

Safety Data Sheet

according to the United Nations GHS (Rev. 10, 2023)

Issue date: 12/05/2025 Revision date: 12/05/2025 Supersedes: 11/04/2017 Version: 3.2

SECTION 1: Identification

1.1. GHS Product identifier

Product form Mixture

Name Cleaning Spray 500 ml

UN-No. (ADR) 1950

Product code BU Direct Fastening

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use For professional use only

1.4. Supplier's details

Supplier

Hilti Saudi Arabia for Construction Tools LLC

King Fahd Street P.O. Box 15930 SA 21454 Jeddah Saudi Arabia

T +966 2 213 8400, F +966 2 697 4696

sa.customerservice@hilti.com

Department issuing data specification sheet

Hilti AG

Feldkircherstraße 100 FL 9494 Schaan Liechtenstein T +423 234 2111

product.compliance-direct.fastening@hilti.com

1.5. Emergency phone number

Emergency number Emergency CONTACT (24-Hour-Number):

GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

+966 2 213 8400

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Aerosol, Category 1 H222;H229 On basis of test

data

Skin corrosion/irritation, Category 2 H315 Calculation method Specific target organ toxicity – Single exposure, Category 3, Narcosis H336 Calculation method Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411 Calculation method

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)







Signal word (GHS UN)

Hazardous ingredients hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Hazard statements (GHS UN) H222 - Extremely flammable aerosol

H229 - Pressurised container: May burst if heated

H315 - Causes skin irritation

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H336 - May cause drowsiness or dizziness

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS UN) 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 which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
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	CAS-No.: 74-98-6	10 – 12.5	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
Butane	CAS-No.: 106-97-8	5 – 10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
isobutane	CAS-No.: 75-28-5	5 – 10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
Carbon dioxide (Propellant gas (Aerosol))	CAS-No.: 124-38-9	< 2.5	Press. Gas (Liq.), H280

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general Take off immediately all contaminated clothing. Call a poison center or a doctor if you feel

unwell.

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.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation Shortness of breath.

Symptoms/effects after skin contact Irritation.
Symptoms/effects after eye contact Eye irritation.

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4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

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.

5.3. Special protective actions for fire-fighters

Precautionary measures fire Fight fire remotely due to the risk of explosion.

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.

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.

6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area. Avoid breathing spray, vapours. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. Breathing apparatus.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. 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".

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.

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Heat and ignition sources Keep away from heat and direct sunlight. Information on mixed storage Do not store with DX powder cartridges.

Storage temperature 5-25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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, such as personal protective equipment (PPE)

Hand protection In case of repeated or prolonged contact wear gloves

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	No supplementary	EN ISO 374
				information available	

Eye protection Chemical goggles or safety glasses. EN 170

Respiratory protection No respiratory protection needed under normal use conditions. In case of insufficient

ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Breathing apparatus with filter	A2/P3	If conc. in air > exposure limit	EN 143

Personal protective equipment symbol(s)





8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state Liquid Appearance Aerosol Colour clear. Odour solvent-like. Odour threshold Not available Melting point Not determined Freezing point Not available Boiling point Not available

Flammability Extremely flammable aerosol.

Lower explosion limit 0.6 vol % Upper explosion limit 10.9 vol %

Flash point -12 °C (major component)
Auto-ignition temperature > 200 °C (major component)

Decomposition temperature Not determined pH Not determined

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Not available pH solution Viscosity, kinematic (calculated value) (40 °C) Not available Partition coefficient n-octanol/water (Log Pow) Not determined Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure 5500 hPa (20°C) Vapour pressure at 50°C Not available 0.7 g/cm3 (20°C) Density Relative density Not determined Relative vapour density at 20°C Not available

Solubility Practically not miscible.

Viscosity, dynamic Not determined

Particle size Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

Explosive properties Product is not explosive. May form flammable/explosive vapour-air mixture

% of flammable ingredients 107.5 %

VOC content 663 g/l (97,90 %)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Sparks. Open flame. Direct sunlight. Overheating.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (dermal)

Acute toxicity (inhalation)

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

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	ermal 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			

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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

SECTION 12: Ecological information

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12.1	. To:	xicitv

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.

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)	0.17 (21 d, Daphnia magna, (OECD 211 method), Read-across)		
NOEC chronic fish	2.045 mg/l (Quantitative structure-activity relationship (QSAR))		
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)		

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12.2.	Persistence and	l degradability

Cleaning Spray 500 ml		
Persistence and degradability	No additional information available	
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 Kow) Not determined		
Bioaccumulative potential	No additional information available	
Propane (74-98-6)		
Bioaccumulative potential Low bioaccumulation potential (Log Kow < 4).		
isobutane (75-28-5)		
Partition coefficient n-octanol/water (Log Kow)	1.09 – 2.8 (20 °C)	
Bioaccumulative potential Bioaccumulation unlikely.		
Carbon dioxide (124-38-9)		
Partition coefficient n-octanol/water (Log Kow)	0.83 (Measured)	

12.4. Mobility in soil

Cleaning Spray 500 ml	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone Not classified (Based on available data, the classification criteria are not met)
Other adverse effects No additional information available

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 ADR / IMDG / IATA / RID

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ADR	IMDG	IATA	RID			
14.1. UN number or ID numbe	14.1. UN number or ID number					
UN 1950	UN 1950	UN 1950	UN 1950			
14.2. UN proper shipping nam	e					
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS			
Transport document description						
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1			
14.3. Transport hazard class(e	es)					
2.1	2.1	2.1	2.1			
2	1 1 2 2	2	2			
14.4. Packing group	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 Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes			

14.6. Special precautions for user

Overland transport

Classification code (ADR) 5F

Special provisions (ADR) 190, 327, 344, 625

Limited quantities (ADR) 11
Excepted quantities (ADR) E0

Packing instructions (ADR) P207, LP200 Special packing provisions (ADR) PP87, RR6, L2

Mixed packing provisions (ADR)MP9Transport category (ADR)2Special provisions for carriage - Packages (ADR)V14Special provisions for carriage - Loading, unloadingCV9, CV12

and handling (ADR)

Special provisions for carriage - Operation (ADR) S2
Tunnel restriction code (ADR) D

Transport by sea

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 EmS-No. (Spillage) S-U Stowage category (IMDG) None Stowage and handling (IMDG) SW1, SW22 Segregation (IMDG) SG69 MFAG-No 126

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Air transport

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

Rail transport

Classification code (RID) 5F

Special provisions (RID) 190, 327, 344, 625

Limited quantities (RID) 1L Excepted quantities (RID) E0

Packing instructions (RID) P207, LP200 Special packing provisions (RID) PP87, RR6, L2

Mixed packing provisions (RID) MP9

Transport category (RID) 2

Special provisions for carriage – Packages (RID) W14

Special provisions for carriage - Loading, unloading CW9, CW12

and handling (RID)

Colis express (express parcels) (RID) CE2
Hazard identification number (RID) 23

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Regulatory reference Not listed on the United States TSCA (Toxic Substances Control Act) inventory.

SECTION 16: Other information

 Issue date
 5/12/2025

 Revision date
 5/12/2025

 Supersedes
 4/11/2017

Indication of changes:

General revision.

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

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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

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

Department issuing data specification sheet.

Training advice

Full text of H-statements:	
Aerosol 1	Aerosol, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
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
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects

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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.

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