

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 13/06/2024 Revision date: 13/06/2024 Supersedes: 30/10/2023 Version: 4.2

SECTION 1: Identification

1.1. GHS Product identifier

Product form Mixture

Name Cleaning Spray 150 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 Department issuing data specification sheet

Hilti Qatar W.L.L. Hilti AG

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Qatar <u>product.compliance-direct.fastening@hilti.com</u>

T +974 4406 3600, F +974 4406 3669

QA.info@hilti.com

1.5. Emergency phone number

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

GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

+974 4406 3600

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

Skin corrosion/irritation, Category 2

H315

Calculation method
Specific target organ toxicity – Single exposure, Category 3, Narcosis
Hazardous to the aquatic environment – Chronic Hazard, Category 2

H411

Calculation method
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) Danger

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Hazardous ingredients hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane; Acetone; 1-

methoxypropan-2-ol

Hazard statements (GHS UN) H222 - Extremely flammable aerosol

H229 - Pressurised container: May burst if heated

H315 - Causes skin irritation H319 - Causes serious eye irritation

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.

P211 - Do not spray on an open flame or other ignition source.

P251 - Do not pierce or burn, even after use. P261 - Avoid breathing vapours, spray, mist.

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 not expose to temperatures exceeding 122 °F, 50

°C.

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
Acetone	CAS-No.: 67-64-1	25 – 50	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
1-methoxypropan-2-ol	CAS-No.: 107-98-2	5 – 10	Flam. Liq. 3, H226 Acute Tox. 5 (Oral), H303 STOT SE 3, H336
Carbon dioxide (Propellant gas (Aerosol))	CAS-No.: 124-38-9	5 – 10	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.

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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.

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.

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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.

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.

Other information No additional information available.

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)	l '	No supplementary information available	EN ISO 374

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 available Freezing point Not available Boiling point Not available

Flammability Extremely flammable aerosol.

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Lower explosion limit 0.6 (<) vol % Upper explosion limit 13 vol % Flash point < 21 °C Auto-ignition temperature > 200 °C Decomposition temperature Not available Not available рΗ pH solution Not available Viscosity, kinematic (calculated value) (40 °C) Not available Partition coefficient n-octanol/water (Log Kow) Not available 5500 hPa (20 °C) Vapour pressure Vapour pressure at 50°C Not available Density 0.7 g/cm³ Not available Relative density Relative vapour density at 20°C Not available Not available Solubility 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 135 %

VOC content 747 g/l (99,5 %)

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)

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-nexane (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
Acetone (67-64-1)	
LD50 oral rat 5800 mg/kg bodyweight	

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A			
Acetone (67-64-1)			
LD50 oral	6667 mg/kg		
LD50 dermal rat	> 7400 mg/kg bodyweight		
LD50 dermal	20000 mg/kg		
LC50 Inhalation - Rat (Vapours)	76 mg/l/4h		
1-methoxypropan-2-ol (107-98-2)			
LD50 oral rat	4016 mg/kg bodyweight		
LD50 dermal rat	> 2000 mg/kg bodyweight		
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/irritation	Causes serious eye irritation.		
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			
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, iso	oalkanes, cyclics, < 5% n-hexane (92128-66-0)		
STOT-single exposure	May cause drowsiness or dizziness.		
Acetone (67-64-1)			
STOT-single exposure May cause drowsiness or dizziness.			
1-methoxypropan-2-ol (107-98-2)			
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)			

SECTION 12: Ecological information

12 1	Toxicity

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Classification procedure (Hazardous to the aquatic environment, long-term (chronic))

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

Toxic to aquatic life with long lasting effects.

Calculation method

environment, long-term (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))	
Acetone (67-64-1)		
LC50 - Fish [1]	5540 mg/l (96 h; Oncorhynchus mykiss)	
EC50 - Crustacea [1] 8800 mg/l (48 h; Daphnia pulex)		

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Acetone (67-64-1)	
NOEC chronic crustacea	2212 mg/l (28 d; Daphnia magna)
1-methoxypropan-2-ol (107-98-2)	
LC50 - Fish [1]	6812 mg/l (96 h; Leuciscus idus; DIN 38 412, part L15)
EC50 - Crustacea [1]	> 100 mg/l (48 h; Daphnia magna)
Carbon dioxide (124-38-9)	
LC50 - Fish [1]	35 mg/l (96 h; Salmo gairdneri; Literature data)
12.2. Persistence and degradability	
Cleaning Spray 150 ml	
Persistence and degradability	No additional information available
hydrocarbons, C6-C7, n-alkanes, isoalkane	s, cyclics, < 5% n-hexane (92128-66-0)
Persistence and degradability	Readily biodegradable.
Biodegradation	98 % (28 d; (OECD 301F method))
Acetone (67-64-1)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable.
Biodegradation	90.9 % (28 d; (OECD 301B method))
1-methoxypropan-2-ol (107-98-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % (28 d; (OECD 301E method))
Carbon dioxide (124-38-9)	
Persistence and degradability	Not applicable.
12.3. Bioaccumulative potential	
Cleaning Spray 150 ml	
Bioaccumulative potential	No additional information available
Acetone (67-64-1)	
Bioconcentration factor (BCF REACH)	3 (calculated value)
Bioaccumulative potential	Bioaccumulation unlikely.
1-methoxypropan-2-ol (107-98-2)	
Partition coefficient n-octanol/water (Log Pow)	0.37 (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 150 ml	
Mobility in soil	No additional information available
Acetone (67-64-1)	
Surface tension	23.3 mN/m (20 °C)
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1-methoxypropan-2-ol (107-98-2)	
Surface tension	70.7 mN/m (1 g/L; 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

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

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	9		
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	s)		
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 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) 5F

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

hazardous substance mark is therefore not required, as stated in the ADR regulation, section 5.2.1.8.1.

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

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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

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 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, 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.

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SECTION 16: Other information

 Issue date
 6/13/2024

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 Supersedes
 10/30/2023

Section	Changed item	Change	Comments
3	Composition/information on ingredients	Modified	

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 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

vPvB - Very Persistent and Very Bioaccumulative

NOAEL - No-Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

LOAEL - Lowest Observed Adverse Effect Level

Full text of H-statements:	
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Press. Gas (Liq.)	Gases under pressure : Liquefied gas

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Full text of H-statements:	
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H229	Pressurised container: May burst if heated
H280	Contains gas under pressure; may explode if heated
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye 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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