

Safety Data Sheet

according to the WHS Regulations

Issue date: 06/06/2023 Revision date: 06/06/2023 Supersedes: 11/04/2017 Version: 3.0

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form Mixture

Name Cleaning Spray 500 ml
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. Details of manufacturer or importer

Supplier Department issuing data specification sheet:

Hilti (Aust.) Pty. Ltd. Hilti Entwicklungsgesellschaft mbH

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Australia T +49 8191 906310 - F +49 8191 90176310

T +61 131 292 - F +61 1300 135 042 <u>df-hse@hilti.com</u> <u>serviceaustralia@hilti.com</u>

1.5. Emergency phone number

Emergency number Emergency contact (24 hours per day)

GBK GmbH Global Regulatory Compliance +49 (0)6132-84463

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Aerosol, Category 1 H222;H229
Skin corrosion/irritation, Category 2 H315
Specific target organ toxicity – Single exposure, Category 3, Narcosis H336

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)





Flame

Exclamation mark

Signal word (GHS AU) Dange

Contains hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (50 – 75 %)

Hazard statements (GHS AU) H222 - Extremely flammable aerosol

H229 - Pressurised container: May burst if heated

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness

Precautionary statements (GHS AU) 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 spray, vapours, mist, gas, fume, dust.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Additional hazard statements (GHS AU) Restricted to professional users

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2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	92128-66-0	50 – 75	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304
Propane	74-98-6	10 – 12.5	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
Butane	106-97-8	5 – 10	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
isobutane	75-28-5	5 – 10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280

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. Symptoms caused by exposure

Symptoms/effects after inhalation Shortness of breath.

Symptoms/effects after skin contact Irritation.

4.3. Medical attention and special treatment

SECTION 5: Fire-fighting measures

5.1. 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.

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

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 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.

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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.

Reference to other sections (13) For further information refer to section 13. Concerning personal protective equipment to

use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed Hazardous waste due to potential risk of explosion. Do not pierce or burn, even after use. 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.

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.

Storage temperature 5 - 25 °C

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

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

Cleaning Spray 500 ml		
Australia - Occupational Exposure Limits		
Local name	Carbon dioxide	
OES TWA [1]	22500 mg/m³ in coal mines 9000 mg/m³	
OES TWA [2]	12500 ppm in coal mines 5000 ppm	
OES STEL	54000 mg/m³ in coal mines 54000 mg/m³	
OES STEL [ppm]	30000 ppm in coal mines 30000 ppm	
Regulatory reference	Workplace exposure standards for airborne contaminants (2019)	

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Butane (106-97-8)		
Australia - Occupational Exposure Limits		
Local name	Butane	
OES TWA [1]	1900 mg/m³	
OES TWA [2]	800 ppm	
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)	

8.2. Monitoring methods

No additional information available

8.3. Engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment Gloves.

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)	- ,	No supplementary information available	EN ISO 374

Eye protection Chemical goggles or safety glasses. ISO 16321-1. 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)





SECTION 9: Physical and chemical properties

Physical state Liquid Appearance Aerosol. Colour clear Odour solvent-like Odour threshold No data available рΗ Not determined pH solution No data available Relative evaporation rate (butylacetate=1) No data available

Melting point / Freezing point Melting point: Not determined

Boiling point No data available

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

Decomposition temperature Not determined Flammability No data available

Vapour pressure: 5500 hPa (20°C) Vapour pressure

Relative density No data available Density Density: 0.7 g/cm3 (20°C)

Relative density: Not determined

Practically not miscible.

Solubility Partition coefficient n-octanol/water (Log Pow) Not determined

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Viscosity, dynamic Not determined

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

Explosive limits

Mo data available

Minimum ignition energy

VOC content

Fat solubility

No data available

No data available

No data available

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.

SECTION 11: Toxicological information

Acute toxicity (oral)

Not classifiedBased on available data, the classification criteria are not met
Acute toxicity (dermal)

Not classifiedBased on available data, the classification criteria are not met
Acute toxicity (inhalation)

Not classifiedBased 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, isoalka	nnes, 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/4h	
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 sensitisation	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.	

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, isoa	Ikanes, 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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According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term

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

Hazardous to the aquatic environment, long-term

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

(chronic)

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; (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))	
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))	
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 (20 °C)	

12.2. Persistence and degradability

1211 Colocolist and dogladdomy		
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.		
Butane (106-97-8)		
Not rapidly degradable		
isobutane (75-28-5)		
Persistence and degradability	Readily biodegradable.	

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)		
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 (20 °C)	
Bioaccumulative potential	Bioaccumulation unlikely.	

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12.4. Mobility in soil	
Cleaning Spray 500 ml	
Partition coefficient n-octanol/water (Log Pow)	Not determined
isobutane (75-28-5)	
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 (20 °C)

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

Regional legislation (waste) 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

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name		<u>, </u>	
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS
Transport document description		<u>, </u>	
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(es)			
2.1	2.1	2.1	2.1
2	2	2	2
14.4. Packing group		<u>, </u>	
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		<u>, </u>	
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

No supplementary information available

Overland transport

Classification code (ADR)

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

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

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

Mixed packing provisions (ADR) MP9

Transport category (ADR) 2

Special provisions for carriage - Packages (ADR) V14

Special provisions for carriage - Loading, unloading CV9, 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 P207, LP200 Packing instructions (IMDG) PP87, L2 Special packing provisions (IMDG) EmS-No. (Fire) F-D EmS-No. (Spillage) S-U Stowage category (IMDG) None SW1. SW22 Stowage and handling (IMDG) Segregation (IMDG) SG69 MFAG-No 126

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

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

No additional information available

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15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes				
Section	Changed item	Change	Comments	
	General			
3	Composition/information on ingredients	Modified		
8	Personal protective equipment	Added		
9	Physical and chemical properties	Modified		
11	Toxicological information	Modified		
12.	Ecotoxicological information	Modified		

Data sources

Abbreviations and acronyms

European Chemicals Agency, http://echa.europa.eu/. manufacturer.

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 disrupting properties

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

VOC - Volatile Organic Compounds

WGK - Water Hazard Class

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vPvB - Very Persistent and Very Bioaccumulative

NOAEL - No-Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

LOAEL - Lowest Observed Adverse Effect Level

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Classification		
Aerosol 1	H222;H229	
Skin Irrit. 2	H315	
STOT SE 3	H336	

Full text of H-statements			
Aerosol 1	Aerosol, Category 1		
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		
H225	Highly flammable liquid and vapour		
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		

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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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