

Kluebersynth GEM 4-220 N (H)

Safety Data Sheet

According to SS 586 Part 3 (2022)
Issue date: 14.10.2025

Revision date: 14.10.2025

Supersedes:

Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product name	Kluebersynth GEM 4-220 N (H)
Product code	BU ET&A
Product form	Mixture

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use	Lubricant
Restrictions on use	For professional use only

1.4. Supplier's details

Supplier

Klüber Lubrication München GmbH & Co. KG
Geisenhausenerstr. 7 München Germany 81379
T +49 89 7876-0
mcm@klueber.com

Department issuing data specification sheet

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

1.5. Emergency phone number

Emergency number	GBK GmbH Global Regulatory Compliance +49 (0)6132-84463
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SECTION 2: Hazard 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

This mixture does not contain any substances to be mentioned according to the applicable regulations

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	Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest. If experiencing respiratory symptoms: Call a poison center or a doctor. If breathing is irregular or stopped, administer artificial respiration.
Skin contact	Take off contaminated clothing. Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.

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Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.
Ingestion	Move the affected person to the fresh air. Rinse mouth. Do NOT induce vomiting. Get medical advice/attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects	No additional information.
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4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	Water spray. Alcohol resistant foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Explosion hazard	No direct explosion hazard.
Reactivity in case of fire	Decomposition products may be a hazard to health.
Hazardous decomposition products in case of fire	Carbon oxides (CO, CO ₂). Sulphur oxides.

5.3. Special protective actions for fire fighters

Firefighting instructions	Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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

Protective equipment	Wear recommended personal protective equipment.
Emergency procedures	Ventilate spillage area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.

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

For containment	Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

Ensure good ventilation of the work station. 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. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Keep in a cool, well-ventilated place away from heat. Comply with applicable regulations.

Storage conditions

Keep cool. Protect from sunlight. Keep container closed when not in use. Keep only in original container.

Heat and ignition sources

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters/Occupational exposure limits

No additional information available

8.2. Appropriate engineering control measures

Appropriate engineering controls

Ensure good ventilation of the work station.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection

protective gloves. Nitrile rubber gloves

Eye protection

Chemical goggles or safety glasses

Skin and body protection

Wear suitable protective clothing

Respiratory protection

Avoid breathing dust, mist or spray. In order to avoid inhalation of mist/vapour, all spraying must be done wearing adequate respirator

Personal protective equipment symbol(s)



Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Yellow

Odour

characteristic

Odour threshold

No data available

pH

Not available

Melting point

Not available

Freezing point

Not available

Initial boiling point and boiling range

Not available

Flash point

≥ 200 °C

Evaporation rate

Not available

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Flammability	Not available
Explosive limits	Not available
Vapour pressure	< 0.001 hPa (20 °C)
Relative vapour density at 20°C	Not available
Density	0.86 g/cm ³ (20°C)
Relative density	Not available
Relative gas density	0.861 (20°C)
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	Not available
Partition coefficient n-octanol/water (Log Pow)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity, kinematic	220 mm ² /s (40 °C)
Particle size	Not available
Particle size distribution	Not available
Particle shape	Not available
Particle aspect ratio	Not available
Particle specific surface area	Not available

9.2. Other information

VOC content	< 3 %
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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

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

No additional information available

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
Skin corrosion or irritation	Not classified
Serious eye damage or 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	220 mm ² /s (40 °C)
Density	0.86 g/cm ³ (20°C)
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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.

12.2. Persistence and degradability

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Persistence and degradability	No additional information available.

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

12.4. Mobility in soil

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Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal considerations

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations.
Additional information	Do not re-use empty containers.

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

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ADR	IMDG	IATA	RID
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
Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations	Applicable
Arms and Explosives Act	Not applicable
Chemical Weapons Prohibition Act	
Environmental Protection and Management (Air Impurities) Regulations	
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	

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Regulation		Component / Mixture
Hazardous waste (Control of export, import and transit) Act		
Strategic goods (Control) Act		

15.2. International regulations

No additional information available

SECTION 16: Other information

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Abbreviations and acronyms	ACGIH - American Conference of Government Industrial Hygienists 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) CAS-No. - Chemical Abstract Service number CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 COD - Chemical oxygen demand (COD) CSA - Chemical safety assessment DMEL - Derived Minimal Effect level DNEL - Derived-No Effect Level EC-No. - European Community number EC50 - Median effective concentration ED - Endocrine disruptor EN - European Standard EWC - European waste catalogue IARC - International Agency for Research on Cancer IATA - International Air Transport Association IMDG - International Maritime Dangerous Goods LC50 - Median lethal concentration LD50 - Median lethal dose LOAEL - Lowest Observed Adverse Effect Level Log Kow - Partition coefficient n-octanol/water (Log Kow) Log Pow - Partition coefficient n-octanol/water (Log Pow) MAK - maximum workplace concentration NOAEC - No-Observed Adverse Effect Concentration NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration N.O.S. - Not Otherwise Specified OECD - Organisation for Economic Co-operation and Development OEL - Occupational Exposure Limit OSHA - Occupational Safety Health Administration PBT - Persistent Bioaccumulative Toxic PNEC - Predicted No-Effect Concentration PPE - Personal protection equipment RID - Regulations concerning the International Carriage of Dangerous Goods by Rail SDS - Safety Data Sheet STP - Sewage treatment plant TF - Technical function ThOD - Theoretical oxygen demand (ThOD)

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TLM - Median Tolerance Limit
TWA - Time Weighted Average
VOC - Volatile Organic Compounds
vPvB - Very Persistent and Very Bioaccumulative
UFI - Unique Formula Identifier
None.

Other information

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.