

Printing date 07/15/2004

Reviewed on 07/15/2004

1 Identification of substance:

- **Product details:**
- **Trade name: Viva Sol x**
- **Application of the substance / the preparation** Drycleaning / Laundry
- **Manufacturer/Supplier:**
SEITZ GmbH
Gutenbergstrasse 3
65830 Kriftel/ Germany
seitz@seitz24.com
www.seitz24.com
- **Information department:**
CHEM-TEL Inc.
1305 North Florida Ave
Tampa Florida 33602
- **Emergency information:** 1-800-255-3924

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with non-hazardous ingredients.

- **CAS-No. Components:**

1310-58-3	potassium hydroxide	10 - 20%
	trade secret: nonionic surfactant	< 10%

3 Hazards identification

- **Hazard description:**
Corrosive liquid



Corrosive

- **Information pertaining to particular dangers for man and environment**
R 35 Causes severe burns.
- **Classification system**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0-4)**



Health = 3
Fire = 0
Reactivity = 0

4 First aid measures

- **General information**
Remove casualties from exposure.
Keep unprotected persons away.
Immediately remove any clothing soiled by the product.
- **After inhalation**
Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.

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- **After skin contact**
Immediately rinse with water.
Seek medical treatment.
- **After eye contact**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Avoid contact with eyes and skin.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose of the collected material according to regulations.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Keep away from heat and direct sunlight.
Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from metals.
Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from frost.
Time of storage: max. 24 month

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8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

1310-58-3 potassium hydroxide

REL 2 mg/m³TLV Short-term value: C 2 mg/m³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Not necessary if room is well-ventilated.

· **Protection of hands:**

Alkaline resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed goggles.

· **Body protection:** Alkaline resistant protective clothing

9 Physical and chemical properties:

· **General Information**

Form:	Fluid
Color:	Dark yellow
Odor:	Product specific

· **Change in condition**

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined

· **Flash point:** Not applicable

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C (68°F):** 1.410 - 1.420 g/cm³ (ISO 2811)

· **Solubility in / Miscibility with**

Water: Fully miscible

· **pH-value (10 g/l) at 20°C (68°F):** 11.8 - 12.2

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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions**
Reacts with strong acids and oxidizing agents
Reacts with certain metals
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

1310-58-3 potassium hydroxide

Oral	LD50	365 mg/kg (rat)
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trade secret: nonionic surfactant

Oral	LD50	>2000 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information:

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

13 Waste Disposal Method

- **Product and uncleaned packagings:**
- **Recommendation:**
Contaminated adsorbent, soil, water must be disposed of in a permitted hazardous waste management facility. Recovered products may be reused, reprocessed or incinerated or must be treated in a permitted hazardous waste management facility. It is your duty to dispose of the chemical materials and/or their containers in accordance with the Clean Air Act, The Clean Water Act, RCRA, as well as applicable Federal, State, and local Regulations regarding disposal.

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14 Transport information

· DOT regulations:



- Hazard class: 8
- Identification number: UN1814
- Packing group: II
- Proper shipping name (technical name): POTASSIUM HYDROXIDE SOLUTION
- Label: 8

· Land transport ADR/RID (cross-border)



- ADR/RID class: 8 (C5) Corrosive substances
- Danger code (Kemler): 80
- UN-Number: 1814
- Packaging group: II
- Description of goods: 1814 POTASSIUM HYDROXIDE SOLUTION

· Maritime transport IMDG:



- IMDG Class: 8
- UN Number: 1814
- Label: 8
- Packaging group: II
- EMS Number: F-A,S-B
- Marine pollutant: No
- Proper shipping name: POTASSIUM HYDROXIDE SOLUTION

· Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 8
- UN/ID Number: 1814
- Label: 8
- Packaging group: II
- Proper shipping name: POTASSIUM HYDROXIDE SOLUTION

15 Regulatory information (Not meant to be all-inclusive/selected regulations represented)

· Product related hazard informations:

The product has been marked in accordance with national laws.
Observe the general safety regulations when handling chemicals

- Hazard symbols:
Corrosive

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- **Hazard-determining components of labelling:**
potassium hydroxide

- **Risk phrases:**
35 Causes severe burns.

- **Safety phrases:**
 - 2 Keep out of the reach of children.
 - 20 When using do not eat or drink.
 - 24/25 Avoid contact with skin and eyes.
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - 27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
 - 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 - 46 If swallowed, seek medical advice immediately and show this container or label.

- **National regulations**

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

- **Other regulations, limitations and prohibitive regulations**
The product has been designed for professional use only.

- **Please note:**

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyers responsibility to ensure that their activities comply with Federal, State or provincial and local laws. The following specific information is made for the purpose of complying with numerous laws and regulations.

- **U.S. Regulations**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

- **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

- **Toxic Substances Control Act (TSCA):**

All ingredients are listed.

- **California proposition 65:**

- **Prop 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

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· Prop 65 - Chemicals known to cause reproductive toxicity

None of the ingredients is listed.

· State right-to-know

The following product component(s) is/are cited on certain State lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

· CAS-No.: Chemical name: LIST: 1310-58-3 potassium hydroxide NY/PA-E
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· OSHA hazard communication standard:
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This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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· Comprehensive Environmental Response Compensation and Liability Act (CERCLA, or Superfund):
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This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA, which may require reporting of releases:
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· CAS-No.: Chemical name: 1310-58-3 potassium hydroxide
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· Canadian regulations

· WHMIS information:

The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

E - Corrosive Material

· CPR statement:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
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· Hazardous products act information:
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This produkt contains the following ingredient(s) which are Controlled Products and/or on the Ingredients Disclosure List (Canadian HPA section 13 and 14):

· Canadian Ingredient disclosure list
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· Limit 0,1%

None of the ingredients is listed.

· Limit 1%

1310-58-3 potassium hydroxide

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:** Dr. Ralf Döring

· * **Data compared to the previous version altered.**