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

1.1. Product identifier

temp:ex 6600 0000

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

Use of the substance/mixture

Solvent for temporary cement

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	Renfert GmbH	
Street:	Untere Giesswiesen 2	
Place:	D-78247 Hilzingen	
Telephone:	+49 7731 8208-0	Telefax: +49 7731 8208-70
e-mail:	info@renfert.com	
Internet:	www.renfert.com	

Supplier

Company name:	Ivoclar Vivadent Ltd New Zealand	
Street:	12 Omega St	
Place:	GB Rosedale, Auckland	
Telephone:	+64 9 914 9999	Telefax: +64 9 914 9990
Internet:	www.ivoclarvivadent.co.nz	

1.4. Emergency telephone number:

0800 764 766 (National Poison Centre)
Poisons Hotline (24 hours / 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Substance or mixture corrosive to metals: Met. Corr. 1
Skin corrosion/irritation: Skin Corr. 1A
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
May be corrosive to metals.
Causes severe skin burns and eye damage.
Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

potassium hydroxide

Signal word: Danger

Pictograms:

Hazard statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Precautionary statements

P234	Keep only in original packaging.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P390	Absorb spillage to prevent material damage.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Alkaline cleaning agent

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1310-58-3	potassium hydroxide			10 - < 30 %
	215-181-3	019-002-00-8	01-2119487136-33	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A; H290 H302 H314			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
1310-58-3	215-181-3	potassium hydroxide	10 - < 30 % %
	oral: LD50 = 333 mg/kg Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off immediately all contaminated clothing and wash it before reuse .
First aider: Pay attention to self-protection!

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Call a physician immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to the escape of irritating gases and vapours.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Use personal protection equipment.
Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle and open container with care.
Wear personal protection equipment (refer to section 8).
Avoid contact with eyes and skin.
When using do not eat, drink or smoke.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.
Keep container tightly closed.

Hints on joint storage

Do not store together with: Acid

Further information on storage conditions

Keep away from food, drink and animal feedingstuffs.
Protect from sunlight.
storage temperature: approx. 5 - 40°C

7.3. Specific end use(s)

Please refer to our internet website for more information: www.renfert.com
To avoid risks to man and the environment, comply with the instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Safe handling: see section 7

Protective and hygiene measures

Remove contaminated, saturated clothing immediately.
Wash hands before breaks and after work.
Avoid contact with eyes and skin.
Keep away from food, drink and animal feedingstuffs.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
Suitable material: NR (natural rubber, natural latex), Butyl caoutchouc (butyl rubber), PVC (polyvinyl chloride), CR (polychloroprene, chloroprene rubber), FKM (fluoro rubber), NBR (Nitrile rubber)
Thickness of the glove material: 0,5 mm
Breakthrough time: >= 8 h
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Skin protection

Take off immediately all contaminated clothing.

Respiratory protection

Provide adequate ventilation.
Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour:	blue
Odour:	odourless
pH-Value (at 20 °C):	13,5 - 14

Changes in the physical state

Melting point:	not determined
Boiling point or initial boiling point and boiling range:	> 100 °C
Flash point:	not applicable

Flammability

Solid/liquid:	not applicable
Gas:	not applicable

Explosive properties

not explosive according to EU A.14

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Auto-ignition temperature:	not determined

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined
Vapour pressure: (at 20 °C)	23 hPa
Density (at 20 °C):	1,00 - 1,18 g/cm³
Water solubility:	completely miscible
Partition coefficient n-octanol/water:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not applicable
Evaporation rate:	not determined

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Violent reaction with: Acid
Corrosive to metals
Release of: Hydrogen

10.4. Conditions to avoid

No special measures are necessary.

10.5. Incompatible materials

Violent reaction with: Acid

Corrosive to metals

10.6. Hazardous decomposition products

Corrosive to metals. Release of: Hydrogen

SECTION 11: Toxicological information

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

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1310-58-3	potassium hydroxide				
	oral	LD50 333 mg/kg	Rat		OECD 425

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Further information

The product has not been tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

Further information

The product has not been tested. The statement is derived from the properties of the single components. Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1814
14.2. UN proper shipping name:	KALIUMHYDROXIDLÖSUNG
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

Marine transport (IMDG)

14.1. UN number:	UN 1814
14.2. UN proper shipping name:	POTASSIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1814
14.2. UN proper shipping name:	POTASSIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Further information: see section 6, 7, 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

Classified as Hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC) approved criteria for the classifying hazardous substances [NOHSC: 1008] 3rd edition.

Standard for the Uniform Scheduling of Medicines and Poisons.

Carcinogen classification under WHS Regulation 2011, Schedule 10.

Notification status in accordance with section 3 and current national legislation.

HSNO Approval: HSR001574
EPA NZ Classes of hazardous properties:
Classification 6.1D (All) Acutely toxic
Classification 8.1A Corrosive to metals
Classification 8.2B Corrosive to dermal tissue
Classification 8.3A Corrosive to ocular tissue
Classification 9.3B Ecotoxic to terrestrial vertebrates

SECTION 16: Other information

Abbreviations and acronyms

PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LD50: lethal dose, 50%
ATE: Acute Toxicity Estimates
LC50: lethal concentration, 50%
ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement concernant le transport international ferroviaire de marchandises Dangereuses (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
VOC: volatile organic compound(s)

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our

present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. Restricted to professional users.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)