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

1.1 Product identifier

POWER Kleber GEL
Article number: 93620,93720
UFI: UYV1-A5PN-S20R-QUFG

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

1.2.1 Relevant uses

Adhesive

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

PETEC Verbindungstechnik GmbH
Wüstenbuch 26
96132 Schlüsselfeld / GERMANY
Phone +49 (0) 9555 80994-0
Fax +49 (0) 9555-80994-25
Homepage www.petec.de
E-mail info@petec.de

Address enquiries to

Technical information info@petec.de

Safety Data Sheet sdb@chemiebuero.de (No dispatch of safety data sheets)

Safety data sheets are available from the supplier.

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Eye Irrit. 2: H319 Causes serious eye irritation.
Skin Irrit. 2: H315 Causes skin irritation.
STOT SE 3: H335 May cause respiratory irritation.
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word WARNING

Contains: Ethyl-2-cyanoacrylate

Hazard statements
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P261 Avoid breathing vapours.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice / attention.
P312 Call a POISON CENTER / doctor if you feel unwell.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/national regulation.

Special labelling EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

2.3 Other hazards

Human health dangers Cyanoacrylate! Danger! Bonds skin and eyelids in seconds. Keep out of reach of children.

Environmental hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Contains no ingredients with endocrine-disrupting properties.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
> 80	Ethyl-2-cyanoacrylate
	CAS: 7085-85-0, EINECS/ELINCS: 230-391-5, EU-INDEX: 607-236-00-9, Reg-No.: 01-2119527766-29-XXXX
	GHS/CLP: STOT SE 3: H335 - Eye Irrit. 2: H319 - Skin Irrit. 2: H315
	SCL [%]: >= 10: STOT SE 3: H335
< 1	1,4-Dihydroxybenzene
	CAS: 123-31-9, EINECS/ELINCS: 204-617-8, EU-INDEX: 604-005-00-4, Reg-No.: 01-2119524016-51-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Sens. 1B: H317 - Eye Dam. 1: H318 - Muta. 2: H341 - Carc. 2: H351 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M-Factor (acute): 10, M-Factor (chronic): 1

Comment on component parts For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change soaked clothing immediately.

Inhalation
Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact
In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.
Do not pull solidified product from skin forcibly.

Eye contact
In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
Do not open bonded eyelids forcibly and without any special care.

Ingestion
Consult a doctor immediately.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
The product will polymerise immediately in the mouth, making it almost impossible to swallow, but beware of possible choking hazard. Ensure breathing passages are not obstructed. Saliva will separate the solidified product from the mouth over a period of hours.
Do not try to pull the polymerised adhesive from the mouth. Keep checking the mouth to ensure that the person doesn`t swallow it when it detaches.

4.2 Most important symptoms and effects, both acute and delayed

Headache
Irritant effects
Cough

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
Foam.
Dry powder.
Carbon dioxide.
Water spray jet.

Extinguishing media that must not be used
Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)
Carbon dioxide (CO2)
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Do not inhale explosion and/or combustion gases.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Wear suitable protective equipment. For personal protection see SECTION 8.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid contact with eyes and skin. Use personal protective equipment.

Clean skin thoroughly after work, apply skin cream.
Take off contaminated clothing and wash before reuse.
Use barrier skin cream.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original tightly closed container.

Do not store together with oxidizing agents.
Do not store with amines
Keep away from water.

Keep container tightly closed.
Keep container in a well-ventilated place.
Keep in a cool place. Store in a dry place.
Protect from heat/overheating.

torage class (TRGS 510) Storage class 10 (VCI)

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored DE (TRGS 900)

not relevant

Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

DNEL

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
Industrial, inhalative, Acute - systemic effects, 9,25 mg/m³
Industrial, inhalative, Acute - local effects, 9,25 mg/m³
Industrial, inhalative, Long-term - systemic effects, 9,25 mg/m³
Industrial, inhalative, Long-term - local effects, 9,25 mg/m³
general population, inhalative, Acute - local effects, 9,25 mg/m³
general population, inhalative, Acute - systemic effects, 9,25 mg/m³
general population, inhalative, Long-term - systemic effects, 9,25 mg/m³
general population, inhalative, Long-term - local effects, 9,25 mg/m³
1,4-Dihydroxybenzene, CAS: 123-31-9
Industrial, dermal, Long-term - systemic effects, 3,33 mg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 2,1 mg/m³
general population, oral, Long-term - systemic effects, 0,6 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 1,66 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 1,05 mg/m³

PNEC

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
There are no PNEC values established for the substance.
1,4-Dihydroxybenzene, CAS: 123-31-9
soil, 0,64 µg/kg soil dw
sediment (seawater), 0,49 µg/kg sediment dw
sediment (freshwater), 4,9 µg/kg sediment dw
sewage treatment plants (STP), 0,71 mg/L
seawater, 0,057 µg/L
freshwater, 0,57 µg/L

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. > 0,15 mm; Nitrile rubber, >60 min (EN 374-1/-2/-3).
Skin protection	Light protective clothing.
Other	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact with eyes and skin. Do not inhale vapours.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	Gel
Color	colourless
Odor	pungent
Odour threshold	not relevant
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point or initial boiling point and boiling range [°C]	214
Flash point [°C]	> 85
Flammability	yes
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	ca. 0,021 (20°C)
Density [g/cm³]	not determined
Relative density	ca. 1,04
Bulk density [kg/m³]	not applicable
Solubility in water	reacts with water 24 µg/l (20 °C, pH 6,6)
Solubility other solvents	acetone
Partition coefficient n-octanol/water (log value)	0,776 (22 °C, pH 6,3)
Kinematic viscosity	not determined dynamic: 50K-90KcPs (Brookfield RVT, T-spindle C, 2.5rpm)
Relative vapour density	not relevant
Melting point [°C]	-31
Auto-ignition temperature [°C]	485
Decomposition temperature [°C]	not determined
Particle characteristics	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.
Polymerized by contact with water, alcohols, amines or alkalis.
Polymerisation with evolution of heat.

10.4 Conditions to avoid

Heat-sensitive
Sunlight
Sensitive to moisture.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.
In the event of fire: See SECTION 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

Product
ATE-mix, oral, > 2000 mg/kg bw

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
LD50, oral, Rat, > 5000 mg/kg bw, OECD 401
1,4-Dihydroxybenzene, CAS: 123-31-9
LD50, oral, Rat, 367 mg/kg (OECD 401)

Acute dermal toxicity

Product
ATE-mix, dermal, > 2000 mg/kg bw

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
LD50, dermal, Rabbit, > 2000 mg/kg, OECD 402
1,4-Dihydroxybenzene, CAS: 123-31-9
LD50, dermal, > 2000 mg/kg

Acute inhalational toxicity

Product
ATE-mix, inhalative, > 20 mg/l

Substance
1,4-Dihydroxybenzene, CAS: 123-31-9
LC0, inhalativ (mist), Rat, > 2800 mg/m³/8h
LC0, inhalativ (mist), Rat, > 7800 mg/m³/1h

Serious eye damage/irritation Irritant
Calculation method

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
Eye, Rabbit, OECD 405, irritant
1,4-Dihydroxybenzene, CAS: 123-31-9
Eye, irritant

Skin corrosion/irritation Irritant
Calculation method

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
Rabbit, OECD 404, irritant
1,4-Dihydroxybenzene, CAS: 123-31-9
Rabbit, non-irritating

Respiratory or skin sensitisation Based on the available information, the classification criteria are not fulfilled.

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
dermal, Guinea pig, non-sensitizing
1,4-Dihydroxybenzene, CAS: 123-31-9
dermal, mouse, OECD 429, sensitising
dermal, Guinea pig, OECD 406, sensitising

Specific target organ toxicity — single exposure

May cause respiratory irritation.
Calculation method

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
inhalative, Harmonised classification: STOT SE 3 H335, irritant

Specific target organ toxicity — repeated exposure

Based on the available information, the classification criteria are not fulfilled.

Substance
1,4-Dihydroxybenzene, CAS: 123-31-9
NOAEL, dermal, Rat, 3840 mg/kg bw/day, OECD 411
NOAEL, oral, Rat, 20 mg/kg bw/day

Mutagenicity

Based on the available information, the classification criteria are not fulfilled.
Does not contain a relevant substance that meets the classification criteria.

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
OECD 473, negativ
OECD 476, negativ
OECD 471, negativ
1,4-Dihydroxybenzene, CAS: 123-31-9
OECD 476, positive

Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.
Does not contain a relevant substance that meets the classification criteria.

- Fertility

Substance
1,4-Dihydroxybenzene, CAS: 123-31-9
oral, Rat, 150 mg/kg bw/day, no adverse effect observed

- Development

Substance
1,4-Dihydroxybenzene, CAS: 123-31-9
oral, Rat, 75 mg/kg bw/da, no adverse effect observed

Carcinogenicity

Based on the available information, the classification criteria are not fulfilled.
Does not contain a relevant substance that meets the classification criteria.

Substance
1,4-Dihydroxybenzene, CAS: 123-31-9
NOAEL, oral, Rat, 25 mg/kg bw/day

Aspiration hazard

Based on the available information, the classification criteria are not fulfilled.

General remarks

Cyanoacrylates bond skin and eyelids in seconds. In the case of large spills on the skin,

superficial burns may occur - treat accordingly. There may be irritation and redness at the site of contact.

Toxicological data of complete product are not available.
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties Does not contain a relevant substance that meets the classification criteria.

11.2.2 Other information

SECTION 12: Ecological information

12.1 Toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
Ethyl-2-cyanoacrylate, CAS: 7085-85-0
BCF, 0.776 (EU A.8)
Biological degradability:, 57 % (OECD 301D)
1,4-Dihydroxybenzene, CAS: 123-31-9
LC50, (96h), Oncorhynchus mykiss, 0,638 mg/l (OECD 203)
EC50, (72h), Selenastrum capricornutum, 0,335 mg/l (OECD 201)
EC50, (48h), Daphnia magna, 0,134 mg/l (OECD 202)
NOEC, (21d), Daphnia magna, 0,0057 mg/l (OECD 211)

12.2 Persistence and degradability

Behaviour in environment compartments No information available.

Behaviour in sewage plant No information available.

Biological degradability CAS 123-31-9: Biodegradable.
CAS 7085-85-0: The product is readily biodegradable.

12.3 Bioaccumulative potential

No evidence for bioaccumulation potential.
CAS 123-31-9: Log Pow 0,5 - 0,59

12.4 Mobility in soil

Cured product is immobile.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Does not contain a relevant substance that meets the classification criteria.

12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment.
Do not allow product to reach the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 080409*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances
150102

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA 3334

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA Aviation regulated liquid, n.o.s. (Cyanoacrylates)[only for more than 0,5l]

- Label

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	9

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	III

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex I (REACH)	The product is not subject to Annex I restrictions.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains ≥ 0.1% of substances with the following restrictions. 3, 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3
TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)
NATIONAL REGULATIONS (DE):	Hazardous Substances Ordinance - GefStoffV 21.07.2021; Detergent and Cleaning Agents Act - WRMG; Federal Water Act - WHG; Technical Rule for Hazardous Substances - TRGS: 200, 220, 615, 900, 905.
- Water hazard class	1, conf. AwSV, 18.04.2017
- Decree for case of interference, observe limits	not applicable
- Class. according to TA-Luft	5.2.5.
Storage class (TRGS 510)	Storage class 10 (VCI)
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	<3 %
- Other regulations	UVV: Handling of adhesives (VBG 81). TRGS 401: Gefährdung durch Hautkontakt. - Ermittlung, Beurteilung, Maßnahmen. TRGS 510: Storage of hazardous substances in non-stationary containers

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.
H351 Suspected of causing cancer.
H341 Suspected of causing genetic defects.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H302 Harmful if swallowed.

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Customs Tariff not determined

Classification procedure
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)

Modified position none