

Safety Data Sheet According to SS 586 Part 3 (2022) Issue date: 27.11.2024

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Version: 3.0

1.1. Product identifier		
Name	Kluebersynth 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 re	estrictions on u	se
Recommended use	Lubricant	
Restrictions on use	For professional u	use only
1.4. Supplier's details		
Supplier		Department issuing data specification sheet
Hilti Far East Private Ltd.		Hilti AG
80 Pasir Panjang Road, #16-83/84 Mapletree Business	City Singapore	Feldkircherstraße 100
Singapur 117372		FL 9494 Schaan
T +65 6777 7887 - F +65 6777 3057		Liechtenstein
<u>sg-customerservice@hilti.com</u>		T +423 234 2111
		product.compliance-power.tools@hilti.com
1.5. Emergency phone number		
Emergency number	GBK GmbH Glob	al Regulatory Compliance
	+49 (0)6132-8446	33

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as hazardous according to GHS

2.2. GHS label elements including precautionary statements

No labelling applicable

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	Synonyms	Concentration (%)	Formula	Product identifier
diphenyl tolyl phosphate	cresol diphenyl phosphate / diphenyl cresol phosphate / diphenyl tolyl ester phosphoric acid	< 2.5	C19H17O4P	CAS-No.: 26444-49-5 EC-No.: 247-693-8
triphenyl phosphate	phosphoric acid, triphenyl ester / TP (=triphenyl phosphate) / TPP (=triphenyl phosphate)	< 2.5	C18H15O4P	CAS-No.: 115-86-6 EC-No.: 204-112-2
Bis(methylphenyl) phenyl phosphate	-	< 2.5	-	CAS-No.: 26446-73-1 EC-No.: 247-708-8



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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).
Inhalation	Allow affected person to breathe fresh air. Allow the victim to rest.
Skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
Eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms/effects	s, acute and delayed
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Indication of immediate medical a	attention and special treatment needed
Other medical advice or treatment	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.
5.2. Specific hazards arising from the chem	ical
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 fighte	ers
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

No additional information available

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 authorities 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.



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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 an	y 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/Occupational exposure limits

triphenyl phosphate (115-86-6)	
Singapore - Occupational Exposure Limits	
Local name	Triphenyl phosphate
PEL (OEL TWA)	3 mg/m ³
Regulatory reference	WSH (General Provision) Regulation 2014

8.2. Monitoring

Monitoring methods

A specific exposure sampling method is not available.

8.3. Appropriate engineering control measures

No additional information available

8.4. Personal protection

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

Personal protective equipment symbol(s)



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Liquid Yellow characteristic No data available No data available No data available No data available No data available

Physical state
Colour
Odour
Odour threshold
рН
Relative evaporation rate (butylacetate=1)
Melting point
Freezing point



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Boiling point	No data available
Flash point	> 250 °C ISO 2592
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability	No data available
Vapour pressure	< 0.001 hPa (20 °C)
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	1.04 g/cm ³
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Viscosity, kinematic	80 mm²/s (40 °C)
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available
9.2 Other information	

9.2. Other information

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. Acute toxicity		
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 SG (oral)	6400 mg/kg bodyweight	
ATE SG (dermal)	5000 mg/kg bodyweight	



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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 SG (oral)	3723.1 mg/kg bodyweight
ATE SG (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
Kluebersynth GH 6-80 (Hilti)	
Viscosity, kinematic	80 mm²/s (40 °C)
Density	1.04 g/cm ³
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)	Not classified		
Other information	Avoid release to the environment.		
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		
Partition coefficient n-octanol/water (Log Pow)	3.7 (OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)		
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		
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)		



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triphenyl phosphate (115-86-6)			
Partition coefficient n-octanol/water (Log Pow)	4.63 (Experimental value, Equivalent or similar to OECD 107, 20 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.4 – 3.55 (log Koc, Calculated value)		
Bis(methylphenyl) phenyl phosphate (26446	-73-1)		
12.2. Persistence and degradability			
Kluebersynth 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			
Kluebersynth GH 6-80 (Hilti)			
Bioaccumulative potential	Not established.		
diphenyl tolyl phosphate (26444-49-5)			
Partition coefficient n-octanol/water (Log Pow)	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 Pow)	4.63 (Experimental value, Equivalent or similar to OECD 107, 20 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.4 – 3.55 (log Koc, Calculated value)		
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).		
12.4. Mobility in soil			
Kluebersynth GH 6-80 (Hilti)			
Mobility in soil	No additional information available		
diphenyl tolyl phosphate (26444-49-5)			
Partition coefficient n-octanol/water (Log Pow)	3.7 (OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)		
Ecology - soil	Low potential for adsorption in soil.		
triphenyl phosphate (115-86-6)			
Partition coefficient n-octanol/water (Log Pow)	4.63 (Experimental value, Equivalent or similar to OECD 107, 20 °C)		
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		



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Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Product/Packaging disposal recommendations

Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / 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				
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

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

Regulation		Component / Mixture	
Arms and Explosives Act	Not applicable		
Chemical Weapons Prohibition Act			
Environmental Protection and Management (Air Impurities) Regulations			



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Regulation	Component / M	/lixture
Environmental Protection and Management Act (Hazardous Substances)		
Environmental Public Health (Quality of Piped Drinking Water) Regulations		
Fire Safety Act/Fire Safety (Petroleum and Flammable Materials) Regulations		
Maritime and Port Authority of Singapore (Dangerous, Petroleum and Explosives) Regulations		
Misuse of Drugs Act		
Poisons Act		
Poisons Rules		
Hazardous waste (Control of export, import and transit) Act		
Strategic goods (Control) Act		

15.2. International regulations

No additional information available

15.3 Chemical inventory status

No additional information available

SECTION 16: Other information	
Issue date	27/11/2024
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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
	NOAEC - No-Observed Adverse Effect Concentration
	NOAEL - No-Observed Adverse Effect Level



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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

Indication of changes			
Section	Changed item	Change	Comments
1	Department issuing data specification sheet	Modified	
1	Emergency number	Modified	
3	Composition/information on ingredients	Modified	

SDS_SG_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.