

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

1.1. Product identifier

Product code : Ravvilux
Trades code : A70-025
Product line: Tintolav

UFI: N830-603Q-D00E-TDRC

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

For levelling and refreshing tissues

Sectors of use:

Industrial Manufacturing[SU3], Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.com

Email tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112
Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

The UK National Poisons Emergency number +44 (0)870 600 6266
London: Emergency 24 hour telephone +44 (0) 207188 0100

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS02, GHS07, GHS09

Hazard Class and Category Code(s):

Flam. Aerosol 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 2

Hazard statement Code(s):

H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

Aerosol that ignites easily even at low temperatures, fire risk

If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

The product, if brought into contact with skin can cause skin sensitization.

Warning: Vapours inhalation may cause sleepiness and giddiness
The product is dangerous to the environment as it is toxic to aquatic life with long lasting effects
The repeated inhalation of vapors can cause drowsiness and giddiness.
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.
The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

The calculation of the classification is performed net of the propellants

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
GHS02, GHS07, GHS09 - Danger



Hazard statement Code(s):
H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:

Prevention

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.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.

Response

P302+P352 - IF ON SKIN: Wash with plenty of water/...
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

Storage

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal

P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:

hydrocarbons C7-(n-alkanes, isoalkanes, cyclic), butane, isobutane, propane, paraffinum liquidum, eucalyptus globulus extract, turpentine, vanillin, limonene.

Content of VOC ready to use condition: 89,52 %

UFI: N830-603Q-D00E-TDRC

2.3. Other hazards

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as PBT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvB according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as PMT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvM according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Note U - When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic	>= 35 < 50%	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411 1 1 ATE oral = 5.840,000 mg/kg ATE dermal = 2.800,000 mg/kg ATE inhal = 23,300 mg/l/4 h	ND	ND	927-510-4	01-2119475 515-33-xxxx
Butane Note: U C	>= 25 < 35%	Flam. Gas 1A, H220; Press. Gas, H280	601-004-00-0	106-97-8	203-448-7	01-2119474 691-32

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		ATE inhal = 658,000 mg/l/4 h				
Isobutane Note: C U	$\geq 5 < 15\%$	Flam. Gas 1A, H220; Press. Gas, H280 ATE oral = 570.000,000 mg/kg ATE dermal = 570.000,000 mg/kg ATE inhal = 658.000,000 mg/l/4 h	601-004-00-0	75-28-5	200-857-2	01-2119485 395-27
Propane Note: U	$\geq 5 < 15\%$	Flam. Gas 1A, H220; Press. Gas, H280 ATE inhal = 410.000,000 mg/l/4 h	601-003-00-5	74-98-6	200-827-9	01-2119486 944-21
White mineral oil (petroleum)	$\geq 5 < 15\%$	Asp. Tox. 1, H304 ATE oral = 5.000,000 mg/kg ATE dermal = 2.000,000 mg/kg ATE inhal = 4,500 mg/l/4 h	ND	8042-47-5	232-455-8	ND

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):

Take contaminated clothing Immediately off.
Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.
In case of contact with skin, wash immediately with soap and water

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water for at least 10 minutes.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

If skin irritation occurs: Get medical advice/attention.
If medical advice is needed, have product container or label at hand.
Call a POISON CENTER/doctor if you feel unwell.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:

CO2 or dry powder extinguisher

Extinguishing means to avoid:

Direct jets of water

5.2. Special hazards arising from the substance or mixture

The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

Manufactured under pressure in sealed metal container (test pressure 15 bar max). Cool containers with water spray trying to remove them from the fire. The aerosol containers can be overheated and burst violently ejected from a distance (protect the head using a safety helmet).

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Leave the surrounding area recalling that any overheating could project the cylinder at a considerable distance.

Wear gloves and protective clothing

6.1.2 For emergency responders:

Given the tightness of aerosol, it is unlikely that the spillage may occur.

However if some container is damaged likely to cause a loss, insulate the tank in question by bringing it to open air or covering it with inert material and fuel (eg sand, earth, vermiculite) and having the care to avoid any point of ignition that might pose a serious risk of fire.

Wear gloves and protective clothing Suitable: LaTeX, nitrile, PVC

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provision of sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill

Inform the competent authorities.

Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

Recover the product for reuse, if possible, or the removal.

6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors

Use extreme caution when handling the product. Avoid shock or friction.

In residential areas do not use on large surfaces.

Do not smoke at work

At work do not eat or drink.

Vapors are heavier than air and may spread close to the ground and form explosive mixtures with air. Prevent formation of flammable or explosive concentrations in the air.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.

Do not pierce or burn, even after the use. Do not spray on flame or incandescent objects. Use in adequately ventilated areas.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

Pressurized container. Store in a ventilated place, in original packaging away from heat and sunlight.

Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.

7.3. Specific end use(s)

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

Private households (= general public = consumers):

Handle with care.

Store in ventilated place away from heat sources,

Keep the container tightly closed.

Public domain (administration, education, entertainment, services, craftsmen):

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic:

Derived No Effect Levels (DNELS)

Long-term effects-Oral-systemic-> Work n/a-General population 149 mg/kg bw/day

Long-term systemic effects-Dermal-> Work 300 mg/kg bw/day-General population 149 mg/kg bw/day

Long-term systemic effects – Inhalation--Work 2085 > mg/m-General population 447 mg/m

Butane:

TLV (ACGIH) = 1000 ppm

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m 10 hour (s).

TWA: 800 ppm 10 hour (s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 1900 mg/m 8 hour (s).

TWA: 800 ppm 8 hour (s).

Butane EH40 WEL TWA 600 ppm 1.450 mg/m³

Isobutane:

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m 10 hour (s).

TWA: 800 ppm 10 hour (s)

Propane:

TLV: (Aliphatic hydrocarbon gases) 1000 ppm as TWA; (ACGIH 2005).

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1800 mg/m 10 hour (s).

TWA: 1000 ppm 10 hour (s).

OSHA PEL (United States, 6/2010).

TWA: 1800 mg/m 8 hour (s).

TWA: 1000 ppm 8 hour (s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 1800 mg/m 8 hour (s).

TWA: 1000 ppm 8 hour (s)

White mineral oil (petroleum):

White Mineral Oil ACGIH TLV STEL 10 mg/m³

- Substance: Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic

DNEL

Systemic effects Long term Consumers inhalation = 2085 (mg/m³)

Systemic effects Long term Consumers dermal = 300 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 149 (mg/kg bw/day)

8.2. Exposure controls

Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen

Private households (= general public = consumers):

No specific checks planned

Public domain (administration, education, entertainment, services, craftsmen):

No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection

Wear mask



(b) Skin protection

(i) Hand protection

Handle with gloves. Gloves must be checked before use. Use a technique suitable for removing gloves (without touching the outer surface of the glove) to avoid the skin contact with this product. Dispose of contaminated gloves after use in accordance with current legislation and good laboratory practices. Wash and dry your hands. The selected protective gloves have to satisfy the requirements of EU directive 89/686 / EEC e the resulting EN 374 standards.

Full contact

Material: Nitrile rubber

minimum thickness: 0.11 mm

breakthrough time: 480 min

The choice of an appropriate glove depends not only on the material but also on other quality characteristics which vary from one manufacturer to another.

For the choice of the type of gloves to use consult the supplier / manufacturer of the gloves.

Observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(ii) Other

Avoid direct contact with the skin

Better is to use cotton antistatic clothing

(c) Respiratory protection

Work in a sufficiently ventilated to avoid inhaling the product.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Aerosol	
Colour	colorless liquid under pressure	
Odour	Characteristic	
Odour threshold	not determined	
Melting point/freezing point	< -100 °C (liquid gas)	
Boiling point or initial boiling point and boiling range	> -42 °C (liquid gas)	
Flammability	flammable	
Lower and upper explosion limit	9,5% vol / 1,8% vol	
Flash point	< -80 °C (liquid gas)	ASTM D92
Auto-ignition temperature	> 400 °C	
Decomposition temperature	not determined	
pH	irrelevant	
Kinematic viscosity	not determined	
Solubility	irrelevant	
Water solubility	not determined	

Physical and chemical properties	Value	Determination method
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	3,2 bar	
Density and/or relative density	0,65 kg/l	
Relative vapour density	> 2 (liquid gas)	
Particle characteristics	not determined	

9.2. Other information

Content of VOC ready to use condition: 89,52 %

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity**10.1. Reactivity**

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Avoid heating the product, it could explode.

Avoid contact with combustible materials. The product could catch fire.

Avoid heat, open flames, sparks or hot surfaces.

The aerosol product is stable for a period exceeding 36 months and in normal storage conditions can not take place dangerous reactions as the container is almost hermetically sealed.

To avoid that the metal container can deteriorate, keep away from acidic or basic products. Attention to the heat as temperatures exceeding 50 ° C has increased pressure inside the container that gets to deformation of the cylinder until the outbreak.

10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, strong reducing agents.

It can generate toxic gases to contact with oxidants mineral acids, organic peroxides, organic water peroxides.

It can ignite in contact with oxidants mineral acids, organic nitrides, peroxides and water peroxides, strong oxidants agents.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = ∞

ATE(mix) dermal = ∞

ATE(mix) inhal = 10.869,6 mg/l/4 h

(a) acute toxicity: based on available data, the classification criteria are not met.

(b) skin corrosion/irritation: If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

White mineral oil (petroleum): Skin: repeated or prolonged Contact may cause irritation and dermatitis

(c) serious eye damage/irritation: White mineral oil (petroleum): Eyes: Irritating

(d) respiratory or skin sensitisation: The product, if brought into contact with skin can cause skin sensitization.

(e) germ cell mutagenicity: based on available data, the classification criteria are not met.

(f) carcinogenicity: based on available data, the classification criteria are not met.

(g) reproductive toxicity: based on available data, the classification criteria are not met.

(h) specific target organ toxicity (STOT) single exposure: Warning: Vapours inhalation may cause sleepiness and giddiness

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic: Specific target organ toxicity (single exposure):

STOT Single Exp. 3 (hazard statement: H336 May cause drowsiness or dizziness. Affected organs: Nervous system. Route of exposure: Inhalation

(i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.

(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic:

LD50 Oral, Rat LD50 > 5840 mg/kg bw (rat)

LC50, Inhalation (4 h) Rat > 23.3 mg/L air (male/female)

LD50, Dermal Rat > = 2800 mg/Kg bw

LD50 (rat) Oral (mg/kg body weight) = 5840

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2800

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 23,3

Butane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658

Isobutane:

LD50 (rat) Oral (mg/kg body weight) = 570000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 570000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658000

Propane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 410000

White mineral oil (petroleum):

TOXICOLOGICAL DATA: Meaningful toxicological test data could not be found for this product.

Carcinogenicity Data: The ingredient(s) of this product is (are) not classed as carcinogenic by ACGIH, IARC, OSHA or NTP.

Reproductive Data: No adverse reproductive effects are anticipated.

Mutagenicity Data: No adverse mutagenic effects are anticipated.

Teratogenicity Data: No adverse teratogenic effects are anticipated.

LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 4,5

11.2. Information on other hazards

No data available.

11.2.1. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic:
LC50 (83d): > 13.4 mg/l/83d *Oncorhynchus mykiss* (rainbow trout)
IC50 (72 h): > 10 mg/l/72 h *Pseudokirchnerella subcapitata*
EC50 (48 h): 12 mg/l/48 h *Daphnia magna*
C(E)L50 (mg/l) = 10 1
1

Butane:

C(E)L50 (mg/l) = 7,71

Isobutane:

C(E)L50 (mg/l) = 7,71

Propane:

C(E)L50 (mg/l) = 7,71

White mineral oil (petroleum):

Ecotoxicity: Not available. Low acute toxicity to aquatic organisms.

Environmental Fate: Not available. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers. This product is biodegradable.

C(E)L50 (mg/l) = 100 1

1

The product is dangerous for the environment as it is toxic to aquatic organisms following acute exposure.

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:

White mineral oil (petroleum):

Biotic degradation: degradable

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The product does not contain substances identified as PBT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvB according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.6. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

The waste must be disposed of in compliance with the regulations in force delivering empty containers for final disposal and equipped to safely handle pressurized containers containing flammable liquids and gas waste. The empty container heated to temperatures exceeding 70 ° C can burst.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION 14. Transport information**14.1. UN number or ID number**

ADR/RID/IMDG/ICAO-IATA: 1950

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 1 L per package 30 kg

Inner packagings placed in shrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 kg



14.2. UN proper shipping name

ADR/RID/IMDG: AEROSOL infiammabili
ADR/RID/IMDG: AEROSOL flammable
ICAO-IATA: AEROSOL flammable

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 2
ADR/RID/IMDG/ICAO-IATA: Label : 2.1 + Limited quantities
ADR: Tunnel restriction code : D
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 L
IMDG - EmS : F-D, S-U

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: --

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous
IMDG: Marine polluting agent : Yes

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

DELEGATED REGULATION (EU) 2024/2564 (ATP XXII)
DELEGATED REGULATION (EU) 2023/707
Seveso category:
P3a - FLAMMABLE AEROSOLS
E2 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste:
HP3 - Flammable
HP4 - Irritant — skin irritation and eye damage
HP5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Substances in the Candidate List (REACH Article 59)
Based on available data, no SVHC substances are present

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information**16.1. Other information**

Points modified compared to previous release: 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3.

Other hazards, 3.2 Mixtures, 4.1. Description of first aid measures, 4.3. Indication of any immediate medical attention and special treatment needed, 9.2. Other information, 10.4. Conditions to avoid, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 11.2. Information on other hazards, 12.1. Toxicity, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 14.1. UN number or ID number, 14.3. Transport hazard class(es), 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the hazard statements exposed to point 3

- H225 = Highly flammable liquid and vapour.
- H304 = May be fatal if swallowed and enters airways.
- H315 = Causes skin irritation.
- H336 = May cause drowsiness or dizziness.
- H411 = Toxic to aquatic life with long lasting effects.
- H220 = Extremely flammable gas.
- H280 = Contains gas under pressure; may explode if heated.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

- H222 - Extremely flammable aerosol. Classification procedure: On basis of test data
- H229 - Pressurised container: May burst if heated. Classification procedure: On basis of test data
- H315 - Causes skin irritation. Classification procedure: Calculation method
- H317 - May cause an allergic skin reaction. Classification procedure: Calculation method
- H336 - May cause drowsiness or dizziness. Classification procedure: Calculation method
- H411 - Toxic to aquatic life with long lasting effects. Classification procedure: Calculation method

Main normative references:

Directive 1999/45/EC

Directive 2001/60/EC

Regulation (EC) No 1272/2008

Regulation (EU) No 453/2010

Regulation (EC) No 790/2009 (1st ATP CLP)

Regulation (EU) No 286/2011 (2nd ATP CLP)

Regulation (EU) No 618/2012 (3rd ATP CLP)

Regulation (EU) No 487/2013 (4th ATP CLP)

Regulation (EU) No 944/2013 (5th ATP CLP)

Regulation (EU) No 605/2014 (6th ATP CLP)

Regulation (EU) 2015/1221 (7th ATP CLP)

Regulation (EU) 2016/918 (8th ATP CLP)

Regulation (EU) 2016/1179 (9th ATP CLP)

Regulation (EU) 2017/776 (10th ATP CLP)

Regulation (EU) 2018/669 (11th ATP CLP)

Regulation (EU) 2019/521 (12th ATP CLP)

Delegated Regulation (EU) 2018/1480 (13th ATP CLP)

Delegated Regulation (EU) 2020/217 (14th ATP CLP)

Delegated Regulation (EU) 2020/1182 (15th ATP CLP)

Delegated Regulation (EU) 2021/643 (16th ATP CLP)

Delegated Regulation (EU) 2021/849 (17th ATP CLP)

Delegated Regulation (EU) 2022/692 (18th ATP CLP)

Delegated Regulation (EU) 2023/707 (Introduction of new hazard and endocrine classes)

Delegated Regulation (EU) 2023/1434 (19th ATP CLP)

Delegated Regulation (EU) 2023/1435 (20th ATP CLP)

Delegated Regulation (EU) 2024/197 (21st ATP CLP)

Delegated Regulation (EU) 2024/2564 (22nd ATP CLP)

Delegated Regulation (EU) 2025/1222 (23rd ATP CLP)

Databases consulted: ECHA (European Chemicals Agency), internal databases of raw materials provided by the respective manufacturers.

Legend of abbreviations and acronyms

(Q)SAR: (Quantitative) Structure-Activity Relationships

ACGIH / TWA: 8-hour time-weighted average

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

AIIC: Australian Inventory of Industrial Chemicals

ASTM: ASTM International (American Society for Testing and Materials)

ATE: Acute Toxicity Estimates

BCF: BioConcentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAO: Cargo Aircraft Only

CAS: Chemical Abstracts Service number

CAV: Poison Control Center

CE: EC number (European inventory of Existing Commercial chemical Substances)

CLP: Regulation (EC) No 1272/2008

CMR: Carcinogenic, mutagenic or toxic for reproduction

COD: Chemical Oxygen Demand

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DIN: German Institute for Standardization standard

DMEL: Derived Minimal Effect Level

DNEL: Derived No-Effect Level

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Effective Concentration to 50% of test population

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

ELx: Loading rate associated with x% response

EmS: Emergency Schedule

ErCx: Concentration associated with x% growth rate response

GefStoffVO: Ordinance on Hazardous Substances, Germany

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GLP: Good Laboratory Practice

IARC: International Agency for Research on Cancer

ATA: International Air Transport Association

ATA DGR: Dangerous Goods Regulations of the International Air Transport Association

IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IC50: Inhibitory Concentration to 50% of test population

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

INCI: International Nomenclature of Cosmetic Ingredients

INDEX: Identification number in Annex VI of CLP

ISO: International Organization for Standardization

IT OEL CMR / Valori limite 8 ore: 8-hour limit values

IT OEL CMR / Valori limite breve durata: Short-term limit values

IT VLEP / STEL: Limit Values - Short Term

IT VLEP / TWA: Limit Values - 8 Hours

KSt: Explosion coefficient

LC50: Lethal Concentration 50%

LCLo: Lowest Lethal Concentration

LD50: Lethal Dose 50%

LOAEC: Lowest Observed Adverse Effect Concentration

LOAEL: Lowest Observed Adverse Effect Level

LOEC: Lowest Observed Effect Concentration

LOEL: Lowest Observed Effect Level

LTE: Long-term exposure

MAK: Maximum Allowable Concentration

MARPOL: International Convention for the Prevention of Pollution from Ships

NEN: Dutch standard

NOAEL: No Observed Adverse Effect Level

NOEC: No Observed Effect Concentration

NOEL: No Observed Effect Level

NOELR: No Observed Effect Loading Rate

OCSE (OECD): Organisation for Economic Co-operation and Development

OEL: Occupational Exposure Limit

OPPTS: Office of Pollution Prevention and Toxics

PBT: Persistent, Bioaccumulative and Toxic

PEC: Predicted Effect Concentration

PEL: Permissible Exposure Limit

PMT: Persistent, Mobile and Toxic

PNEC: Predicted No-Effect Concentration

PNOS: Particulates Not Otherwise Specified

REACH: Regulation (EC) No 1907/2006

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

SADT: Self-Accelerating Decomposition Temperature

SPM: Synthetic Polymer Microparticles

STA (ATE): Acute Toxicity Estimate

STE: Short-term exposure

STOT: Specific Target Organ Toxicity

SVHC: Substance of Very High Concern

ThOD: Theoretical Oxygen Demand

TLV: Threshold Limit Value

TLV CEILING: Concentration that should not be exceeded during any part of the working exposure

TWA STEL: Short-term exposure limit

TWATLV: Threshold Limit Value - Time Weighted Average (8-hour day)

UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

VOC: Volatile Organic Compound

vPvB: Very Persistent and Very Bioaccumulative

vPvM: Very Persistent and Very Mobile

VwVwS: Administrative Regulation on Substances Hazardous to Waters

WGK: Water Hazard Class (Germany)

** The information contained herein is based on our knowledge at the date above.

Related solely to the product and do not constitute a guarantee of a particular quality.

It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.
