

Section 1. Identification

Product identifier : TORNADE

Other means of identification : Codes : 70476, 70478

Recommended use and restrictions on use : All purpose cleaner degreaser (ready to use)

Supplier identifier : Les Produits Sanitaires Lépine inc.
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24/7

Section 2. Hazard identification

Hazard classification of substance or mixture : EYE IRRITATION – Category 2

Label elements

Symbol(s) :



Signal word :

Warning

Hazard statement(s) :

Causes serious eye irritation.

Precautionary statement(s)

Prevention :

Wear eye protection. Wash hand thoroughly after handling.

Response :

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage :

Not applicable

Disposal :

Not applicable

Section 3. Composition/information on ingredients

Substance/material : Mixture

| Chemical name | Common name | % (w/w) | CAS number |
|--|------------------|-----------|------------|
| Dipropylene glycol monomethyl ether | Glycol ether DPM | 1 – 5 | 34590-94-8 |
| Alcohol ethoxylate C9-11 | | 1 – 5 | 68439-46-3 |
| Tetrasodium ethylenediamine tetraacetate | EDTA | 0,5 – 1,5 | 64-02-8 |

The actual concentration or concentration range is withheld as a trade secret.

Based on current knowledge of the supplier and in the concentrations applicable, no other ingredients present are classified as hazardous to health or the environment therefore would require reporting in this section.

Occupational exposure limits, where available, are listed in section 8.

Section 4. First-aid measures

First-aid measures by route of exposure :

| | |
|-----------------------|--|
| Eye contact : | Rinse cautiously with water for several minutes, lifting the eyelids occasionally. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice. |
| Inhalation : | Unlikely route of exposure considering the nature and use of the product. Remove person to fresh air if required. |
| Skin contact : | Rinse with plenty of water for a few minutes. If irritation occurs, get medical advice. |
| Ingestion : | Do not induce vomiting. Consult a doctor or poison center. |

Most important symptoms and effects (acute or delayed)

Potential acute health effects

| | |
|-----------------------|---|
| Eye contact : | Causes serious eye irritation. |
| Inhalation : | Unlikely route of exposure considering the nature and use of the product. |
| Skin contact : | May cause skin irritation. |
| Ingestion : | May cause irritation to the mouth and throat. |

Signs/symptoms of overexposure

| | |
|-----------------------|--|
| Eye contact : | Adverse symptoms may include : pain, tearing, conjunctivitis. |
| Inhalation : | Unlikely route of exposure considering the nature and use of the product. |
| Skin contact : | Adverse symptoms may include : irritation. |
| Ingestion : | Adverse symptoms may include : abdominal pain, diarrhea, nausea, vomiting. |

Immediate medical attention and special treatment, if necessary

| | |
|---|---|
| Note to physician : | Symptomatic treatment required. Contact the poison treatment specialist immediately if large amounts have been ingested or inhaled. |
| Specific treatments : | No special treatment. |
| Protection of first responders : | See section 8. |

See toxicological information (section 11)

Section 5. Fire-fighting measures

Extinguishing media

| | |
|---|---|
| Suitable extinguishing media : | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media : | None known. |

Specific hazard arising from the hazardous product : No specific risk of fire or explosion.

| | |
|---|---|
| Hazardous combustion products : | If heated to decomposition, releases carbon oxides and nitrogen oxides. |
| Precautions for fire-fighters : | No special measures are required. |
| Protective equipment for fire-fighters : | It is important that firefighters wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a positive pressure face shield. |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures :

Use appropriate personal protective equipment : respiratory protection, protective clothing, gloves and eye protection (see Section 8)

Methods and materials for containment and cleaning up :

Contain spill for neutralization, in order to prevent environmental contamination. Keep away from sewers or waterways. The small quantities must be removed, wiped and used, when it's possible. For general purpose cleaning, or drain in the sanitary sewers if the municipal and provincial regulations permit it. Recover the abundant quantities with vermiculite or all other absorbent, and eliminate as industrial waste. If the product flowed in the nature inform the municipal, provincial and federal authorities as required by law.

Section 7. Handling and storage

Precautions for safe handling

Protective measures :

Put on appropriate personal protective equipment (see Section 8).

Advice on general hygiene at work :

Refer to Section 8 for information on hygiene measures.

Conditions for safe storage (including incompatible materials) :

Store in accordance with local regulations.

Section 8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits :

| Name of product or ingredient | Exposure limits - ACGIH | Exposure limits - OSHA | Immediately dangerous to life or health - IDLH |
|--|---------------------------------|---------------------------------|---|
| Dipropylene glycol monomethyl ether | 150 ppm – STEL 100 ppm - TWA | 150 ppm – STEL 100 ppm - TWA | 600 ppm |
| Alcohol ethoxylate C9-11 | Not available | Not available | Not available |
| Tetrasodium ethylenediamine tetraacetate | None | None | None |

Appropriate engineering controls :

None required in normal use.

Individual protection measures

Hygiene measures :

Observe good personal hygiene measure.

Eye / face protection :

None required in normal use. If there are splash risks, wear protective glasses.

Skin protection :

Hand protection :

None required in normal use.

Body protection :

None required in normal use.

Other skin protection :

None required in normal use.

Respiratory protection :

None required in normal use.

Section 9. Physical and chemical properties

Appearance :

Light green liquid

Odour :

Fruity

Odour threshold :

Not available

pH :

11,5 ± 0,4

Melting point/Freezing point :

± 0 °C

Initial boiling point : :

± 100 °C

| | |
|---|--|
| Flash point : | Closed cup : >93,3°C (>199,9°F) |
| Evaporation rate : | Not available |
| Flammability (solids and gases) : | Not applicable |
| Lower and upper flammability/explosive limit : | Not available |
| Vapour pressure : | Not available |
| Vapour density : | Not available |
| Relative density : | 1,00 ± 0,01g/ml |
| Solubility : | Easily soluble in the following materials : cold and hot water |
| Partition coefficient n-octanol/water : | Not available |
| Auto-ignition temperature : | Not available |
| Decomposition temperature : | Not available |
| Viscosity : | Not available |

Section 10. Stability and reactivity

| | |
|---|--|
| Reactivity : | No specific test data to the reactivity available for this product or its ingredients. |
| Chemical stability : | The product is stable. |
| Possibility of hazardous reactions : | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid : | No specific data. |
| Incompatible materials : | Do not blend with other detergents. |
| Hazardous decomposition products : | If heated to decomposition, releases carbon oxides, nitrogen oxides. |

Section 11. Toxicological information

Information on toxicological effects

Toxicological data :

| Name of product or ingredient | Result | Species | Dosage | Exposure | Observation |
|--|-------------|---------|-------------|----------|-------------|
| Dipropylene glycol monomethyl ether | LD50 Oral | Rat | >5000 mg/kg | - | - |
| | LD50 Dermal | Rabbit | 9510 mg/kg | - | - |
| Alcohol ethoxylate C9-11 | LD50 Oral | Rat | >2000 mg/kg | - | - |
| | LD50 Dermal | Rabbit | >2000 mg/kg | - | - |
| Tetrasodium ethylenediamine tetraacetate | LD50 Oral | Rat | 3030 mg/kg | - | - |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - | - |

| | |
|---|-------------------|
| Sensitization : | No data available |
| Mutagenicity : | No data available |
| Carcinogenicity : | No data available |
| Toxicity to reproduction : | No data available |
| Teratogenicity : | No data available |
| Systemic toxicity for some target organs – single exposure : | No data available |
| Target organ toxicity – repeated exposure : | No data available |

Route of exposure : Skin contact, eye contact, inhalation, ingestion.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : Unlikely route of exposure considering the nature and use of the product.
Skin contact : May cause skin irritation.
Ingestion : May cause irritation to the mouth and throat.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include : pain, tearing, conjunctivitis.
Inhalation : Unlikely route of exposure considering the nature and use of the product.
Skin contact : Adverse symptoms may include : irritation.
Ingestion : Adverse symptoms may include : abdominal pain, diarrhea, nausea, vomiting.

Delayed and immediate effects, and chronic effects from short-term and long-term exposure

Short-term exposure : No important effects or critical dangers known.
Long-term exposure : No important effects or critical dangers known.
Potential chronic health effects : No important effects or critical dangers known.

Numerical value of toxicity

Acute toxicity estimates

| Route of exposure | ATE value |
|-------------------|-------------|
| Oral | >5000 mg/kg |
| Dermal | >5000 mg/kg |

Section 12. Ecological information

Ecotoxicity :

| Name | Results | Species | Exposure |
|---------------|---------------|---------------|---------------|
| Not available | Not available | Not available | Not available |

Persistence and degradability : Not available
Bioaccumulative potential : Not available
Mobility in soil : Not available
Other adverse effects : Not available

Section 13. Disposal considerations

Disposal methods : It is important to minimize or avoid generation of waste wherever possible. Dispose of contents and container in accordance with all applicable local, state, and national regulations.

Section 14. Transport information

UN number : Not applicable
UN proper shipping name : Not applicable
Packing group : Not applicable
Environmental hazards : Not applicable
Special precautions : Transport with local users : Always transport in containers that are correct and secure. Ensure that persons transporting the product know what to do in case of accident or spillage.

Section 15. Regulatory information

The product classification and SDS were developed in accordance with the HPR.

Section 16. Other information

Procedure used to prepare the classification

| Classification | Justification |
|-----------------------------|--------------------|
| EYE IRRITATION – Category 2 | Calculation method |

Prepared on : 2017-11-21
Edition : 01
Prepared by : The research and development department of Produits Sanitaires Lépine inc.

Legend of abbreviations :
 ATE = Acute toxicity estimate
 SDS = Safety Data Sheet
 UN = United Nations
 HPR = Hazardous Products Regulations
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 TDG : Transportation of Dangerous Goods
 CAS : Chemical Abstract Services
 TWA : Time-Weighted Average
 STEL : Short-Term Exposure Limit
 IDLH : Immediately dangerous to life or health
 LC : Lethal Concentration
 LD : Lethal Dose
 EC : Effective Concentration

Notice to reader :

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