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

1.1 Product identifiers

Product name : Tergitol™
Product Number : NP9
Brand : Sigma

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO  63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Eye irritation (Category 2A), H319
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word Warning
Hazard statement(s)
H302 + H332 Harmful if swallowed or if inhaled.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P261 Avoid breathing mist or vapors.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear eye protection/face protection.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
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.
P391 Collect spillage.
P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients
3.2 Mixtures

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>α-(4-Nonylphenyl)-ω-hydroxy-poly(oxy-1,2-ethanediyl) branched</td>
<td>Acute Tox. 4; Eye Irrit. 2A; Aquatic Acute 2; Aquatic Chronic 2; H302, H332, H319, H401, H411</td>
<td>&gt;= 90 - &lt;= 100%</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>127087-87-0</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>500-315-8</td>
<td></td>
</tr>
<tr>
<td>α-Hydro-ω-hydroxy-poly(oxy-1,2-ethanediyl) M ~ 200</td>
<td></td>
<td>&gt;= 1 - &lt; 5%</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>25322-68-3</td>
<td></td>
</tr>
<tr>
<td>Dinonylphenyl polyoxyethylene</td>
<td>Eye Irrit. 2A; H319</td>
<td>&gt;= 1 - &lt; 5%</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>9014-93-1</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>618-488-4</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.
SECTION 4: First aid measures

4.1 Description of first-aid measures
No data available

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media
No data available

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.

5.3 Advice for firefighters
No data available

5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For personal protection see section 8.

6.2 Environmental precautions
No data available

6.3 Methods and materials for containment and cleaning up
No data available

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
No data available

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>α-Hydro-ω-hydroxy-poly(oxy-1,2-ethanediyl) M</td>
<td>25322-68-3</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>USA, Workplace Environmental Exposure Levels (WEEL)</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Personal protective equipment

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Control of environmental exposure
Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance
   Form: liquid
   Color: colorless, light yellow

b) Odor
   mild

c) Odor Threshold
   No data available
d) pH

5 - 8 at 10 g/l - (as aqueous solution)
6 - 7 at 1% - (as aqueous solution)

e) Melting point/freezing point

Freezing point: 3.8 °C (38.8 °F)

f) Initial boiling point and boiling range

> 250 °C > 482 °F - Decomposes on heating.

g) Flash point

247 °C (477 °F) - closed cup - ASTM D 93

h) Evaporation rate

No data available

i) Flammability (solid, gas)

No data available

j) Upper/lower flammability or explosive limits

No data available

k) Vapor pressure

< 0.01 hPa at 20 °C (68 °F)

l) Vapor density

No data available

m) Density

No data available

Relative density

No data available

n) Water solubility

completely soluble

o) Partition coefficient: n-octanol/water

log Pow: 2.1 - 3.4

p) Autoignition temperature

No data available

q) Decomposition temperature

No data available

r) Viscosity

237 mm2/s at 25 °C (77 °F) -

s) Explosive properties

Not classified as explosive.

t) Oxidizing properties

none

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents
10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity
Acute toxicity estimate Oral - 515.46 mg/kg
(Calculation method)
Acute toxicity estimate Inhalation - 4 h - 1.19 mg/l - dust/mist(Calculation method)

Dermal: No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Additional Information

RTECS: WZ4750000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.
Components

\( \alpha-(4\text{-Nonylphenyl})-\omega\text{-hydroxy-poly(oxy-1,2-ethanediyl)} \) branched

**Acute toxicity**
LD50 Oral - Rat - 960 - 3,980 mg/kg
Remarks: (External MSDS)
LC50 Inhalation - Rat - 4 h - 1.15 mg/l - dust/mist
Remarks: (External MSDS)
LD50 Dermal - Rabbit - 2,000 - 2,991 mg/kg

**Skin corrosion/irritation**
After long-term exposure to the chemical: Mild skin irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Eye irritation
Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization**
Patch test on human volunteers did not demonstrate sensitization properties.

**Germ cell mutagenicity**
In vitro tests did not show mutagenic effects

**Carcinogenicity**
Animal testing did not show any carcinogenic effects.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

\( \alpha\text{-Hydro-}\omega\text{-hydroxy-poly(oxy-1,2-ethanediyl)} \) M ~ 200

**Acute toxicity**
LD50 Oral - Rat - 30,200 mg/kg
Inhalation: No data available
LD50 Dermal - Rabbit - > 20,000 mg/kg
No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available
Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

**Dinonylphenyl polyoxyethylene**

**Acute toxicity**
Oral: No data available
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
Causes serious eye irritation.

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
No data available

**Reproductive toxicity**
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

**SECTION 12: Ecological information**

12.1 Toxicity

**Mixture**
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties
No data available

12.7 Other adverse effects
No data available

Components

- **α-(4-Nonylphenyl)-ω-hydroxy-poly(oxy-1,2-ethanediyl) branched**
  - Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 3.8 - 6.2 mg/l - 96 h (OECD Test Guideline 203)
  - Remarks: (External MSDS)
  - Toxicity to daphnia and other aquatic invertebrates: LC50 - Daphnia magna (Water flea) - 9.3 - 21.4 mg/l - 48 h (OECD Test Guideline 202)
  - Remarks: (External MSDS)
  - Toxicity to bacteria: IC50 - Bacteria - > 1,000 mg/l - 16 h

- **α-Hydro-ω-hydroxy-poly(oxy-1,2-ethanediyl) M ~ 200**
  No data available

- **Dinonylphenyl polyoxyethylene**
  No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods
No data available

SECTION 14: Transport information

**DOT (US)**
Not dangerous goods

**IMDG**
UN number: 3082 Class: 9 Packing group: III EMS-
No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (α-(4-Nonylphenyl)-ω-hydroxy-poly(oxy-1,2-ethanediyl) branched)
Marine pollutant: yes
Marine pollutant: no

**IATA**
UN number: 3082   Class: 9   Packing group: III
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (α-(4-Nonylphenyl)-ω-hydroxy-poly(oxy-1,2-ethanediyl) branched)

Further information
Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

SECTION 15: Regulatory information

SARA 302 Components
This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>α-(4-Nonylphenyl)-ω-hydroxy-poly(oxy-1,2-ethanediyl) branched</td>
<td>127087-87-0</td>
<td>2021-01-12</td>
</tr>
</tbody>
</table>

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

SECTION 16: Other information
The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Version: 8.7   Revision Date: 09/08/2022   Print Date: 01/14/2024