Cleaning Spray 500 ml

Safety Data Sheet

according to SOR/2015-17, Hazardous Products Regulations (HPR)
Issue date: 07/03/2025 Revision date: 07/03/2025 Supersedes: 04/11/2017 Version: 3.2

SECTION 1: Identification

1.1. Product identifier

Product form	Mixture
Name	Cleaning Spray 500 ml
Product code	BU Direct Fastening

1.2. Recommended use and restrictions on use

Recommended use	For professional use only

1.3. Supplier

Supplier
Hilti (Canada) Corp.
2201 Bristol Circle
Suite 700
CA L6H 0J8 Oakville, Ontario
Canada
T +1905 8139200
1-800-363-4458 toll free, F +1 905 813 9009

Department issuing data specification sheet
Hilti AG
Feldkircherstraße 100
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-direct.fastening@hilti.com

1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Aerosol, Category 1	H222;H229	
Skin corrosion/irritation, Category 2	H315	Causes skin irritation
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness
Hazardous to the aquatic environment, Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA)

Signal word (GHS CA) Danger

Hazard statements (GHS CA)
H222 - Extremely flammable aerosol
H229 - Pressurized container; may burst if heated
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS CA)	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P251 - Do not pierce or burn, even after use. P261 - Avoid breathing dust, fume, gas, mist, vapours, spray. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	CAS-No.: 92128-66-0	50 – 75	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Propane	Propane	CAS-No.: 74-98-6	10 – 12.5	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Butane	butane	CAS-No.: 106-97-8	5 – 10	Flam. Gas 1, H220 Press. Gas (Comp.), H280
isobutane	isobutane	CAS-No.: 75-28-5	5 – 10	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Carbon dioxide (Propellant gas (Aerosol))	Carbon dioxide	CAS-No.: 124-38-9	< 2.5	Press. Gas (Liq.), H280

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion	Get immediate medical advice/attention.
First-aid measures general	Take off immediately all contaminated clothing. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	Shortness of breath.
Symptoms/effects after skin contact	Irritation.
Symptoms/effects after eye contact	Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media	Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

Fire hazard	Extremely flammable aerosol.
Explosion hazard	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire	Formation of toxic gases is possible during heating or in case of fire. Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions	DO NOT fight fire when fire reaches explosives. Evacuate area.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Precautionary measures fire	Fight fire remotely due to the risk of explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Evacuate area. No flames, no sparks. Eliminate all sources of ignition.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up	Do not flush with water.
Other information	For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Do not eat, drink or smoke when using this product. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	Hazardous waste due to potential risk of explosion. Do not pierce or burn, even after use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	Proper grounding procedures to avoid static electricity should be followed.

Storage conditions	Keep cool. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place.
Incompatible materials	Heat sources. Direct sunlight.
Heat and ignition sources	Keep away from heat and direct sunlight.
Storage temperature	5 – 25 °C
Information on mixed storage	Do not store with DX powder cartridges.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propane (74-98-6)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Propane
OEL TWA	1000 ppm
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	Simple asphyxiant. EX
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	Simple asphyxiant. EX (the substance is a flammable asphyxiant or excursions above the exposure limit could approach 10% of the lower explosive limit)
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Propane
OEL TWA	1000 ppm

OEL STEL	1250 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Propane
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	See Appendix F: Minimal Oxygen Content
Regulatory reference	Occupational Health and Safety Act, R.S.O. 1990, c. O.1 - R.R.O. 1990, Reg. 833: Control of exposure to biological or chemical agents
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Propane
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
Canada (Yukon) - Occupational Exposure Limits	
Local name	Propane
Notations and remarks	Asphyxiant substance
Regulatory reference	Yukon Occupational Health Regulations O.I.C. 1986/164

Butane (106-97-8)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Butane
OEL TWA	1000 ppm
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Butane
VEMP (OEL TWAEV)	1900 mg/m³
	800 ppm
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety

Canada (British Columbia) - Occupational Exposure Limits	
Local name	Butane, all isomers: n-butane
OEL STEL	1000 ppm
Notations and remarks	EX (the substance is a flammable asphyxiant or excursions above the exposure limit could approach 10% of the lower explosive limit)
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Butane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)
Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Butane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)
Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Butane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)
Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Butane, All isomers
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Butane, All isomers
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Butane, All isomers

OEL TWAEV	1000 ppm
Regulatory reference	Occupational Health and Safety Act, R.S.O. 1990, c. O.1 - R.R.O. 1990, Reg. 833: Control of exposure to biological or chemical agents
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Butane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)
Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Butane. All isomers
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
Canada (Yukon) - Occupational Exposure Limits	
Local name	Butane
OEL TWA	1400 mg/m³
	600 ppm
OEL STEL	1600 mg/m³
	750 ppm
Regulatory reference	Yukon Occupational Health Regulations O.I.C. 1986/164

isobutane (75-28-5)	
Canada (Quebec) - Occupational Exposure Limits	
Local name	Isobutane
VECD (OEL STEV)	1000 ppm
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Butane, all isomers: isobutane
OEL STEL	1000 ppm
Notations and remarks	EX (the substance is a flammable asphyxiant or excursions above the exposure limit could approach 10% of the lower explosive limit)
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Isobutane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)

Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (New Brunswick) - Occupational Exposure Limits	
Local name	Butane, all isomers
OEL STEL	1000 ppm
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Isobutane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)
Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Isobutane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)
Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Butane, All isomers
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Butane, All isomers
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Butane, All isomers
OEL TWAEV	1000 ppm
Regulatory reference	Occupational Health and Safety Act, R.S.O. 1990, c. O.1 - R.R.O. 1990, Reg. 833: Control of exposure to biological or chemical agents
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Isobutane
OEL STEL	2370 mg/m³ (EX - Explosion hazard)
	1000 ppm (EX - Explosion hazard)

Notations and remarks	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2025
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Butane. All isomers
OEL TWA	1000 ppm
OEL STEL	1250 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

Carbon dioxide (124-38-9)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	9000 mg/m³
	5000 ppm
OEL STEL	54000 mg/m³
	30000 ppm
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Carbon dioxide
VECD (OEL STEV)	54000 mg/m³
	30000 ppm
VEMP (OEL TWAEV)	9000 mg/m³
	5000 ppm
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	5000 ppm
OEL STEL	15000 ppm
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	9000 mg/m³
	5000 ppm
OEL STEL	54000 mg/m³
	30000 ppm
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025

Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	9000 mg/m³
	5000 ppm
OEL STEL	54000 mg/m³
	30000 ppm
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	9000 mg/m³
	5000 ppm
OEL STEL	54000 mg/m³
	30000 ppm
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	5000 ppm
OEL STEL	30000 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	5000 ppm
OEL STEL	30000 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWAEV	5000 ppm
	30000 ppm
Regulatory reference	Occupational Health and Safety Act, R.S.O. 1990, c. O.1 - R.R.O. 1990, Reg. 833: Control of exposure to biological or chemical agents
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	9000 mg/m³
	5000 ppm

OEL STEL	54000 mg/m³
	30000 ppm
Notations and remarks	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	5000 ppm
OEL STEL	30000 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
Canada (Yukon) - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA	9000 mg/m³
	5000 ppm
OEL STEL	27000 mg/m³
	15000 ppm
Regulatory reference	Yukon Occupational Health Regulations O.I.C. 1986/164

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.
Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

In case of repeated or prolonged contact wear gloves

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	No supplementary information available

Eye protection:

Chemical goggles or safety glasses. CSA Z94.3:20

Respiratory protection:

No respiratory protection needed under normal use conditions. In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Breathing apparatus with filter	A2/P3	If conc. in air > exposure limit

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Aerosol.
Colour	clear
Odour	solvent-like
Odour threshold	No data available
pH	Not determined
Relative evaporation rate (butylacetate=1)	No data available
Relative evaporation rate (ether=1)	No data available
Melting point	Not determined
Freezing point	No data available
Boiling point	No data available
Flash point	-12 °C (major component)
Auto-ignition temperature	> 200 °C (major component)
Decomposition temperature	Not determined
Flammability (solid, gas)	Extremely flammable aerosol.
Vapour pressure	5500 hPa (20°C)
Relative vapour density at 20°C	No data available
Relative density	Not determined
Density	0.7 g/cm³ (20°C)
Solubility	Practically not miscible.
Partition coefficient n-octanol/water (Log Pow)	Not determined
Viscosity, kinematic	No data available
Viscosity, dynamic	Not determined
Explosive properties	Product is not explosive. May form flammable/explosive vapour-air mixture.
Explosive limits	Lower explosion limit: 0.6 vol % Upper explosion limit: 10.9 vol %

9.2. Other information

VOC content	663 g/l (97,90 %)
Heat of combustion	> 30 kJ/g NFPA 30B, Aerosol Classification Level: 3

SECTION 10: Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	No additional information available
Possibility of hazardous reactions	No additional information available
Conditions to avoid	Heat. Sparks. Open flame. Direct sunlight. Overheating.
Incompatible materials	No additional information available
Hazardous decomposition products	Carbon dioxide. Carbon monoxide.
Hardening time:	No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	Not classified (Based on available data, the classification criteria are not met)

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (92128-66-0)	
LD50 oral rat	> 5840 mg/kg bodyweight
LD50 dermal rat	> 2920 mg/kg bodyweight
LC50 Inhalation - Rat (Vapours)	> 25.2 mg/l/4h

Propane (74-98-6)	
LC50 Inhalation - Rat [ppm]	> 280000 ppm (literature)

Butane (106-97-8)	
LC50 Inhalation - Rat [ppm]	> 800000 ppm

isobutane (75-28-5)	
LC50 Inhalation - Rat [ppm]	> 18000 ppm

Skin corrosion/irritation	Causes skin irritation. pH: Not determined
Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met) pH: Not determined
Respiratory or skin sensitization	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	May cause drowsiness or dizziness.

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (92128-66-0)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	Not classified (Based on available data, the classification criteria are not met)

Cleaning Spray 500 ml	
Vaporizer	Aerosol

Symptoms/effects after inhalation	Shortness of breath.
Symptoms/effects after skin contact	Irritation.
Symptoms/effects after eye contact	Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute)	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic)	Toxic to aquatic life with long lasting effects.

Cleaning Spray 500 ml	
Partition coefficient n-octanol/water (Log Pow)	Not determined

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (92128-66-0)	
LC50 - Fish [1]	11.4 mg/l (96 h, Oncorhynchus mykiss, (OECD 203 method))
EC50 - Crustacea [1]	3 mg/l (48 h, Daphnia magna, (OECD 202 method))
ErC50 algae	≥ 10 mg/l (72 h, Pseudokirchneriella subcapitata, (OECD 201 method))
NOEC chronic fish	2.045 mg/l (Quantitative structure-activity relationship (QSAR))
NOEC (chronic)	0.17 (21 d, Daphnia magna, (OECD 211 method), Read-across)
NOEC chronic crustacea	0.17 mg/l (21 d; Daphnia magna (Water flea); (OECD 211 method))
NOEC chronic algae	3 mg/l (72 h, Pseudokirchneriella subcapitata, (OECD 201 method))

Butane (106-97-8)	
LC50 - Fish [1]	24 – 148 mg/l (Quantitative structure-activity relationship (QSAR))
EC50 - Crustacea [1]	7 – 70 mg/l (Quantitative structure-activity relationship (QSAR))
EC50 72h - Algae [1]	7 – 17 mg/l (Quantitative structure-activity relationship (QSAR))

isobutane (75-28-5)	
LC50 - Fish [1]	24.11 – 147.54 mg/l (Quantitative structure-activity relationship (QSAR))
EC50 - Crustacea [1]	7.02 – 69.43 mg/l (Quantitative structure-activity relationship (QSAR))
ErC50 algae	7.71 – 16.5 mg/l (Quantitative structure-activity relationship (QSAR))

Carbon dioxide (124-38-9)	
LC50 - Fish [1]	35 ppm (96 h; Salmo gairdneri; Literature data)

12.2. Persistence and degradability

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (92128-66-0)	
Persistence and degradability	Readily biodegradable.
Biodegradation	98 % (28 d; (OECD 301F method))

Propane (74-98-6)	
Persistence and degradability	Readily biodegradable in water.

isobutane (75-28-5)	
Persistence and degradability	Readily biodegradable.

Carbon dioxide (124-38-9)	
Persistence and degradability	Not applicable.

12.3. Bioaccumulative potential

Cleaning Spray 500 ml	
Partition coefficient n-octanol/water (Log Pow)	Not determined

Propane (74-98-6)	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

isobutane (75-28-5)	
Bioaccumulative potential	Bioaccumulation unlikely.

isobutane (75-28-5)	
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 (20 °C)
Carbon dioxide (124-38-9)	
Partition coefficient n-octanol/water (Log Pow)	0.83 (Measured)

12.4. Mobility in soil

isobutane (75-28-5)
Carbon dioxide (124-38-9)

12.5. Other adverse effects

Ozone: Not classified (Based on available data, the classification criteria are not met)

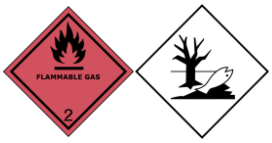
SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation: Disposal must be done according to official regulations.
Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations: Container under pressure. Do not drill or burn even after use.
Additional information: Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

TDG	DOT	IMDG	IATA
14.1. UN number			
UN1950	UN1950	1950	1950
14.2. Proper Shipping Name			
Aerosols, flammable	Aerosols, flammable	Aerosols, flammable	Aerosols, flammable
14.3. Transport hazard class(es)			
2.1	2.1	2.1	2.1
			
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes

14.6. Special precautions for user

TDG

UN-No. (TDG) : UN1950

TDG Special Provisions	:	80 - Despite section 1.17 of Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases), a person must not offer for transport or transport these dangerous goods unless they are in a means of containment that is in compliance with the requirements for transporting gases in Part 5 (Means of Containment),107 - (1) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of UN1950, AEROSOLS, and UN2037, GAS CARTRIDGES, that contain dangerous goods included in Class 2.1 or Class 2.2 and that are transported on a road vehicle, a railway vehicle or a vessel on a domestic voyage, if the aerosols or gas cartridges have a capacity less than or equal to 50 mL. (2) Subsection (1) does not apply to self-defence spray.
Explosive Limit and Limited Quantity Index	:	1 L
Excepted quantities (TDG)	:	E0
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	:	75 L
Emergency Response Guide (ERG) Number	:	126

DOT

UN-No. (DOT)	:	UN1950
DOT Special Provisions (49 CFR 172.102)	:	N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	306
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	150 kg
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	:	25 - Protected from sources of heat,87 - Stow ‘‘separated from’’ Class 1 (explosives) except Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials

IMDG

Special provisions (IMDG)	:	63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	:	SP277
Excepted quantities (IMDG)	:	E0
Packing instructions (IMDG)	:	P207, LP200
Special packing provisions (IMDG)	:	PP87, L2
EmS-No. (Fire)	:	F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage)	:	S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	:	None
Stowage and handling (IMDG)	:	SW1, SW22
Segregation (IMDG)	:	SG69
MFAG-No	:	126

IATA

PCA Excepted quantities (IATA)	:	E0
PCA Limited quantities (IATA)	:	Y203
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA packing instructions (IATA)	:	203
PCA max net quantity (IATA)	:	75kg
CAO packing instructions (IATA)	:	203
CAO max net quantity (IATA)	:	150kg
Special provisions (IATA)	:	A145, A167, A802
ERG code (IATA)	:	10L

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (92128-66-0)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Propane (74-98-6)
Listed on the Canadian DSL (Domestic Substances List)

Butane (106-97-8)
Listed on the Canadian DSL (Domestic Substances List)

isobutane (75-28-5)
Listed on the Canadian DSL (Domestic Substances List)

Carbon dioxide (124-38-9)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: Other information

Issue date	07-03-2025
Revision date	07-03-2025
Supersedes	04-11-2017

Indication of changes:
General.

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
1	Department issuing data specification sheet	Modified	E-Mail address (competent person)
2.1	Classification (GHS CA)	Added	Environmentally hazardous
9	Physical and chemical properties	Added	NFPA 30B
14	Transport information	Modified	

Data sources	European Chemicals Agency, http://echa.europa.eu/. manufacturer.
Training advice	Department issuing data specification sheet.
Other information	NFPA 30B. NFPA 704.

Full text of hazard classes and H-statements:	
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapour
H229	Pressurized container; may burst if heated

Full text of hazard classes and H-statements:	
H280	Contains gas under pressure; may explode if heated
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

Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
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
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
EC50	Median effective concentration
ED	Endocrine disruptor
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
N.O.S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
TRGS	Technical Rules for Hazardous Substances

Abbreviations and acronyms:	
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
vPvB	Very Persistent and Very Bioaccumulative
NOAEL	No-Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level

SDS CA HILTI

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.