

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name	Tork Citrus Air Freshener Spray
Article number	236050

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

Identified uses	For professional use Air freshener
Uses that are advised against	Not indicated

1.3. Details of the supplier of the safety data sheet

Company	Essity Hygiene and Health AB (previously SCA Hygiene Products AB) SE-40503 Göteborg Sweden
Telephone	+46 (0)31 746 00 00 +44 1 582 677 400
E-mail	info@essity.com
Website	www.essity.com

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Extremely flammable aerosol (Category 1), H222,H229
Irritates eyes (Category 2), H319

2.2. Label elements

Hazard pictogram



Signal word

Danger

Hazard statements

H222,H229

Extremely flammable aerosol. Pressurised container: May burst if heated

H319

Causes serious eye irritation

Precautionary statements

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P211

Do not spray on an open flame or other ignition source

P251

Do not pierce or burn, even after use

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

P410+P412

Protect from sunlight. Do not expose to temperatures exceeding 50 °C

Supplemental hazard information

EUH208 Contains 2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE. May produce an allergic reaction.

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
ETHANOL		
CAS No: 64-17-5 EC No: 200-578-6 Index No: 603-002-00-5 REACH: 01-2119457610-43	Flam Liq 2, Eye Irrit 2; H225, H319	10 - 20 %
PROPAN-2-OL		
CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0 REACH: 01-2119457558-25	Flam Liq 2, Eye Irrit 2, STOT SE <i>3drow</i> ; H225, H319, H336	≥1 - <10 %
DIPROPYLENE GLYCOL		
CAS No: 110-98-5 EC No: 203-821-4	Skin Irrit 2, Eye Irrit 2; H315, H319	≥1 - <10 %
2,6-DIMETHYLOCT-7-EN-2-OL		
CAS No: 18479-58-8 EC No: 242-362-4 REACH: 01-2119457274-37	Skin Irrit 2, Eye Irrit 2; H315, H319	≥1 - <10 %
ALLYL HEXANOATE		
CAS No: 123-68-2 EC No: 204-642-4	Acute Tox <i>3dermal</i> , Acute Tox <i>3oral</i> , Skin Irrit 2, Aquatic Chronic 2; H311, H301, H315, H411	<1 %
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE		
CAS No: 68039-49-6 EC No: 268-264-1	Skin Irrit 2, Eye Irrit 2, Skin Sens 1, Aquatic Chronic 3; H315, H319, H317, H412	<1 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms persist, call a doctor/physician.

Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.

Upon skin contact

Remove contaminated clothes.

Wash the skin with soap and water.

Upon ingestion

Rinse nose, mouth and throat with water.

DO NOT induce vomiting.

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

Upon breathing in

Breathing may cause headache, vertigo, weakness and sickness.

Upon eye contact

Irritation.

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

Symptomatic treatment.

Upon contact with a doctor, make sure to have the label or this safety data sheet with you.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

Unsuitable extinguishing agents

May not be extinguished with water dispersed under high pressure.

5.2. Special hazards arising from the substance or mixture

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning.

In case of fire, high pressure may build up causing the packaging to explode.

5.3. Advice for fire-fighters

Protective measures should be taken regarding other material at the site of the fire.

Cool closed containers that were exposed to fire with water.

In case of fire use a respirator mask.

Wear full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.

Use recommended safety equipment, see section 8.

Do not inhale vapours and avoid contact with skin, eyes and clothes when cleaning up the spillage.

Ensure good ventilation.

6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

6.3. Methods and material for containment and cleaning up

Small spills can be wiped up with a cloth or similar. Then flush the spill site with water. Larger spills should first be covered with sand or earth and then be collected. Collected material should be disposed according to Section 13.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid open fire, hot items, sparks or other ignition sources.

Take precautionary measures against static discharge.

Do not inhale the fumes and avoid exposure to skin, eyes and clothing.

Wash your hands after using the product.

Remove clothes which have been splattered.

7.2. Conditions for safe storage, including any incompatibilities

Store tightly, in original packaging.

Keep away from heat and sunlight.

Store in a well-ventilated space.

Store in dry and cool area.

Store at maximum 50 °C.

Do not store near strong acids and bases.

7.3. Specific end uses

See identified uses in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values

ETHANOL

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 1000 ppm / 1920 mg/m³

PROPAN-2-OL

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 400 ppm / 999 mg/m³

Short term exposure limit (STEL) 500 ppm / 1250 mg/m³

BORNAN-2-ONE

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 2 ppm / 13 mg/m³

Short term exposure limit (STEL) 3 ppm / 19 mg/m³

DNEL

ETHANOL

	Type of exposure	Route of exposure	Value
Worker	Acute Local	Inhalation	1900 mg/m ³
Consumer	Chronic Systemic	Inhalation	114 mg/m ³
Worker	Chronic Systemic	Dermal	343 mg/kg
Worker	Chronic Systemic	Inhalation	950 mg/m ³
Consumer	Acute Local	Inhalation	950 mg/m ³
Consumer	Acute Local	Dermal	950 mg/m ³
Consumer	Chronic Systemic	Oral	87 mg/kg
Consumer	Chronic Systemic	Dermal	206 mg/kg

PROPAN-2-OL

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	89 mg/m ³
Worker	Chronic Systemic	Dermal	888 mg/kg
Worker	Chronic Systemic	Inhalation	500 mg/m ³
Consumer	Chronic Systemic	Oral	26 mg/kg
Consumer	Chronic Systemic	Dermal	319 mg/kg

**PNEC
ETHANOL**

Environmental protection target	PNEC value
Fresh water	0.96 mg/l
Freshwater sediments	3.6 mg/kg
Marine water	0.79 mg/l
Marine sediments	2.9 mg/kg
Microorganisms in sewage treatment	580 mg/l
Soil (agricultural)	0.63 mg/kg

PROPAN-2-OL

Environmental protection target	PNEC value
Fresh water	140.9 mg/l
Freshwater sediments	552 mg/kg
Marine water	140.9 mg/l
Marine sediments	552 mg/kg
Microorganisms in sewage treatment	2251 mg/l
Soil (agricultural)	28 mg/kg

8.2. Exposure controls

Wash hands thoroughly after handling and before food intake or smoking.

8.2.1. Appropriate engineering controls

Handle in premises with good ventilation.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

It is generally not necessary to use protective gloves.

Respiratory protection

Respiratory protection is not normally required.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Form: aerosol. Colour: colourless to pale yellow.
b) Odour	citrus
c) Odour threshold	Not indicated
d) pH	Not indicated
e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Lower explosion limit 1.8% Upper explosion limit 19%
k) Vapour pressure	350 - 450 kPa
l) Vapour density	Not indicated
m) Relative density	0.619 - 0.645
n) Solubility	Not indicated
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not indicated
q) Decomposition temperature	Not indicated
r) Viscosity	Not indicated
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Avoid heat, sparks and open flames.
Do not expose to temperatures above 50 °C.
Protect from direct sunlight.

10.5. Incompatible materials

Avoid contact with strong acids and bases.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

The criteria for classification cannot be considered fulfilled based on available data.

ETHANOL

LD50 rabbit 24h: > 20000 mg/kg Dermally
LC50 rat 4h: 124.7 mg/l Inhalation
LD50 rat 10h: 38 mg/liter Inhalation
LD50 rat 10h: 2000 ppm Inhalation
LD50 rat 24h: 7060 mg/kg Orally

PROPAN-2-OL

LD50 rabbit 24h: 15800 mg/kg Dermal
LD50 rat 24h: > 12800 mg/kg Dermal
LC50 rat 4h: 72.6 mg/L Inhalation
LC50 rat 4h: 64000 ppmV Inhalation
LC50 rat 8h: 16000 ppmV Inhalation
LD50 rat 24h: 5045 mg/kg Orally

2,6-DIMETHYLOCT-7-EN-2-OL

LD50 rat 24h: 3600 mg/kg Orally

Skin corrosion/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Serious eye damage/irritation

Irritating to eyes.

Respiratory or skin sensitisation

The product contains a low level of allergenic substance.
Risk for sensitisation.

Germ cell mutagenicity

The criteria for classification cannot be considered fulfilled based on available data.

Carcinogenicity

The criteria for classification cannot be considered fulfilled based on available data.

Reproductive toxicity

The criteria for classification cannot be considered fulfilled based on available data.

STOT-single exposure

The criteria for classification cannot be considered fulfilled based on available data.

STOT-repeated exposure

The criteria for classification cannot be considered fulfilled based on available data.

Aspiration hazard

The criteria for classification cannot be considered fulfilled based on available data.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No ecological damage is known or expected in the event of normal use.
Prevent release on land, in water and drains.

ETHANOL

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 12 - 16 g/l
LC50 fathead minnow (*Pimephales promelas*) 96h: > 100 mg/l
LC50 Freshwater water flea (*Daphnia magna*) 48h: 12340 mg/l
EC50 Freshwater water flea (*Daphnia magna*) 48h: 9268 - 14221 mg/l

PROPAN-2-OL

LC50 fathead minnow (*Pimephales promelas*) 96h: 9640 mg/L
LC50 Freshwater water flea (*Daphnia magna*) 48h: 2285 mg/L
EC50 Freshwater water flea (*Daphnia magna*) 48 h: 13299 mg/l
LC50 Fish 96h: 1000 mg/l
EC50 Freshwater water flea (*Daphnia magna*) 24h: 10 - 100 mg/l
EC50 Algae 24h: 1 - 10 mg/l

12.2. Persistence and degradability

There is no information regarding persistence or degradability.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

Information about mobility in nature is not available.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects

No known effects or hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste handling of the product

Product as well as packaging must be disposed of as hazardous waste.

Pressurized container: Do not pierce or burn, even after use.

May not be disposed of with household waste.

Observe local regulations.

Avoid discharge into sewers.

See also national waste regulations.

Classification according to 2008/98

Recommended LoW-code: 16 05 04 Gases in pressure containers (including halons) containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number

1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

Class

2: Gases

Classification code (ADR/RID)

5F: Aerosols, flammable

Labels



14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Tunnel restrictions

Tunnel category: D

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

Transport category: 2; Highest total quantity per transported unit 333 kg or liters

Varying stowage category, see IMDG (IMDG)

Emergency Schedule (EmS) for FIRE (IMDG) F-D

Emergency Schedule (EmS) for SPILLAGE (IMDG) S-U

Limited quantities (LQ):.

1 L.

Excepted quantities, code E0:

Not permitted as Excepted Quantity.

SECTION 15: REGULATORY INFORMATION

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

Not indicated.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

Earlier versions

2017-11-29 Changes in section(s) 2.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

Flam Liq 2	Flammable liquids (Category 2)
Eye Irrit 2	Irritates eyes (Category 2)
STOT SE <i>3drow</i>	Specific target organ toxicity - Single exposure (Category 3, Narcosis effect)
Skin Irrit 2	Skin Irritant (Category 2)
Acute Tox <i>3dermal</i>	Acute toxicity (Category 3 skin)
Acute Tox <i>3oral</i>	Acute toxicity (Category 3 oral)
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects (Category Chronic 2)
Skin Sens 1	May cause an allergic skin reaction (Category 1)
Aquatic Chronic 3	Harmful to aquatic life with long-lasting effects (Category Chronic 3)

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

Tunnel restriction code: D; Passage forbidden through tunnels of category D and E type

Transport category: 2; Highest total quantity per transported unit 333 kg or liters

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2018-10-18.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 2015/830 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- EH40/2005 EH40/2005 Workplace exposure limits
- 2008/98 DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives
- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

- H225 Highly flammable liquid and vapour
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness
- H315 Causes skin irritation
- H311 Toxic in contact with skin
- H301 Toxic if swallowed
- H411 Toxic to aquatic life with long lasting effects
- H317 May cause an allergic skin reaction
- H412 Harmful to aquatic life with long lasting effects

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with the directions for use.

Other relevant information

Not indicated

Editorial information



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name	Tork Tropical Fruit Air Freshener Spray
Article number	236051

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

Identified uses	For professional use Air freshener
Uses that are advised against	Not indicated

1.3. Details of the supplier of the safety data sheet

Company	Essity Hygiene and Health AB (previously SCA Hygiene Products AB) SE-40503 Göteborg Sweden
Telephone	+46 (0)31 746 00 00 +44 1 582 677 400
E-mail	info@essity.com
Website	www.essity.com

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Extremely flammable aerosol (Category 1), H222,H229

2.2. Label elements

Hazard pictogram



Signal word	Danger
Hazard statements	
H222,H229	Extremely flammable aerosol. Pressurised container: May burst if heated
Precautionary statements	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211	Do not spray on an open flame or other ignition source
P251	Do not pierce or burn, even after use
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C

Supplemental hazard information

EUH208 Contains ETHANONE, 1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTHALENYL)-. May produce an allergic reaction.

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

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PROPAN-2-OL		
CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0 REACH: 01-2119457558-25	Flam Liq 2, Eye Irrit 2, STOT SE <i>3drow</i> ; H225, H319, H336	≥1 - <10 %
ALLYL HEXANOATE		
CAS No: 123-68-2 EC No: 204-642-4	Acute Tox <i>3dermal</i> , Acute Tox <i>3oral</i> , Skin Irrit 2, Aquatic Chronic 2; H311, H301, H315, H411	<1 %
ETHANONE, 1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTHALENYL)-		
CAS No: 54464-57-2 EC No: 259-174-3 REACH: 01-2119489989-04	Skin Irrit 2, Skin Sens 1, Aquatic Chronic 2; H315, H317, H411	<1 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms persist, call a doctor/physician.

Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.

Upon skin contact

Remove contaminated clothes.

Wash the skin with soap and water.

Upon ingestion

Rinse nose, mouth and throat with water.

DO NOT induce vomiting.

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

Upon breathing in

Breathing may cause headache, vertigo, weakness and sickness.

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

Symptomatic treatment.

Upon contact with a doctor, make sure to have the label or this safety data sheet with you.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

Unsuitable extinguishing agents

May not be extinguished with water dispersed under high pressure.

5.2. Special hazards arising from the substance or mixture

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning.

In case of fire, high pressure may build up causing the packaging to explode.

5.3. Advice for fire-fighters

Protective measures should be taken regarding other material at the site of the fire.

Cool closed containers that were exposed to fire with water.

In case of fire use a respirator mask.

Wear full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.

Use recommended safety equipment, see section 8.

Do not inhale vapours and avoid contact with skin, eyes and clothes when cleaning up the spillage.

Ensure good ventilation.

6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

6.3. Methods and material for containment and cleaning up

Small spills can be wiped up with a cloth or similar. Then flush the spill site with water. Larger spills should first be covered with sand or earth and then be collected. Collected material should be disposed according to Section 13.

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See section 8 and 13 for personal protection equipment and disposal considerations.

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7.1. Precautions for safe handling

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Take precautionary measures against static discharge.

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Wash your hands after using the product.

Remove clothes which have been splattered.

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Store tightly, in original packaging.

Keep away from heat and sunlight.

Store in a well-ventilated space.

Store in dry and cool area.

Store at maximum 50 °C.

Do not store near strong acids and bases.

7.3. Specific end uses

See identified uses in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values

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United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 1000 ppm / 1920 mg/m³

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United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 400 ppm / 999 mg/m³

Short term exposure limit (STEL) 500 ppm / 1250 mg/m³

DNEL

ETHANOL

	Type of exposure	Route of exposure	Value
Worker	Acute Local	Inhalation	1900 mg/m ³
Consumer	Chronic Systemic	Inhalation	114 mg/m ³
Worker	Chronic Systemic	Dermal	343 mg/kg
Worker	Chronic Systemic	Inhalation	950 mg/m ³
Consumer	Acute Local	Inhalation	950 mg/m ³
Consumer	Acute Local	Dermal	950 mg/m ³
Consumer	Chronic Systemic	Oral	87 mg/kg
Consumer	Chronic Systemic	Dermal	206 mg/kg

PROPAN-2-OL

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	89 mg/m ³
Worker	Chronic Systemic	Dermal	888 mg/kg
Worker	Chronic Systemic	Inhalation	500 mg/m ³
Consumer	Chronic Systemic	Oral	26 mg/kg
Consumer	Chronic Systemic	Dermal	319 mg/kg

**PNEC
ETHANOL**

Environmental protection target	PNEC value
Fresh water	0.96 mg/l
Freshwater sediments	3.6 mg/kg
Marine water	0.79 mg/l
Marine sediments	2.9 mg/kg
Microorganisms in sewage treatment	580 mg/l
Soil (agricultural)	0.63 mg/kg

PROPAN-2-OL

Environmental protection target	PNEC value
Fresh water	140.9 mg/l
Freshwater sediments	552 mg/kg
Marine water	140.9 mg/l
Marine sediments	552 mg/kg
Microorganisms in sewage treatment	2251 mg/l
Soil (agricultural)	28 mg/kg

8.2. Exposure controls

Wash hands thoroughly after handling and before food intake or smoking.

8.2.1. Appropriate engineering controls

Handle in premises with good ventilation.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

It is generally not necessary to use protective gloves.

Respiratory protection

Respiratory protection is not normally required.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Form: aerosol. Colour: colourless to pale yellow.
b) Odour	fruity
c) Odour threshold	Not indicated
d) pH	Not indicated
e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Lower explosion limit 1.8% Upper explosion limit 19%
k) Vapour pressure	350 - 450 kPa
l) Vapour density	Not indicated
m) Relative density	0.619 - 0.645
n) Solubility	Not indicated
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not indicated
q) Decomposition temperature	Not indicated
r) Viscosity	Not indicated
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Avoid heat, sparks and open flames.
Do not expose to temperatures above 50 °C.
Protect from direct sunlight.

10.5. Incompatible materials

Avoid contact with strong acids and bases.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

The criteria for classification cannot be considered fulfilled based on available data.

ETHANOL

LD50 rabbit 24h: > 20000 mg/kg Dermally
LC50 rat 4h: 124.7 mg/l Inhalation
LD50 rat 10h: 38 mg/liter Inhalation
LD50 rat 10h: 2000 ppm Inhalation
LD50 rat 24h: 7060 mg/kg Orally

PROPAN-2-OL

LD50 rabbit 24h: 15800 mg/kg Dermal
LD50 rat 24h: > 12800 mg/kg Dermal
LC50 rat 4h: 72.6 mg/L Inhalation
LC50 rat 4h: 64000 ppmV Inhalation
LC50 rat 8h: 16000 ppmV Inhalation
LD50 rat 24h: 5045 mg/kg Orally

Skin corrosion/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Serious eye damage/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Respiratory or skin sensitisation

The product contains a low level of allergenic substance.

Risk for sensitisation.

Germ cell mutagenicity

The criteria for classification cannot be considered fulfilled based on available data.

Carcinogenicity

The criteria for classification cannot be considered fulfilled based on available data.

Reproductive toxicity

The criteria for classification cannot be considered fulfilled based on available data.

STOT-single exposure

The criteria for classification cannot be considered fulfilled based on available data.

STOT-repeated exposure

The criteria for classification cannot be considered fulfilled based on available data.

Aspiration hazard

The criteria for classification cannot be considered fulfilled based on available data.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No ecological damage is known or expected in the event of normal use.

Prevent release on land, in water and drains.

ETHANOL

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 12 - 16 g/l
LC50 fathead minnow (*Pimephales promelas*) 96h: > 100 mg/l
LC50 Freshwater water flea (*Daphnia magna*) 48h: 12340 mg/l
EC50 Freshwater water flea (*Daphnia magna*) 48h: 9268 - 14221 mg/l

PROPAN-2-OL

LC50 fathead minnow (*Pimephales promelas*) 96h: 9640 mg/L
LC50 Freshwater water flea (*Daphnia magna*) 48h: 2285 mg/L
EC50 Freshwater water flea (*Daphnia magna*) 48 h: 13299 mg/l
LC50 Fish 96h: 1000 mg/l
EC50 Freshwater water flea (*Daphnia magna*) 24h: 10 - 100 mg/l
EC50 Algae 24h: 1 - 10 mg/l

12.2. Persistence and degradability

There is no information regarding persistence or degradability.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

Information about mobility in nature is not available.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects

No known effects or hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste handling of the product

- Product as well as packaging must be disposed of as hazardous waste.
- Pressurized container: Do not pierce or burn, even after use.
- May not be disposed of with household waste.
- Observe local regulations.
- Avoid discharge into sewers.
- See also national waste regulations.

Classification according to 2008/98

Recommended LoW-code: 16 05 04 Gases in pressure containers (including halons) containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number

1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

Class

2: Gases

Classification code (ADR/RID)

5F: Aerosols, flammable

Labels



14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Tunnel restrictions

Tunnel category: D

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

- Transport category: 2; Highest total quantity per transported unit 333 kg or liters
- Varying stowage category, see IMDG (IMDG)
- Emergency Schedule (EmS) for FIRE (IMDG) F-D
- Emergency Schedule (EmS) for SPILLAGE (IMDG) S-U
- Limited quantities (LQ):.
- 1 L.
- Excepted quantities, code E0:
- Not permitted as Excepted Quantity.

SECTION 15: REGULATORY INFORMATION

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

Not indicated.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

Earlier versions

2017-11-29 Changes in section(s) 2.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

Flam Liq 2	Flammable liquids (Category 2)
Eye Irrit 2	Irritates eyes (Category 2)
STOT SE <i>3drow</i>	Specific target organ toxicity - Single exposure (Category 3, Narcosis effect)
Acute Tox <i>3dermal</i>	Acute toxicity (Category 3 skin)
Acute Tox <i>3oral</i>	Acute toxicity (Category 3 oral)
Skin Irrit 2	Skin Irritant (Category 2)
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects (Category Chronic 2)
Skin Sens 1	May cause an allergic skin reaction (Category 1)

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

Tunnel restriction code: D; Passage forbidden through tunnels of category D and E type

Transport category: 2; Highest total quantity per transported unit 333 kg or liters

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2018-10-22.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 2015/830 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- EH40/2005 EH40/2005 Workplace exposure limits
- 2008/98 DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives
- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

- H225 Highly flammable liquid and vapour
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness
- H311 Toxic in contact with skin
- H301 Toxic if swallowed
- H315 Causes skin irritation
- H411 Toxic to aquatic life with long lasting effects
- H317 May cause an allergic skin reaction

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with the directions for use.

Other relevant information

Not indicated

Editorial information



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name	Tork Floral Air Freshener Spray
Article number	236052

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

Identified uses	For professional use Air freshener
Uses that are advised against	Not indicated

1.3. Details of the supplier of the safety data sheet

Company	Essity Hygiene and Health AB (previously SCA Hygiene Products AB) SE-40503 Göteborg Sweden
Telephone	+46 (0)31 746 00 00 +44 1 582 677 400
E-mail	info@essity.com
Website	www.essity.com

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Extremely flammable aerosol (Category 1), H222,H229

2.2. Label elements

Hazard pictogram



Signal word	Danger
Hazard statements	
H222,H229	Extremely flammable aerosol. Pressurised container: May burst if heated
Precautionary statements	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211	Do not spray on an open flame or other ignition source
P251	Do not pierce or burn, even after use
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C

Supplemental hazard information

EUH208 Contains 2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE; ETHANONE, 1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTHALENYL)-. May produce an allergic reaction.

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
ETHANOL		
CAS No: 64-17-5 EC No: 200-578-6 Index No: 603-002-00-5 REACH: 01-2119457610-43	Flam Liq 2, Eye Irrit 2; H225, H319	10 - 20 %
PROPAN-2-OL		
CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0 REACH: 01-2119457558-25	Flam Liq 2, Eye Irrit 2, STOT SE <i>3drow</i> ; H225, H319, H336	≥1 - <10 %
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE		
CAS No: 68039-49-6 EC No: 268-264-1	Skin Irrit 2, Eye Irrit 2, Skin Sens 1, Aquatic Chronic 3; H315, H319, H317, H412	<1 %
DIPHENYL ETHER (DIPHENYL ETHER (VAPOUR))		
CAS No: 101-84-8 EC No: 202-981-2	Eye Irrit 2; H319	<1 %
ETHANONE, 1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTHALENYL)-		
CAS No: 54464-57-2 EC No: 259-174-3 REACH: 01-2119489989-04	Skin Irrit 2, Skin Sens 1, Aquatic Chronic 2; H315, H317, H411	<1 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms persist, call a doctor/physician.

Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.

Upon skin contact

Remove contaminated clothes.

Wash the skin with soap and water.

Upon ingestion

Rinse nose, mouth and throat with water.

DO NOT induce vomiting.

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

Upon breathing in

Breathing may cause headache, vertigo, weakness and sickness.

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

Symptomatic treatment.

Upon contact with a doctor, make sure to have the label or this safety data sheet with you.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

Unsuitable extinguishing agents

May not be extinguished with water dispersed under high pressure.

5.2. Special hazards arising from the substance or mixture

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning.

In case of fire, high pressure may build up causing the packaging to explode.

5.3. Advice for fire-fighters

Protective measures should be taken regarding other material at the site of the fire.

Cool closed containers that were exposed to fire with water.

In case of fire use a respirator mask.

Wear full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.

Use recommended safety equipment, see section 8.

Do not inhale vapours and avoid contact with skin, eyes and clothes when cleaning up the spillage.

Ensure good ventilation.

6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

6.3. Methods and material for containment and cleaning up

Small spills can be wiped up with a cloth or similar. Then flush the spill site with water. Larger spills should first be covered with sand or earth and then be collected. Collected material should be disposed according to Section 13.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid open fire, hot items, sparks or other ignition sources.

Take precautionary measures against static discharge.

Do not inhale the fumes and avoid exposure to skin, eyes and clothing.

Wash your hands after using the product.

Remove clothes which have been splattered.

7.2. Conditions for safe storage, including any incompatibilities

Store tightly, in original packaging.

Keep away from heat and sunlight.

Store in a well-ventilated space.

Store in dry and cool area.

Store at maximum 50 °C.

Do not store near strong acids and bases.

7.3. Specific end uses

See identified uses in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values

ETHANOL

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 1000 ppm / 1920 mg/m³

PROPAN-2-OL

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 400 ppm / 999 mg/m³

Short term exposure limit (STEL) 500 ppm / 1250 mg/m³

DIPHENYL ETHER (DIPHENYL ETHER (VAPOUR))

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 1 ppm / 7.1 mg/m³

DNEL

ETHANOL

	Type of exposure	Route of exposure	Value
Worker	Acute Local	Inhalation	1900 mg/m ³
Consumer	Chronic Systemic	Inhalation	114 mg/m ³
Worker	Chronic Systemic	Dermal	343 mg/kg
Worker	Chronic Systemic	Inhalation	950 mg/m ³
Consumer	Acute Local	Inhalation	950 mg/m ³
Consumer	Acute Local	Dermal	950 mg/m ³
Consumer	Chronic Systemic	Oral	87 mg/kg
Consumer	Chronic Systemic	Dermal	206 mg/kg

PROPAN-2-OL

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	89 mg/m ³
Worker	Chronic Systemic	Dermal	888 mg/kg
Worker	Chronic Systemic	Inhalation	500 mg/m ³
Consumer	Chronic Systemic	Oral	26 mg/kg
Consumer	Chronic Systemic	Dermal	319 mg/kg

**PNEC
ETHANOL**

Environmental protection target	PNEC value
Fresh water	0.96 mg/l
Freshwater sediments	3.6 mg/kg
Marine water	0.79 mg/l
Marine sediments	2.9 mg/kg
Microorganisms in sewage treatment	580 mg/l
Soil (agricultural)	0.63 mg/kg

PROPAN-2-OL

Environmental protection target	PNEC value
Fresh water	140.9 mg/l
Freshwater sediments	552 mg/kg
Marine water	140.9 mg/l
Marine sediments	552 mg/kg
Microorganisms in sewage treatment	2251 mg/l
Soil (agricultural)	28 mg/kg

8.2. Exposure controls

Wash hands thoroughly after handling and before food intake or smoking.

8.2.1. Appropriate engineering controls

Handle in premises with good ventilation.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

It is generally not necessary to use protective gloves.

Respiratory protection

Respiratory protection is not normally required.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Form: aerosol. Colour: colourless to pale yellow.
b) Odour	floral
c) Odour threshold	Not indicated
d) pH	Not indicated
e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Lower explosion limit 1.8% Upper explosion limit 19%
k) Vapour pressure	350 - 450 kPa
l) Vapour density	Not indicated
m) Relative density	0.619 - 0.645
n) Solubility	Not indicated
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not indicated
q) Decomposition temperature	Not indicated
r) Viscosity	Not indicated
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Avoid heat, sparks and open flames.
Do not expose to temperatures above 50 °C.
Protect from direct sunlight.

10.5. Incompatible materials

Avoid contact with strong acids and bases.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

The criteria for classification cannot be considered fulfilled based on available data.

ETHANOL

LD50 rabbit 24h: > 20000 mg/kg Dermally
LC50 rat 4h: 124.7 mg/l Inhalation
LD50 rat 10h: 38 mg/liter Inhalation
LD50 rat 10h: 2000 ppm Inhalation
LD50 rat 24h: 7060 mg/kg Orally

PROPAN-2-OL

LD50 rabbit 24h: 15800 mg/kg Dermal
LD50 rat 24h: > 12800 mg/kg Dermal
LC50 rat 4h: 72.6 mg/L Inhalation
LC50 rat 4h: 64000 ppmV Inhalation
LC50 rat 8h: 16000 ppmV Inhalation
LD50 rat 24h: 5045 mg/kg Orally

Skin corrosion/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Serious eye damage/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Respiratory or skin sensitisation

The product contains a low level of allergenic substance.

Risk for sensitisation.

Germ cell mutagenicity

The criteria for classification cannot be considered fulfilled based on available data.

Carcinogenicity

The criteria for classification cannot be considered fulfilled based on available data.

Reproductive toxicity

The criteria for classification cannot be considered fulfilled based on available data.

STOT-single exposure

The criteria for classification cannot be considered fulfilled based on available data.

STOT-repeated exposure

The criteria for classification cannot be considered fulfilled based on available data.

Aspiration hazard

The criteria for classification cannot be considered fulfilled based on available data.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No ecological damage is known or expected in the event of normal use.

Prevent release on land, in water and drains.

ETHANOL

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 12 - 16 g/l
LC50 fathead minnow (*Pimephales promelas*) 96h: > 100 mg/l
LC50 Freshwater water flea (*Daphnia magna*) 48h: 12340 mg/l
EC50 Freshwater water flea (*Daphnia magna*) 48h: 9268 - 14221 mg/l

PROPAN-2-OL

LC50 fathead minnow (*Pimephales promelas*) 96h: 9640 mg/L
LC50 Freshwater water flea (*Daphnia magna*) 48h: 2285 mg/L
EC50 Freshwater water flea (*Daphnia magna*) 48 h: 13299 mg/l
LC50 Fish 96h: 1000 mg/l
EC50 Freshwater water flea (*Daphnia magna*) 24h: 10 - 100 mg/l
EC50 Algae 24h: 1 - 10 mg/l

12.2. Persistence and degradability

There is no information regarding persistence or degradability.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

Information about mobility in nature is not available.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects

No known effects or hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste handling of the product

- Product as well as packaging must be disposed of as hazardous waste.
- Pressurized container: Do not pierce or burn, even after use.
- May not be disposed of with household waste.
- Observe local regulations.
- Avoid discharge into sewers.
- See also national waste regulations.

Classification according to 2008/98

Recommended LoW-code: 16 05 04 Gases in pressure containers (including halons) containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number

1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

Class

2: Gases

Classification code (ADR/RID)

5F: Aerosols, flammable

Labels



14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Tunnel restrictions

Tunnel category: D

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

- Transport category: 2; Highest total quantity per transported unit 333 kg or liters
- Varying stowage category, see IMDG (IMDG)
- Emergency Schedule (EmS) for FIRE (IMDG) F-D
- Emergency Schedule (EmS) for SPILLAGE (IMDG) S-U
- Limited quantities (LQ):.
- 1 L.
- Excepted quantities, code E0:
- Not permitted as Excepted Quantity.

SECTION 15: REGULATORY INFORMATION

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

Not indicated.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

Earlier versions

2017-11-29 Changes in section(s) 2, 3, 8.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

Flam Liq 2	Flammable liquids (Category 2)
Eye Irrit 2	Irritates eyes (Category 2)
STOT SE 3drow	Specific target organ toxicity - Single exposure (Category 3, Narcosis effect)
Skin Irrit 2	Skin Irritant (Category 2)
Skin Sens 1	May cause an allergic skin reaction (Category 1)
Aquatic Chronic 3	Harmful to aquatic life with long-lasting effects (Category Chronic 3)
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects (Category Chronic 2)

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

Tunnel restriction code: D; Passage forbidden through tunnels of category D and E type

Transport category: 2; Highest total quantity per transported unit 333 kg or liters

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2018-10-18.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 2015/830 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- EH40/2005 EH40/2005 Workplace exposure limits
- 2008/98 DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives
- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

- H225 Highly flammable liquid and vapour
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H412 Harmful to aquatic life with long lasting effects
- H411 Toxic to aquatic life with long lasting effects

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with the directions for use.

Other relevant information

Not indicated

Editorial information



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