

The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

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

1.1. Product identifier VIKTOR ČISTIČ

Substance / mixture mixture

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

Mixture's intended use

Degreasing spray

The use descriptors

IS Use at industrial sites

PW Widespread use by professional workers

Mixture uses advised against

The product should not be used in ways other then those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name NOVATO

Address Uralská 770/6, Praha, 160 00

Czech Republic

Identification number (CRN)62910370VAT Reg NoCZ62910370Phone+420 233 339 688E-mailpetr.johanides@novato.cz

Web address www.novato.cz

Competent person responsible for the safety data sheet

Name ABITEC
E-mail info@abitec.cz

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Aerosol 1, H229, H222 Eye Irrit. 2, H319 STOT SE 3, H336 Aquatic Chronic 2, H411

Most serious adverse physico-chemical effects

The mixture is extremely flammable. The container is under pressure: do not expose to sunlight and temperatures above 50 °C. Do not even puncture the empty container or throw it into the fire. Do not spray on open flames or hot objects. Keep away from sources of ignition - No smoking. Keep out of reach of children. Incomplete combustion can release dangerous gases. Solvent vapors are heavier than air, they accumulate in lower positions. They can form an explosive mixture when mixed with air.

Most serious adverse effects on human health and the environment

Inhaling the aerosol can cause headaches, fatigue. Do not inhale the aerosol. It irritates the skin (redness, itching, burning and even dermatitis). Direct eye contact causes eye irritation (watering, burning, itching, redness and conjunctivitis). The mixture may, depending on individual sensitivity, cause an allergic skin reaction (contact dermatitis - redness, swelling, pimples, blisters). Frequent or long-term contact with the skin causes drying or cracking of the skin or even dermatitis. The mixture is classified as harmful to the environment. Follow the instructions for use to avoid risks to people and the environment. The liquid is lighter than water and can cover the surface of the water. Avoid release to soil, ground or surface water or sewers. The full wording of the classification and H phrases is given in Sect. 16 of this safety data sheet.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

2.2. Label elements

Hazard pictogram







Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

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.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C.
P501 Dispose of contents/container to in accordance with local regulations.

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Neither the mixture nor its components meet the criteria for persistent, bioaccumulative and toxic or highly persistent and highly bioaccumulative substances in accordance with Annex XIII, nor have they been included in the list drawn up in accordance with Article 59, paragraph 1, due to the content of endocrine disruptors, nor has it been determined as a substance with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

| Identification numbers | Substance name | Content in % weight | Classification according to Regulation (EC) No 1272/2008 | Note |
|--|--|---------------------|--|------|
| EC: 920-750-0 | Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes | 50-90 | Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411 Specific concentration limit: STOT SE 3, H336: $C \ge 20 \%$ Aquatic Chronic 2, H411: $C \ge 25 \%$ | 3 |
| Index: 601-004-00-0 CAS: 75-28-5 EC: 200-857-2 | isobutane | 25-35 | Flam. Gas 1, H220 Press. Gas (compressed gas), H280 | 1, 2 |



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

VIKTOR ČISTIČ

4

Creation date 10th May 2012 Revision date

21st December 2022 Version

| Identification numbers | Substance name | Content in % weight | Classification according to Regulation (EC) No 1272/2008 | Note |
|---|----------------|---------------------|---|------|
| Index: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9 Registration number: 01-2119486944-21 | propane | 10-15 | Flam. Gas 1, H220 Press. Gas (compressed gas), H280 | 3 |
| Index: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25 | propan-2-ol | 6-15 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 Specific concentration limit: Eye Irrit. 2, H319: $C \ge 10 \%$ STOT SE 3, H336: $C \ge 20 \%$ | 3 |
| Index: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7 Registration number: 01-2119474691-32 | butane | <1 | Flam. Gas 1, H220 Press. Gas (compressed gas), H280 | |

Notes

- 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.
- Note U (Table 3): 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. The following codes are assigned:

Press. Gas (Comp.)

Press. Gas (Liq.)

Press. Gas (Ref. Liq.)

Press. Gas (Diss.)

Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

A substance for which exposure limits are set.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

Description of first aid measures

In case of health problems or in case of doubt, consult a physician and provide him with the information in this safety data sheet. In case of life-threatening conditions, perform resuscitation. Keep unconscious person in a stabilized position and do not give anything by mouth. Avoid cooling. Do not induce vomiting. In case of spontaneous vomiting, avoid inhalation of vomitus. If burns occur, cool the burn with cold water and cover with a clean cloth.

If inhaled, leave the area, rinse the mouth with water, inhale fresh air. If breathing is difficult, give first aid and seek medical advice.

If on skin

Wipe the product, wash thoroughly with lukewarm water, soap and treat with regenerating cream. If clothing is contaminated, remove clothing. Seek medical attention if irritation develops.

If the affected person has contact lenses, remove them. Flush eyes wide open from the inner corner of the eye towards the outside with plenty of clean lukewarm water, especially the area under the eyelids. Rinse for at least 15 minutes, seek medical attention.

If swallowed

In the case of an aerosol product, ingestion is very unlikely. Do not induce vomiting, rinse mouth with water. Seek medical attention immediately and present this safety data sheet. Danger of vomiting!



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

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

If inhaled

Inhalation of the aerosol can cause headaches, fatigue, drowsiness, malaise, even narcotic states, exceptionally unconsciousness. Inhalation into the lungs, swelling of the lungs.

If on skin

The mixture shows skin sensitization, can cause an allergic reaction (rash, dermatitis, eczematous manifestations). Frequent or long-term contact with the skin causes drying or cracking of the skin or even dermatitis. Danger of frostbite in contact with liquid gas.

If in eyes

Direct contact with the eyes causes serious eye irritation (watering, burning, itching, redness and conjunctivitis).

If swallowed

Ingestion of the liquid phase may cause abdominal pain and nausea.

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

Immediate medical attention is not required during normal use of the mixture. Required only if symptoms reach a certain level, as indicated in paragraphs 4.1 and 4.2; is symptomatic.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Multipurpose powders, CO2, foam, water mist, sand.

Unsuitable extinguishing media

Full stream of water. Crushed water can be used to cool the containers near the fire.

5.2. Special hazards arising from the substance or mixture

Extremely flammable mixture. Incomplete combustion or thermal decomposition can produce toxic gases (COx, hydrocarbons, thick smoke, etc.). Do not inhale decomposition products. Vapors are heavier than air, accumulate in lower positions, can spread over long distances. When mixed with air, they can form an explosive mixture. Danger of re-ignition. There is a risk of the pressure vessel exploding at higher temperatures.

5.3. Advice for firefighters

Isolation breathing apparatus and non-flammable intervention suit. Use non-sparking tools. Cool containers exposed to fire with water spray or foam. Burning residues and post-intervention water should be disposed of as hazardous waste.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Prevent unauthorized entry, ensure free escape. Ensure adequate ventilation, do not breathe aerosol. Eliminate possible sources of ignition, do not smoke, do not handle open flame, do not expose to direct sunlight. Use non-sparking tools, avoid electrostatic charge. Avoid contact with skin and eyes - use personal protective equipment.

6.2. Environmental precautions

Provide a spill area, prevent leakage into drains, soil, surface and ground water. In case of a large liquid leak, monitor the NPK concentrations resp. TLV and inform the relevant public authorities and the flow or sewerage manager.

6.3. Methods and material for containment and cleaning up

Stop the leak. In case of large leakage of liquid fraction, drain the mixture. The aerosol evaporates, ensure adequate ventilation. In case of a minor leakage of the liquid fraction, cover with a non-flammable sorbent (sand, diatomaceous earth, soil, universal sorbent, etc.), store the used sorbent in a closable waste container, mark it and dispose of it as hazardous waste. Wash contaminated area with water.

6.4. Reference to other sections

See the Section 7, 8 and 13.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation of the work area. Avoid contact with open flames and other sources of ignition. Protect against direct sunlight. Use non-sparking tools. Take precautionary measures against static discharge. Avoid the formation of gases and vapors in flammable or explosive concentrations and concentrations exceeding the maximum permissible concentrations (NPK-P) for the working atmosphere. Protect eyes and skin, do not breathe aerosol or fumes, use personal protective equipment according to section 8. Observe valid legal regulations on safety and health protection. Follow the principles of hygiene when working with chemicals, do not eat, drink or smoke while working. Wash hands with warm soap and water before breaks, meals and after work.

7.2. Conditions for safe storage, including any incompatibilities

Store in original containers at temperatures up to 40 ° C in dry, well-ventilated areas. Store away from heat, protect from direct sunlight and external weather conditions. Store away from food, drink and animal feeding stuffs. Store separately as flammable. No smoking. Observe the general regulations for storage of pressure vessels. Follow the instructions on the label.

| Content | Packaging type | Material of package |
|---------|----------------|---------------------|
| 600 ml | aerosol can | FE |

Storage class
Storage temperature

2B - Aerosols max. 40 °C

7.3. Specific end use(s)

It is not.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ensure compliance with governmental regulation 361/2007 Coll., Laying down the conditions for the protection of health at work, as amended, and to fulfill the obligations contained therein.

Czech Republic

Government Regulation 330/2023 Coll.

| czecii kepublic | Government Regulation 330/2023 Con. | | |
|---|-------------------------------------|------------------------|-------------------------------------|
| Substance name (component) | Туре | Value | Note |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, | PEL | 400 mg/m ³ | |
| cycloalkanes | NPK-P | 1000 mg/m ³ | |
| propage butane (CAS, 74,09,6) | PEL | 2000 mg/m ³ | |
| propane-butane (CAS: 74-98-6) | NPK-P | 3000 mg/m ³ | |
| | PEL | 500 mg/m ³ | |
| propag 2 ol (CAS) 67 62 0) | PEL | 200 ppm | irritating to mucous membranes |
| propan-2-ol (CAS: 67-63-0) | NPK-P | 1000 mg/m ³ | (eyes, respiratory system) and skin |
| | NPK-P | 400 ppm | |

DNEL

| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes | | | | | | |
|--|-------------------|---------------------------|--------------------------|------------------------|--------|--|
| Workers / consumers | Route of exposure | Value | Effect | Value determination | Source | |
| Workers | Inhalation | 2035 mg/m ³ | Chronic effects systemic | | | |



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012
Revision date 21st December 2022

Version

4

| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes | | | | | |
|--|-------------------|------------------|--------------------------|------------------------|--------|
| Workers / consumers | Route of exposure | Value | Effect | Value determination | Source |
| Workers | Dermal | 773 mg/kg/24h | Chronic effects systemic | | |

| propan-2-ol | | | | | |
|---------------------|-------------------|-----------------------|--------------------------|---------------------|--------|
| Workers / consumers | Route of exposure | Value | Effect | Value determination | Source |
| Workers | Inhalation | 500 mg/m ³ | Chronic effects systemic | | |
| Workers | Dermal | 888 mg/kg/24h | Chronic effects systemic | | |

PNEC

| propan-2-ol | | | | | |
|---|------------|---------------------|--------|--|--|
| Route of exposure Value Value determination | | Value determination | Source | | |
| Freshwater environment | 140.9 mg/l | | | | |
| Marine water | 140.9 mg/l | | | | |
| Soil (agricultural) | 28 mg/kg | | | | |
| Freshwater sediment | 552 mg/kg | | | | |
| Sea sediments | 552 mg/kg | | R | | |

8.2. Exposure controls

Ensure sufficient ventilation or extraction of the work area. In case of exceeding the NPK-P, use suitable respiratory protection. Avoid contact with skin and eyes, do not inhale aerosols, gases and vapors. Observe hygienic measures when working with chemicals. Do not eat, drink and smoke during work. Wash hands with lukewarm soap and water before breaks, meals and after work. Adapt personal protective equipment to the nature of the work.

Eye/face protection

Closed safety glasses.

Skin protection

Protective work clothes made of non-flammable material, antistatic treatment is suitable. Wash affected skin, remove contaminated clothing, wash before further use. Chemically resistant protective gloves (material e.g. nitrile rubber, PVA, fluororubber).

It is recommended to assume solvent resistance for 42 minutes. Taking into account the concentrations of the components, a longer period of resistance can be assumed in individual cases. When choosing, follow the manufacturer's recommendations, the material must be impermeable and resistant to the components of the mixture. Test at a specific workplace before first use. Replace damaged gloves.

Respiratory protection

It is not necessary under normal conditions. In case of increased risk of inhalation and insufficient ventilation use a mask with a filter against organic vapors and aerosols, type A. In the event of an accident or for long-term exposure, use a self-contained breathing apparatus.

Thermal hazard

Exposure to elevated temperatures may result in tearing of the aerosol container when overheating.

Environmental exposure controls

It is not necessary if handling conditions are observed. Observe normal environmental precautions, do not allow to enter drains, soil or water sources.

More information

Ensure compliance with governmental regulation 361/2007 Coll., Laying down the conditions for the protection of health at work, as amended, and to fulfill the obligations contained therein.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

VIKTOR ČISTIČ

Creation date 10th May 2012 Revision date

21st December 2022 Version 4

Physical state liquid Colour colourless Odour characteristic Melting point/freezing point data not available Boiling point or initial boiling point and boiling range data not available Flammability Flammable Class I.

Lower and upper explosion limit

bottom 1.1 % upper 13 % Flash point

data not available Auto-ignition temperature data not available Decomposition temperature data not available data not available Kinematic viscosity data not available Solubility in water insoluble

Partition coefficient n-octanol/water (log value) data not available Vapour pressure 4000 hPa at 20 °C

Density and/or relative density

0.66 g/cm3 at 20 °C (propellant gas) Density

Relative vapour density data not available Particle characteristics data not available

9.2. Other information

VOC content: 1 kg/kg

Solvent vapors can form an explosive mixture when mixed with air.

Soluble in common organic solvents.

Density and/or relative density (at 20 °C): Liquid fraction 740 kg/m3

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is flammable. In normal conditions, the mixture does not show dangerous reactions.

10.2. Chemical stability

The mixture is stable under normal environmental conditions, storage and handling.

Possibility of hazardous reactions

May react with strong acids, bases and oxidizing agents. There is a risk of the pressure vessel exploding when exposed to high temperatures. Propellant gases and solvent vapors can form an explosive mixture when mixed with

10.4. Conditions to avoid

To temperatures above 50 °C, contact with open flames, possible sources of ignition and hot surfaces, sparks, direct sunlight, accumulation of static electricity. Formation of concentration within explosive limits. Vapors are heavier than air, accumulate in lower positions, can spread over long distances. They can form an explosive mixture when mixed with air. Risk of re-ignition. There is a risk of the pressure vessel exploding at higher temperatures.

10.5. Incompatible materials

Flammable materials, strong oxidizing agents, strong acids and bases.

Hazardous decomposition products

Under normal conditions, the mixture does not decompose. Imperfect combustion or thermal decomposition produces toxic combustion products: COx, heavy smoke, hydrocarbons, etc.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

The mixture meets the criteria for classification according to EC Regulation No. 1272/2008. The mixture is classified as dangerous in the sense of EC Regulation No. 1272/2008, as amended.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

Acute toxicity

Based on available data the classification criteria are not met.

| butane | | | | | | | |
|-------------------|-----------|----------|---------------|---------|-----|--|--|
| Route of exposure | Parameter | Value | Exposure time | Species | Sex | | |
| Inhalation | LC50 | 658 mg/l | 4 hours | Rat | | | |

| Hydrocarbons, C7-C | Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes | | | | | | | |
|--------------------|--|--------------------------|---------------|----------------------------|-----|--|--|--|
| Route of exposure | Parameter | Value | Exposure time | Species | Sex | | | |
| Oral | LD50 | >5840 mg/kg | | Rat (Rattus norvegicus) | | | | |
| Dermal | LD ₅₀ | >2920 mg/kg | | Rabbit | | | | |
| Inhalation | LC50 | >23300 mg/m ³ | 4 hours | Rat (Rattus norvegicus) | | | | |

| isobutane | | | | | | |
|-------------------|-----------|----------|---------------|----------------------------|-----|--|
| Route of exposure | Parameter | Value | Exposure time | Species | Sex | |
| Inhalation | LC50 | 658 mg/l | 4 hours | Rat (Rattus norvegicus) | | |

| propan-2-ol | | | | | | | |
|-------------------|------------------|-------------|---------------|----------------------------|-----|--|--|
| Route of exposure | Parameter | Value | Exposure time | Species | Sex | | |
| Oral | LD ₅₀ | 5480 mg/kg | | Rat (Rattus norvegicus) | | | |
| Inhalation | LD50 | 72.6 mg/l | 4 hours | Rat (Rattus norvegicus) | | | |
| Dermal | LD ₅₀ | 12800 mg/kg | | Rabbit | | | |

| propane | | | | | |
|-------------------|-----------|----------|---------------|----------------------------|-----|
| Route of exposure | Parameter | Value | Exposure time | Species | Sex |
| Inhalation | LC50 | 658 mg/l | 4 hours | Rat (Rattus norvegicus) | |

Skin corrosion/irritation

Frequent or long-term contact with the skin causes drying or cracking of the skin or even dermatitis.

Serious eye damage/irritation

The mixture is classified as eye irritant, category 2.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) .

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

Toxicity for specific target organ - single exposure

The mixture is classified as toxic to specific target organs after single exposure, category 3. Inhalation of vapors or aerosol can cause headache, drowsiness or dizziness, malaise, even narcotic states.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

The mixture is classified as toxic by inhalation, category 1. It can cause death if swallowed and enters the respiratory tract. Irrelevant due to aerosol packaging.

11.2. Information on other hazards

It does not contain substances causing disruption of the endocrine system. Inhalation of the aerosol can cause headaches, fatigue, drowsiness, malaise and even narcotic conditions. Direct contact with the eyes causes serious eye irritation (watering, burning, itching, redness and conjunctivitis). The mixture shows skin sensitization, can cause an allergic reaction (rash, dermatitis, eczematous manifestations). Frequent or long-term contact with the skin causes drying or cracking of the skin or even dermatitis. Ingestion of the liquid phase may cause abdominal pain and nausea.

SECTION 12: Ecological information

12.1. Toxicity

The ecotoxic effects of the mixture itself were not assessed. The mixture is classified as dangerous for the environment. Prevent the liquid from leaking into sewers and underground or surface water.

Acute toxicity

| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes | | | | |
|--|-------------|---------------|---|-------------|
| Parameter | Value | Exposure time | Species | Environment |
| LL 50 | 3-10 mg/l | 96 hours | Fish (Oncorhynchus mykiss) | |
| NOELR | 0.57 mg/l | 28 days | Fish (Oncorhynchus mykiss) | |
| EL 50 | 4.6-10 mg/l | 48 hours | Invertebrates | |
| NOELR | 1 mg/l | 21 days | Invertebrates (Daphnia magna) | |
| EbL 50 | 10-30 mg/l | 72 hours | Algae (Pseudokirchneriella subcapitata) | |
| ErL 50 | 30-100 mg/l | 72 hours | Algae (Pseudokirchneriella subcapitata) | |
| NOELR | 6.3 mg/l | 72 hours | Algae (Pseudokirchneriella subcapitata - biomasa) | |
| NOELR | 6.3 mg/kg | 72 hours | Algae (Pseudokirchneriella subcapitata - GRI) | |

| propan-2-ol | | | | |
|-------------|----------------|---------------|----------------------------|-------------|
| Parameter | Value | Exposure time | Species | Environment |
| LC50 | 4200-9640 mg/l | 96 hours | Fish (Pimephales promelas) | |
| EC50 | >1000 mg/l | 24 hours | Invertebrates | |



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012
Revision date 21st December 2022 Ver

Version 4

12.2. Persistence and degradability

Easily biodegradable

12.3. Bioaccumulative potential

Not determined.

12.4. Mobility in soil

It endangers water even with a small penetration into the environment.

12.5. Results of PBT and vPvB assessment

The mixture does not contain substances from the PBT and vPvB groups according to Annex XIII of the REACH Regulation, as amended.

12.6. Endocrine disrupting properties

Substances with these properties in accordance with the criteria set out in Commission Regulation (EU) 2017/2100 or (EU) 2018/605 are not included.

12.7. Other adverse effects

The mixture is harmful to the environment, even a small amount can contaminate drinking water sources. It must not get into the soil, underground or surface water or sewage system. Observe the usual environmental protection measures.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of as hazardous waste. Dispose of at an authorized person or to a hazardous waste collection yard. Dispose of mixture and packaging residues in accordance with local waste disposal regulations. Dispose of contaminated packaging as hazardous waste.

Waste management legislation

Act No. 477/2001 Coll., On Packaging, as amended. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended.

Waste type code

16 05 04* gases in pressure containers (including halons) containing hazardous substances

Packaging waste type code

15 01 11* metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers

15 01 10* packaging containing residues of or contaminated by hazardous substances

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not relevant

14.5. Environmental hazards

No.

14.6. Special precautions for user

Transport in packages that match the properties of the mixture. Observe the prescribed marking for cargo.

14.7. Maritime transport in bulk according to IMO instruments

Can not be used.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) .

VIKTOR ČISTIČ

Creation date 10th May 2012 Revision date 21st December 2022

Version

4

Additional information

Hazard identification No.

UN number

Classification code

Safety signs

1950

2.1+hazardous for the environment





Road transport - ADR

Special provisions 190, 327, 344, 625

Limited quantities 1 L
Excepted quantities E0

Packaging

Packing instructions P207, LP200 Special packing provisions PP87, RR6, L2

Mixed packing provisionsMP9Transport category2Tunnel restriction code(D)

Special provision for

packages

loading, unloading and handling

operation

V14

CV9, CV12

S2

Railway transport - RID

Special provisions 190, 327, 344, 625

Excepted quantities E0

Packaging

Packing instructions P207, LP200 Special packing provisions PP87, RR6, L2

Mixed packing provisions MP9
Transport category 0

Special provision for

packages W14

loading, unloading and handling CW9, CW12

Air transport - ICAO/IATA

Packaging instructions for limited amount Y203
Packaging instructions passenger 203
Cargo packaging instructions 203

Marine transport - IMDG

EmS (emergency plan) F-D, S-U MFAG 620



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

SECTION 15: Regulatory information

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

Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the 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, as amended. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Commission Delegated Regulation (EU) 2021/849 of 11 March 2021 amending, for the purposes of adapting to technical and scientific progress, Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as ammended.Commission Regulation (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals.

15.2. Chemical safety assessment

No chemical hazard assessment was performed for this mixture.

More information

This information only indicates the basic regulations listed in this Safety Data Sheet. Please note the possible existence of additional regulations supplementing these Regulations. We refer to all applicable national, international and local regulations and regulations.

SECTION 16: Other information

| ^ | list of standay | d viale wherea | a used in the sefety data shee | _ |
|---|-----------------|----------------|---------------------------------|----|
| А | list of standar | a risk bnrase | es used in the safety data shee | T. |

| H220 | Extremely flammable gas. |
|------|---|
| H222 | Extremely flammable aerosol. |
| H225 | Highly flammable liquid and vapour. |
| H229 | Pressurised container: May burst if heated. |
| H280 | Contains gas under pressure; may explode if heated. |
| H304 | May be fatal if swallowed and enters airways. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |

Guidelines for safe handling used in the safety data sheet

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.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C.
P501 Dispose of contents/container to in accordance with local regulations.

A list of additional standard phrases used in the safety data sheet

EUH066 Repeated exposure may cause skin dryness or cracking.

Other important information about human health protection

The mixture should not be used for any purpose other than that for which it is intended (see point 1.2). Because the supplier can not control the specific conditions of use of the mixture, it is the responsibility of the user to adapt the prescribed warnings to local laws and regulations. Safety information describes the product in terms of safety and can not be considered as technical product information.

Key to abbreviations and acronyms used in the safety data sheet

| ADR | European agreement cond | cerning the international | carriage of dance | ierous goods by |
|-----|-------------------------|---------------------------|-------------------|-----------------|
| | | | | |

road

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substance and mixtures



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012
Revision date 21st December 2022 Version 4

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50% of the population EINECS European Inventory of Existing Commercial Chemical Substances

EL₅₀ Effective Loading for 50% of the tested organisms

EmS Emergency plan EU European Union

EuPCS European Product Categorisation System IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying

Dangerous Chemicals

ICAOInternational Civil Aviation OrganizationIMDGInternational Maritime Dangerous GoodsIMOInternational Maritime Organization

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the

population

LD50 Lethal dose of a substance in which it can be expected death of 50% of the

population

LL50 Lethal Loading for 50% of tested organisms

log Kow Octanol-water partition coefficient
NOEL No observed effect level

NOELR
NO Observed effect level
NO Else No Observed Effect Loading Rate
NPK
Maximum admissible concentration

OEL Occupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic

PEL Permissible Exposure Limit

ppm Parts per million

Press. Gas (Comp.)

Gas under pressure: compressed gas

Press. Gas (Diss.)

Gas under pressure: dissolved gas

Press. Gas (Lig.)

Gas under pressure: liquefied gas

Press. Gas (Ref. Liq.) Gas under pressure: refrigerated liquefied gas

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN

Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or

biological materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Aerosol Aerosol

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Asp. Tox. Aspiration hazard
Eye Irrit. Eye irritation
Flam. Gas Flammable gas
Flam. Liq. Flammable liquid
Press. Gas Gases under pressure

STOT SE Specific target organ toxicity - single exposure

Training guidelines

According to § 103 and § 104 of Act No. 262/2006 Coll., The Labor Code, as amended. Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

VIKTOR ČISTIČ

Creation date 10th May 2012

Revision date 21st December 2022 Version 4

Recommended restrictions of use

The mixture should not be used for any purpose other than that for which it is intended (see point 1.2). Because the specific conditions of use of the substance are beyond the control of the supplier, it is the responsibility of the user to adapt the prescribed warnings to local laws and regulations. Safety information describes the product in terms of safety and can not be considered as technical product information.

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

Adaptation of BL updated Annex II of the REACH Regulation as amended by Commission Regulation (EU) 2020/878.

Statement

The safety data sheet contains the data needed to ensure safety and health at work and environmental protection. These data correspond to the current state of knowledge and experience and are in accordance with applicable legal regulations. They can not be considered as a guarantee of the suitability and usability of the product for a specific application. The user is responsible for the treatment under existing laws and regulations.

