/EU (Seveso III)
Category
not subject

DI 1999/13/EC (VOC Guideline)

<table>
<thead>
<tr>
<th>Component</th>
<th>Status</th>
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<tbody>
<tr>
<td>Pelargonic acid</td>
<td>regulated</td>
</tr>
<tr>
<td>CAS: 112-05-0</td>
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</tr>
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International Inventories

Pelargonic acid, CAS: 112-05-0
AICS (AU)***
DSL (CA)***
IECSC (CN)***
EC-No. 2039312 (EU)***
ENCS (2)-608 (JP)***
ISHL (2)-608 (JP)***
KECI KE-26163 (KR)***
INSO (MX)***
PICCIS (PH)***
TSCA (US)***
NZIoC (NZ)***
TCSI (TW)***

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long lasting effects.

Abbreviations
A table of terms and abbreviations can be found under the following link:

Training advice
For effective first-aid, special training / education is needed.

Sources of key data used to compile the datasheet
Information contained in this safety data sheet is based on Oxea owned data and public sources deemed valid or acceptable. The absence of data elements required by OSHA, ANSI or Annex II, Regulation 1907/2006/EC indicates, that no data meeting these requirements is available.

Further information for the safety data sheet
Changes against the previous version are marked by ***. Observe national and local legal requirements. For more information, other material safety data sheets or technical data sheets please consult the Oxea homepage (www.oxea-chemicals.com).

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End of Safety Data Sheet