1 Identification of the substance

Tyloxapol - USP

Ethoxylated p-tert-octylphenol formaldehyde polymer

FT11312

A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

advanced Intermediates

not for food or drug use, for laboratory use only

Carbosynth Ltd
8&9 Old Station Business Park
GB-COMPTON RG20 6NE

+44 1635 578444
customerservice@biosynth-carbosynth.com

Office hours: +44 1635 578444

2 Hazards identification

Health Hazards

Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2)
Single exposure: Respiratory tract irritation (Category 3)

Environmental Hazards

not classified

Physical Hazards

not classified

Possible Hazards (Summary)

GHS Labeling

Regulatory List
EC1272/08 Regulation (EC) 1272/2008 (GHS/CLP)

Symbol
GHS07 exclamation mark

Pictogram
Signal Word
Warning

Hazard Statement
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary Statement
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove casualty to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Remove contact lenses, if possible.
P501 Dispose of contents/container in accordance with local/ regional/ national / international regulations.

Additional Information
Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated.

3 Composition/information on ingredients
Substance related information

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Tyloxapol - USP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Ethoxylated p-tert-octylphenol formaldehyde polymer</td>
</tr>
<tr>
<td>Cas No.</td>
<td>[25301-02-4]</td>
</tr>
<tr>
<td>Formula</td>
<td>((C_{17}H_{28}O_3)n)</td>
</tr>
</tbody>
</table>

4 First aid measures
First Aid: Eye
Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

First Aid: Skin
Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

First Aid: Ingestion
Wash out mouth with water provided person is conscious. Call a physician.

First Aid: Inhalation
Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Hints for Physician: Treatment
Treat symptomatically.

5 Firefighting measures
Extinguishing Media
Suitable
- foam, dry extinguishing powder, carbon dioxide (CO2), water spray jet

Hazards During Fire-Fighting
Toxic fumes

Protective Equipment for Fire-Fighting
Wear a self-contained breathing apparatus and chemical protective clothing.

Fire-Fighting/Further Advice
Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

6 Accidental release measures

Personal Precautions
Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation.

Environmental Precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

Methods for Cleaning or Taking Up
Not available

Further Accidental Release Measures
Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Ventilate affected area.

7 Handling and storage

Handling
Handling advice
Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling.

Storage
Storage temperature
Store at 2°C - 8°C

Storage condition
Close container well

Storage Requirements
Keep container tightly closed in an upright position to prevent leakage. Keep away from incompatible substances. Keep container tightly closed when not in use.

8 Exposure controls/personal protection

Exposure controls
Industrial Hygiene
Mechanical exhaust required. Safety shower and eye shower.
Personal Protective Equipment

Respiratory Protection
Wear NIOSH/MSHA or European Standard EN 149 approved respirator.

Hand Protection
Wear compatible chemical-resistant gloves to prevent skin exposure.

Eye Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA.

Body Protection
Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

Advice on Safe Handling
Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure.

9 Physical and chemical properties
Form
clear liquid

Phase Transition Liquid/Gas
282.3 °C

Density
1.107 g/cm³

Flash Point
113 °C

10 Stability and reactivity
Conditions to Avoid
incompatible materials

Substances to Avoid
Some metals, bases, reducing agents, strong oxidizers

Decomposition Products
carbon dioxide (CO₂), carbon monoxide

11 Toxicological information
Acute Toxicity
LD₅₀ oral, Rat, 5,000 mg/kg

Other Relevant Toxicity Information
Only selected Registry of toxic effects of chemical substances (RTECS) data is presented here. For the complete information, consult current entry in RTECS.

12 Ecological Information
Biodegradation
no data available

Bioaccumulation
no data available

Distribution in Environment
no data available
13 Disposal considerations

Advice on Disposal and Packaging

Advice on Disposal
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and Exhaust air. Dispose of waste according to laws applicable.

Advice on Packaging
not available

14 Transport information

Road Transport (ADR/GGVS)
not regulated

Air Transport (IATA)
not regulated

15 Other regulations

Other Regulations

Regulatory List
EINECS, TCSI, NZIOC, PICCS, AICS, DSL

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyloxapol - USP</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

16 Additional information

GHS Labeling

Regulatory List
EC1272/08 Regulation (EC) 1272/2008 (GHS/CLP)

Symbol
GHS07 exclamation mark

Signal Word
Warning

Hazard Statement
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary Statement
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove casualty to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Remove contact lenses, if possible.
P501 Dispose of contents / container in accordance with local / regional / national / international regulations.