



Cluebersynth GH 6-80 (Hilti)

Safety Data Sheet

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

Issue date: 27/11/2024

Revision date: 27/11/2024

Supersedes: 14/12/2022

Version: 3.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form	Mixture
Product name	Cluebersynth GH 6-80 (Hilti)
Product code	BU Diamond

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	Lubricant
Recommended use	For professional use only

1.4. Supplier's details

Supplier

Hilti (Hong Kong) Ltd.
701-704, 7/F, Tower A, Manulife Financial Centre
223 Wai Yip Street, Kwun Tong
HK Kowloon
Hong Kong
T +852 27734 700
hksales@hilti.com

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-power.tools@hilti.com

1.5. Emergency phone number

Emergency number	Emergency CONTACT (24-Hour-Number): GBK GmbH Global Regulatory Compliance +49 (0)6132-84463 +852 27734 700
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SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Hazardous to the aquatic environment – Acute Hazard, Category 3	H402	Expert judgement
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412	Expert judgement

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Signal word (GHS UN)	-
Hazard statements (GHS UN)	H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS UN)	P273 - Avoid release to the environment.

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

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3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
diphenyl tolyl phosphate	CAS-No.: 26444-49-5	< 2.5	Flammable liquids Not classified Acute toxicity (oral) Not classified Acute toxicity (dermal), Category 5, H313 Hazardous to the aquatic environment – Acute Hazard, Category 1, H400 Hazardous to the aquatic environment – Chronic Hazard, Category 1, H410
triphenyl phosphate	CAS-No.: 115-86-6	< 2.5	Acute toxicity (oral), Category 5, H303 Acute toxicity (dermal) Not classified Hazardous to the aquatic environment – Acute Hazard, Category 1, H400 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411
Bis(methylphenyl) phenyl phosphate	CAS-No.: 26446-73-1	< 2.5	Hazardous to the aquatic environment – Acute Hazard, Category 1, H400

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	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.

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

No additional information available.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

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5.2. Specific hazards arising from the chemical

Fire hazard	Combustible liquid.
Reactivity in case of fire	Decomposition products may be a hazard to health.
Hazardous decomposition products in case of fire	Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Special protective actions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
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

Prevention Measures for Secondary Accidents	No additional information available.
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6.1.1. For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapours, spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Keep cool. Protect from sunlight. Keep container closed when not in use. Keep only in original container.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Monitoring methods	
Monitoring methods	A specific exposure sampling method is not available.

8.2. Appropriate engineering controls

Other information	Do not eat, drink or smoke during use.
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8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection	In case of repeated or prolonged contact wear gloves
Eye protection	Chemical goggles or safety glasses
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment

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
Colour	Yellow.
Odour	characteristic.
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Not available
Lower explosion limit	Not available
Upper explosion limit	Not available
Flash point	> 250 °C ISO 2592
Auto-ignition temperature	Not available
Decomposition temperature	Not available
pH	Not available
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	80 mm ² /s (40 °C)
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	< 0.001 hPa (20 °C)
Vapour pressure at 50°C	Not available
Density	1.04 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)

VOC content	0.06 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

diphenyl tolyl phosphate (26444-49-5)	
LD50 oral rat	6400 mg/kg (Rat, Literature study, Oral)
LD50 oral	6400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Literature study, Dermal)
LD50 dermal	5000 mg/kg
ATE UN (oral)	6400 mg/kg bodyweight
ATE UN (dermal)	5000 mg/kg bodyweight

triphenyl phosphate (115-86-6)	
LD50 oral rat	> 20000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	3723.1 mg/kg
LD50 dermal rabbit	> 10000 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Experimental value, Dermal, 14 day(s))
LD50 dermal	10000 mg/kg
ATE UN (oral)	3723.1 mg/kg bodyweight
ATE UN (dermal)	10000 mg/kg bodyweight

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

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Viscosity, kinematic	80 mm ² /s (40 °C)

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Potential adverse human health effects and symptoms

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)	Harmful to aquatic life.
Classification procedure (Hazardous to the aquatic environment, short-term (acute))	Expert judgement
Hazardous to the aquatic environment, long-term (chronic)	Harmful to aquatic life with long lasting effects.
Classification procedure (Hazardous to the aquatic environment, long-term (chronic))	Expert judgement

diphenyl tolyl phosphate (26444-49-5)	
EC50 72h - Algae [1]	0.6 mg/l (Algae)
EC50 72h - Algae [2]	0.99 mg/l (OECD 201: Alga, Growth Inhibition Test, Selenastrum capricornutum)
NOEC chronic crustacea	0.12 mg/l
triphenyl phosphate (115-86-6)	
EC50 - Crustacea [1]	0.25 mg/l
EC50 96h - Algae [1]	2 mg/l (US EPA, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)
NOEC chronic fish	0.037 mg/l

12.2. Persistence and degradability

Cluebersynth GH 6-80 (Hilti)	
Persistence and degradability	No additional information available
diphenyl tolyl phosphate (26444-49-5)	
Persistence and degradability	Not readily biodegradable in water.
ThOD	2.118 g O ₂ /g substance
triphenyl phosphate (115-86-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.

12.3. Bioaccumulative potential

Cluebersynth GH 6-80 (Hilti)	
Bioaccumulative potential	Not established.
diphenyl tolyl phosphate (26444-49-5)	
Partition coefficient n-octanol/water (Log Kow)	3.7 (OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
triphenyl phosphate (115-86-6)	
BCF - Fish [1]	144 (Other, 18 day(s), Oryzias latipes, Flow-through system, Fresh water, Experimental value, Fresh weight)
BCF - Other aquatic organisms [1]	43 (Lemna sp., Literature study, Chronic)
Partition coefficient n-octanol/water (Log Kow)	4.63 (Experimental value, Equivalent or similar to OECD 107, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).



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12.4. Mobility in soil

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Mobility in soil	No additional information available
diphenyl tolyl phosphate (26444-49-5)	
Ecology - soil	Low potential for adsorption in soil.
triphenyl phosphate (115-86-6)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.4 – 3.55 (log Koc, Calculated value)
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations.
Ecological information	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated



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Rail transport

Not regulated

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

SECTION 16: Other information

Issue date 11/27/2024
Revision date 11/27/2024
Supersedes 12/14/2022

Section	Changed item	Change	Comments
1.3	Department issuing data specification sheet	Modified	
2.1	Classification (GHS UN)	Added	
2.2	Hazard statements (GHS UN)	Added	
2.2	Precautionary statements (GHS UN)	Added	
3	Composition/information on ingredients	Modified	
1.4	Emergency number	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
BCF - Bioconcentration factor
BLV - Biological limit value
BOD - Biochemical oxygen demand (BOD)
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD - Chemical oxygen demand (COD)
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
EC-No. - European Community number
EC50 - Median effective concentration
ED - Endocrine disrupting properties
EN - European Standard
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
IOELV - Indicative Occupational Exposure Limit Value
LC50 - Median lethal concentration
LD50 - Median lethal dose
LOAEL - Lowest Observed Adverse Effect Level
N.O.S. - Not Otherwise Specified



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NOAEC - No-Observed Adverse Effect Concentration
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
OECD - Organisation for Economic Co-operation and Development
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
TLM - Median Tolerance Limit
TRGS - Technical Rules for Hazardous Substances
ThOD - Theoretical oxygen demand (ThOD)
VOC - Volatile Organic Compounds
WGK - Water Hazard Class
vPvB - Very Persistent and Very Bioaccumulative
None.

Other information

Full text of H-statements:	
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Acute Tox. Not classified (Dermal)	Acute toxicity (dermal) Not classified
Acute Tox. Not classified (Oral)	Acute toxicity (oral) Not classified
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Flam. Liq. Not classified	Flammable liquids Not classified
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful 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.