

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 27/11/2024 Revision date: 27/11/2024 Supersedes version of: 14/12/2022

Version: 3.0

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

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

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture For professional use only Lubricant

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

#### Supplier Hilti (Schweiz) AG Soodstrasse 61 CH 8134 Adliswil Schweiz T +41 844 84 84 85, F +41 844 84 84 86 info@hilti.ch

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

#### 1.4. Emergency telephone number

Emergency number

Emergency CONTACT (24-Hour-Number): GBK GmbH Global Regulatory Compliance +49 (0)6132-84463

#### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412 Full text of H- and EUH-statements: see section 16 H412 Adverse physicochemical, human health and environmental effects No additional information available 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Signal word (CLP) Hazard statements (CLP) H412 - Harmful to aquatic life with long lasting effects. Precautionary statements (CLP) P273 - Avoid release to the environment.

#### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT and/or vPvB substances  $\ge 0.1\%$  assessed in accordance with REACH Annex XIII

#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Component		
Reaction mass of 3-methylphenyl diphenyl phosphate, 4-methylphenyl diphenyl phosphate, bis(3- methylphenyl) phenyl phosphate, 3-methylphenyl 4- methylphenyl phenyl phosphate and triphenyl phosphate	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
triphenyl phosphate (115-86-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Component	
Reaction mass of 3-methylphenyl diphenyl phosphate, 4-methylphenyl diphenyl phosphate, bis(3- methylphenyl) phenyl phosphate, 3-methylphenyl 4- methylphenyl phenyl phosphate and triphenyl phosphate	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
triphenyl phosphate (115-86-6)	The substance is included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction mass of 3-methylphenyl diphenyl phosphate, 4-methylphenyl diphenyl phosphate, bis(3- methylphenyl) phenyl phosphate, 3-methylphenyl 4- methylphenyl phosphate and triphenyl phosphate	EC-No.: 945-730-9 REACH-no: 01-2119511174- 52	1 – 2.5	Aquatic Acute 1, H400 Aquatic Chronic 3, H412
triphenyl phosphate substance listed on REACH Candidate List Stoff mit nationalem Arbeitsplatzgrenzwert (CH); Stoff, der endokrinschädliche Eigenschaften aufweist	CAS-No.: 115-86-6 EC-No.: 204-112-2	0.1 – 1	Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H- and EUH-statements: see section 16

#### **SECTION 4: First aid measures**

4.1. Description of 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.	



according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness
First-aid measures after ingestion	persists. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
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4.2. Most important symptoms and effects,	
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Indication of any immediate medical att	tention and special treatment needed
No additional information available.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.
5.2. Special hazards arising from the substa	ance or mixture
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. Advice for firefighters	
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 mea	asures
6.1. Personal precautions, protective equip	ment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	Evacuate unnecessary personnel.
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 au	thorities if liquid enters sewers or public waters. Avoid release to the environment.
6.3. Methods and material 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.
6.4. Reference to other sections	

See Section 8. Exposure controls and personal protection.

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.	



#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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.	

#### 7.3. Specific end use(s)

No additional information available

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1. National occupational exposure and biological limit values

triphenyl phosphate (115-86-6)	
Switzerland - Occupational Exposure Limits	
Local name	Triphénylphosphate / Triphenylphosphat
MAK (OEL TWA)	10 mg/m³ (i) / (e)
KZGW (OEL STEL)	20 mg/m³ (i) / (e)
Critical toxicity	Cholin / Cholin
Notation	SS <sub>c</sub> / SS <sub>c</sub>
Remark	NIOSH
Regulatory reference	www.suva.ch, 01.01.2024

#### 8.1.2. Recommended monitoring procedures

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

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.



#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

Eye protection: Chemical goggles or safety glasses

#### 8.2.2.2. Skin protection

Hand protection: In case of repeated or prolonged contact wear gloves

#### 8.2.2.3. Respiratory protection

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### Other information:

Do not eat, drink or smoke during use. No additional information available

#### SECTION 9: Physical and chemical properties

#### 9.1. Information on 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
рН	Not available
Viscosity, kinematic	80 mm²/s (40 °C)
Solubility	Not available
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 <sup>3</sup>
Relative density	Not available
Relative vapour density at 20°C	Not available
Particle characteristics	Not applicable

#### 9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

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#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### 9.2.2. Other safety characteristics

VOC content

0.06 %

#### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
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
Skin corrosion/irritation	Not classified
Additional information	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Not classified
Additional information	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	Not classified
Additional information	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Not classified
Additional information	Based on available data, the classification criteria are not met
Carcinogenicity	Not classified
Additional information	Based on available data, the classification criteria are not met
Reproductive toxicity	Not classified
Additional information	Based on available data, the classification criteria are not met
STOT-single exposure	Not classified
Additional information	Based on available data, the classification criteria are not met
STOT-repeated exposure	Not classified
Additional information	Based on available data, the classification criteria are not met
Aspiration hazard	Not classified



according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Additional information	Based on available data, the classification criteria are not met	
Kluebersynth GH 6-80 (Hilti)		
Viscosity, kinematic	80 mm²/s (40 °C)	
11.2. Information on other hazards		
11.2.1. Endocrine disrupting properties		
Component		
triphenyl phosphate (115-86-6)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)	
11.2.2. Other information		
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)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Harmful to aquatic life with long lasting effects.
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	
triphenyl phosphate (115-86-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
12.3. Bioaccumulative potential	
Kluebersynth GH 6-80 (Hilti)	
Bioaccumulative potential	Not established.



according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 Pow)	4.63 (Experimental value, Equivalent or similar to OECD 107, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
12.4. Mobility 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. Results of PBT and vPvB assessment	
Kluebersynth GH 6-80 (Hilti)	
This substance/mixture does not meet the PBT criteria	a of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criter	ia of REACH regulation, annex XIII
12.6. Endocrine disrupting properties	
Component	
triphenyl phosphate (115-86-6)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)
12.7. Other adverse effects	
Additional information	Avoid release to the environment.

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations.
Ecological information	Avoid release to the environment.
European List of Waste (LoW, EC 2000/532)	unused product :
	13 02 06* - synthetic engine, gear and lubricating oils

#### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IAT	A/RID/

ADR IMDG		ΙΑΤΑ	RID
14.1. UN number or ID number			
Not regulated         Not regulated         Not regulated         Not regulated			
14.2. UN proper shipping name	14.2. UN proper shipping name		
Not regulated Not regulated Not regulated Not regulated		Not regulated	
14.3. Transport hazard class(es)			
Not regulated	Not regulated         Not regulated         Not regulated         Not regulated		Not regulated



#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	ΙΑΤΑ	RID
14.4. Packing group			
Not regulated         Not regulated         Not regulated         Not regulated			
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated

#### 14.6. Special precautions for user

Overland transport Not regulated

Transport by sea Not regulated

Air transport Not regulated

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/legislation specific for the substance or mixture

15.1.1. EU-Regulations

**REACH Annex XVII (Restriction List)** 

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3(c)	Kluebersynth GH 6-80 (Hilti) ; Reaction mass of 3-methylphenyl diphenyl phosphate, 4-methylphenyl diphenyl phosphate, bis(3-methylphenyl) phenyl phosphate, 3-methylphenyl 4-methylphenyl phenyl phosphate and triphenyl phosphate	

#### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Triphenyl phosphate (EC 204-112-2, CAS 115-86-6)

#### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### VOC Directive (2004/42)

VOC content

0.06 %

#### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

#### Switzerland

VOCV (Swiss)

0,19%

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

Indication of changes			
Section Changed item		Change	Comments
1.3	Department issuing data specification sheet Modified		
1.4 Emergency number Modified			
2.1 Classification according to Regulation (EC) Added No. 1272/2008 [CLP]			
2.2     Hazard statements (CLP)     Added			
2.2 Precautionary statements (CLP) Added			
3.2	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	
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	



according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations ar	id acronyms:	
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	
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	

Other information

None.



#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 2	lazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
H400	Very toxic to aquatic life.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aquatic Chronic 3	H412	Expert judgement

SDS\_EU\_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.