

SAFETY DATA SHEET

1. Identification

Product identifier: TOMADOL 1-5

Chemical name: Ethoxylated alcohol

Other means of identification

Recommended use: Industrial Use

Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik (SEA) Pte Ltd.
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#07-18 Nordic European Centre
Singapore 609927

Telephone : +65 6 809 6666

Emergency telephone number:

24-Hour Health : 800 101 2201
Emergency : +65 3158 1349

2. Hazard(s) identification

According to Hazardous Product Regulations

Health Hazards

Acute toxicity (Oral)	Category 4
Acute toxicity (Dermal)	Category 5
Serious Eye Damage/Eye Irritation	Category 1

Environmental Hazards

Acute hazards to the aquatic environment	Category 2
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Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:	Harmful if swallowed. May be harmful in contact with skin. Causes serious eye damage. Toxic to aquatic life.
Precautionary Statements	
Prevention:	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear eye protection/face protection.
Response:	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards: None known.

3. Composition/information on ingredients

Chemical name:
Ethoxylated alcohol

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Poly(oxy-1,2-ethanediyl), a-undecyl-w-hydroxy-		34398-01-1	>60%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

General information:	Immediately remove contaminated clothing.
Inhalation:	Ensure supply of fresh air. In the event of symptoms seek medical advice.

Skin Contact: In case of contact with skin wash off with soap and water. In the event of symptoms seek medical advice.

Eye contact: In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice

Ingestion: Thoroughly clean the mouth with water In the event of symptoms seek medical advice.

Personal Protection for First-aid Responders: Do not inhale explosion and/or combustion gases, Use self-contained breathing apparatus and wear protective suit

Most important symptoms/effects, acute and delayed

Symptoms: Risk of serious damage to eyes.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray.

Unsuitable extinguishing media: Full water jet

Specific hazards arising from the chemical: In the event of fire the following can be released: - carbon dioxide, carbon monoxide Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No specific precautions.

Special protective equipment for fire-fighters: Do not inhale explosion and/or combustion gases Use self-contained breathing apparatus and wear protective suit

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.

Methods and material for containment and cleaning up: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with the regulations.

Environmental Precautions: Do not allow to enter drains or waterways Do not discharge into the subsoil/soil. Construct a dike to prevent spreading.

7. Handling and storage

Precautions for safe handling:	Provide good ventilation of working area (local exhaust ventilation if necessary). Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes.
Conditions for safe storage, including any incompatibilities:	Keep container tightly closed in a cool, well-ventilated place. Do not store together with oxidizing agents.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Observe national threshold limit values.

Biological Limit Values

Observe national threshold limit values.

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: No data available.

Eye/face protection: Tightly fitting safety goggles

Skin Protection

Hand Protection: Additional Information: gloves made of nitril (NBR)

Other: protective clothing

Respiratory Protection: in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2

Hygiene measures: Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when working. Remove soiled or soaked clothing immediately.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	colourless
Odor:	Mild
Odor Threshold:	not measured
pH:	not measured
Freezing point:	4 °C
Boiling Point:	> 300 °C
Flash Point:	150 °C

Evaporation Rate:	not measured
Flammability (solid, gas):	not measured
Flammability Limit - Upper (%):	not measured
Flammability Limit - Lower (%):	not measured
Vapor pressure:	0,07 hPa (25 °C)
Vapor density (air=1):	not measured
Density:	0,966 g/cm ³ (25 °C)
Relative density:	not measured
Solubility(ies)	
Solubility in Water:	9,4 g/l (20 °C)
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Autoignition Temperature:	not measured
Decomposition Temperature:	not measured
Kinematic viscosity:	not measured
Dynamic viscosity:	18 mPa.s (38 °C)
Explosive properties:	not measured
Oxidizing properties:	not oxidizing
Other information	
Dust Explosion Limit, Upper:	not measured
Dust Explosion Limit, Lower:	not measured
Minimum ignition temperature:	not measured
Metal Corrosion:	Does not corrode metal.
Self Ignition Temperature:	not measured

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions"
Chemical Stability:	The product is stable under normal conditions.
Possibility of hazardous reactions:	No hazardous reactions with proper storage and handling.
Conditions to avoid:	None with proper storage and handling.
Incompatible Materials:	Oxidizing agents.
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	Relevant route of exposure. Information on effects are given below.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.

Ingestion: If handled correctly, not a relevant route of exposure. Information on effects are given below.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): 1.000 - 2.000 mg/kg

Dermal

Product: LD 50 (Rabbit): > 2.000 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

Germ Cell Mutagenicity**In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** Not classified**Other effects:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** LC 50 (Pimephales promelas (fathead minnow), 96 h): > 1 - 10 mg/l**Aquatic Invertebrates****Product:** EC 50 (Daphnia magna (Water flea), 48 h): > 1 - 10 mg/l**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** EC 50 (Alga, 72 h): > 1 - 10 mg/l**Persistence and Degradability****Biodegradation****Product:** Readily biodegradable

Specified substance(s):

 Poly(oxy-1,2-ethanediyl),
 a-undecyl-w-hydroxy-

Readily biodegradable This surfactant is biodegradable according to the criteria laid down in Annex III of Regulation (EC) No.648/2004 on detergents.

BOD/COD Ratio
Product:

No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product:

No data available.

Partition Coefficient n-octanol / water (log Kow)
Product:

Log Kow: not measured

Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

 Poly(oxy-1,2-ethanediyl), a-
 undecyl-w-hydroxy-

No data available.

Other adverse effects:

Do not allow to enter soil, waterways or waste water canal.

13. Disposal considerations
Disposal methods:

In accordance with local authority regulations, take to special waste incineration plant

Contaminated Packaging:

If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information
International Regulations
UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information
International regulations
Montreal protocol

Not applicable

Stockholm convention

Rotterdam convention

Kyoto protocol

16. Other information, including date of preparation or last revision
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Issue Date: 17.10.2019

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Further Information: No data available.

Revision Information: Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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