

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			
I.1. GHS Product identifier			
Product form Mixture			
-	Cleaning Spray 150 ml		
	1950		
Product code BU Direct	BU Direct Fastening		
1.2. Other means of identification			
No additional information available			
.3. Recommended use of the chemical and restriction	ns on use		
Recommended use For profes	essional use only		
I.4. Supplier's details			
Supplier	Department issuing data specification sheet		
Hilti Saudi Arabia for Construction Tools LLC	Hilti AG		
King Fahd Street	Feldkircherstraße 100		
P.O. Box 15930	FL 9494 Schaan		
SA 21454 Jeddah	Liechtenstein		
Saudi Arabia	T +423 234 2111		
「+966 2 213 8400, F +966 2 697 4696	product.compliance-direct.fastening@hilti.com		
a.customerservice@hilti.com			
1.5. Emergency phone number			
Emergency number Emergence	ncy CONTACT (24-Hour-Number):		
GBK Gmb	bH Global Regulatory Compliance		
+49 (0)61	132-84463		
.000.0.0	12 9400		
+966 2 21	13 0400		
SECTION 2: Hazard identification			
2.1. Classification of the substance or mixture			
2.1. Classification of the substance or mixture Classification according to the United Nations GHS			
	H222;H229 On basis of test		
Classification according to the United Nations GHS Aerosol, Category 1	data		
Classification according to the United Nations GHS Aerosol, Category 1 Skin corrosion/irritation, Category 2	data H315 Calculation method		
Classification according to the United Nations GHS Aerosol, Category 1 Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2	dataH315Calculation methodH319Calculation method		
Classification according to the United Nations GHS Aerosol, Category 1 Skin corrosion/irritation, Category 2	data H315 Calculation method H319 Calculation method cosis H336 Calculation method		

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; Acetone; 1-methoxypropan-2-ol



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

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

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measu	Ires
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.



Cleaning Spray 150 ml

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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 chemi	ical
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-fighte	rs
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 rele	ease measures
6.1. Personal precautions, protect	tive 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 sto	
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.



Cleaning Spray 150 ml

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures Storage conditions

Incompatible materials Heat and ignition sources Information on mixed storage Storage temperature Proper grounding procedures to avoid static electricity should be followed. Keep cool. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Heat sources. Direct sunlight. Keep away from heat and direct sunlight. Do not store with DX powder cartridges. 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)

In case of repeated or prolonged contact wear gloves

Туре	Material	Permeation	Thicknes	ss (mm) Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	No supplemen information av	
Eye protection	·	Chemical goggles or s	afety glasse	es. EN 170	
Respiratory protection		No respiratory protecti ventilation, wear suitat		under normal use conditions. ry equipment	In case of insufficient
Device		Filter type	C	condition	Standard
Breathing apparatus with filter A2/P3		lf	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 prope	erties
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.



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

Lower explosion limit	0.6 (<) vol %
Upper explosion limit	13 vol %
Flash point	< 21 °C
Auto-ignition temperature	> 200 °C
Decomposition temperature	Not available
рН	Not available
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	Not available
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	5500 hPa (20 °C)
Vapour pressure at 50°C	Not available
Density	0.7 g/cm ³
Relative density	Not available
Relative vapour density at 20°C	Not available
Solubility	Not available
Particle size	Not applicable

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

Explosive properties % of flammable ingredients VOC content Product is not explosive. May form flammable/explosive vapour-air mixture 135 % 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-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			
Acetone (67-64-1)			
LD50 oral rat 5800 mg/kg bodyweight			



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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 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.	
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	Not classified (Based on available data, the classification criteria are not met).	
(acute)		
Hazardous to the aquatic environment, long-term	Toxic to aquatic life with long lasting effects.	
(chronic)		
Classification procedure (Hazardous to the aquatic	Calculation method	
	Calculation method	
environment, long–term (chronic))		
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (92128-66-0)		

nydrocarbons, C6-C7, n-aikanes, isoaikanes, cyclics, < 5% n-nexane (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)	



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

1-methoxypropan-2-ol (107-98-2) LC50 - Fish [1] 6812 EC50 - Crustacea [1] > 100 Carbon dioxide (124-38-9)	2 mg/l (28 d; Daphnia magna) 2 mg/l (96 h; Leuciscus idus; DIN 38 412, part L15) 00 mg/l (48 h; Daphnia magna) ng/l (96 h; Salmo gairdneri; Literature data)
1-methoxypropan-2-ol (107-98-2) LC50 - Fish [1] 6812 EC50 - Crustacea [1] > 100 Carbon dioxide (124-38-9)	2 mg/l (96 h; Leuciscus idus; DIN 38 412, part L15))0 mg/l (48 h; Daphnia magna)
LC50 - Fish [1] 6812 EC50 - Crustacea [1] > 100 Carbon dioxide (124-38-9)	0 mg/l (48 h; Daphnia magna)
EC50 - Crustacea [1] > 100 Carbon dioxide (124-38-9)	0 mg/l (48 h; Daphnia magna)
LC50 - Fish [1] 35 m	ng/l (96 h; Salmo gairdneri; Literature data)
LC50 - Fish [1] 35 m	ng/l (96 h; Salmo gairdneri; Literature data)
2.2. Persistence and degradability	
Cleaning Spray 150 ml	
Persistence and degradability No a	additional information available
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclic	cs, < 5% n-hexane (92128-66-0)
	dily biodegradable.
Biodegradation 98 %	6 (28 d; (OECD 301F method))
Acetone (67-64-1)	
Not rapidly degradable	
Persistence and degradability Read	dily biodegradable.
Biodegradation 90.9	9 % (28 d; (OECD 301B method))
1-methoxypropan-2-ol (107-98-2)	
Persistence and degradability Read	dily biodegradable.
Biodegradation 96 %	6 (28 d; (OECD 301E method))
Carbon dioxide (124-38-9)	
Persistence and degradability Not a	applicable.
12.3. Bioaccumulative potential	
Cleaning Spray 150 ml	
Bioaccumulative potential No a	additional information available
Acetone (67-64-1)	
Bioconcentration factor (BCF REACH) 3 (ca	alculated value)
Bioaccumulative potential Bioac	accumulation unlikely.
1-methoxypropan-2-ol (107-98-2)	
Partition coefficient n-octanol/water (Log Pow) 0.37	7 (20 °C)
Bioaccumulative potential Bioac	accumulation 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 a	additional information available
Acetone (67-64-1)	
Surface tension 23.3	3 mN/m (20 °C)



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

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

	IMDG	ΙΑΤΑ	RID
4.1. UN number or ID number	r		
UN 1950	UN 1950	UN 1950	UN 1950
4.2. UN proper shipping nam	e		
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS
ransport document description			
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1
4.3. Transport hazard class(e	es)		
2.1	2.1	2.1	2.1
4.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
4.5. 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
-	ces derogation applies (quantity of lic ore not required, as stated in the ADI	quids ≤ 5 litres or net mass of solids ≤ 5 R regulation, section 5.2.1.8.1.	5 kg). The environmentally
o supplementary information availa	able		

Overland transport	
Classification code (ADR)	5F
Special provisions (ADR)	190, 327, 344, 625
Limited quantities (ADR)	11
Excepted quantities (ADR)	EO



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

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
	2
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
	120
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)	6 .
	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.



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

Issue date Revision date Supersedes		6/13/2024 6/13/2024 10/30/2023		
Section	Changed item		Change	Comments
3	Composition/information	on ingredients	Modified	
Abbreviations and ac	pronyms	Inland Waterways ADR - European Agreemen Road ATE - Acute Toxicity Estima CLP - Classification Labellin DNEL - Derived-No Effect L EC50 - Median effective con ED - Endocrine disrupting p EC-No European Commu EN - European Standard IATA - International Air Tran IMDG - International Maritin IOELV - Indicative Occupat LC50 - Median lethal conce LD50 - Median lethal dose NOEC - No-Observed Effect OECD - Organisation for Ec N.O.S Not Otherwise Spect OEL - Occupational Exposu PBT - Persistent Bioaccumu PNEC - Predicted No-Effect REACH - Registration, Eval (EC) No 1907/2006	t concerning the ate concerning the age Packaging Re- evel ncentration properties unity number hsport Association ne Dangerous Go ional Exposure Li intration at Concentration conomic Co-opera- cified ure Limit ulative Toxic t Concentration luation, Authorisa ing the Internation ant mit Hazardous Subs Very Bioaccumul rerse Effect Level verse Effect Conc	International Carriage of Dangerous Goods by International Carriage of Dangerous Goods by gulation; Regulation (EC) No 1272/2008 n bods imit Value ation and Development ation and Restriction of Chemicals Regulation hal Carriage of Dangerous Goods by Rail stances
Full text of H-sta	tements:			
Acute Tox. 5 (Oral)		Acute toxicity (oral), Categ	ory 5	

Tur text of H-Statements.			
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5	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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according to the United Nations GHS (Rev. 9, 2021)

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	

SDS UN 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.