

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

071495498

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

071495209 071495217 071495225 071495233 071495241 071495258 071495266 071495274 071495282 071495290  
071495308 071495316 071495324 071495332 071495340 071495357 071495373 071495381 071495399 071495407  
071495415 071495423 071495431 071495449 071495456 071495464 071495480 071495506

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 07/26/2018

Version 3

Reviewed on 07/25/2018

**1 Identification**

- **Product identifier**
- **Trade name:** CERABIEN ZR : FC Paste Stain
- **Article number:** US824-FCPS
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Dental porcelain
- **Details of the supplier of the safety data sheet**
- **Manufacturer:**  
Kuraray Noritake Dental Inc.  
300 Higashiyama, Miyoshi-cho,  
Miyoshi, Aichi, 470-0293  
Japan
- **Contact information:**  
Kuraray America, Inc.  
33 Maiden Lane, 6th Floor, New York,  
NY 10038 U.S.A.  
Tel: 800-879-1676  
Fax: 888-700-5200  
Website: [www.kuraraydental.com](http://www.kuraraydental.com)
- **Emergency telephone number:**  
For chemical emergency spill, leak, fire, exposure or accident  
Call CHEMTREC day and night  
Within USA and Canada: 1-800-424-9300 CCN706984 or  
+1 703-527-3887 (collect calls accepted)

**2 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS08 Health hazard

Muta. 2      H341 Suspected of causing genetic defects.  
Carc. 1A      H350 May cause cancer.  
Repr. 2      H361 Suspected of damaging fertility or the unborn child.  
STOT RE 1   H372 Causes damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4   H302 Harmful if swallowed.  
Skin Irrit. 2   H315 Causes skin irritation.  
Eye Irrit. 2A   H319 Causes serious eye irritation.  
Skin Sens. 1   H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS07, GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

vanadium pentoxide  
nickel oxide

- **Hazard statements**

H302 Harmful if swallowed.

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- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.

## Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P321 Specific treatment (see on this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## Other hazards

## Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

## 3 Composition/information on ingredients

### Chemical characterization: Mixtures

- Description: Mixture of substances listed below with nonhazardous additions.

### Dangerous components:

1313-99-1	nickel oxide ⚠ Carc. 1A, H350; STOT RE 1, H372; ⚠ Eye Irrit. 2A, H319; Skin Sens. 1, H317; Aquatic Chronic 4, H413	≤1%
1314-62-1	vanadium pentoxide ⚠ Muta. 2, H341; Carc. 2, H351; Repr. 2, H361; STOT RE 1, H372; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; STOT SE 3, H335	≤1%
56-81-5	glycerol	15-35%
107-88-0	1,3-Butanediol ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	5-15%

### Other ingredients:

- Potassium alumino silicate glass
- Pigments

## 4 First-aid measures

### Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Immediately call a doctor.

### Information for doctor:

- Most important symptoms and effects, both acute and delayed No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:** Product is not flammable
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** See Section 8.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Ensure adequate ventilation.  
Use appropriate Personal Protective Equipment (PPE).
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Avoid contact with skin and eyes. Do not swallow. Avoid generating dust. Do not breathe dust/fume/gas/mist/vapors/spray.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store at room temperature.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

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

**Components with limit values that require monitoring at the workplace:****1313-99-1 nickel oxide**

PEL (USA)	Long-term value: 1 mg/m <sup>3</sup> as Ni
REL (USA)	Long-term value: 0.015 mg/m <sup>3</sup> as Ni; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.2 mg/m <sup>3</sup> as Ni; inhalable fraction

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**1314-62-1 vanadium pentoxide**

PEL (USA)	Ceiling limit value: 0.5* 0.1** mg/m <sup>3</sup> as V <sub>2</sub> O <sub>5</sub> , *respirable dust **fume
REL (USA)	Ceiling limit value: 0.05* mg/m <sup>3</sup> *15-min, except V metal and carbide
TLV (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *as inhalable fraction

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

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:** Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

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

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Pasty

Color: Colored

· **Odor:** Odorless

· **Odor threshold:** Not determined

· **pH-value:** Not determined

· **Change in condition**

Melting point/Melting range: 18.18 °C (glycerol)

Boiling point/Boiling range: 290 °C (glycerol)

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· <b>Flash point:</b>	177 °C (glycerol)
· <b>Flammability (solid, gaseous):</b>	Product is not flammable.
· <b>Ignition temperature:</b>	523 °C (glycerol)
· <b>Decomposition temperature:</b>	Not determined
· <b>Auto igniting:</b>	Not determined
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	0.9 Vol % (glycerol)
Upper:	Not determined
· <b>Oxidizing properties</b>	Not determined
· <b>Vapor pressure:</b>	0.1 hPa (20°C, glycerol)
· <b>Density:</b>	
Relative density	Not determined
Vapor density	Not determined
Evaporation rate	Not determined
· <b>Solubility in / Miscibility with Water:</b>	Partly miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined
· <b>Viscosity:</b>	Not determined
· <b>Dynamic:</b>	Not determined
· <b>Kinematic:</b>	Not determined
· <b>Other information</b>	No further relevant information available.

**10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** None

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:****1314-62-1 vanadium pentoxide**

Oral LD50 10 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** Irritating effect
- **on the eye:** Causes serious eye irritation.
- **Sensitization:** Sensitization possible through skin contact.

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**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

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

1313-99-1	nickel oxide	1
1314-62-1	vanadium pentoxide	2B

**NTP (National Toxicology Program)**

1313-99-1	nickel oxide	K
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**12 Ecological information****Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

**Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

**Additional ecological information:****General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

**Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

**13 Disposal considerations****Waste treatment methods****Recommendation:**

Disposal must be made according to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information****UN-Number**

· **DOT, ADR, ADN, IMDG, IATA** Void

**UN proper shipping name**

· **DOT, ADR, ADN, IMDG, IATA** Void

**Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA**

· **Class** Void

**Packing group**

· **DOT, ADR, IMDG, IATA** Void

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- |  |                 |
|--|-----------------|
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

## 15 Regulatory information

### · Section 355 (extremely hazardous substances):

1314-62-1	vanadium pentoxide
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### · Section 313 (Specific toxic chemical listings):

1313-99-1	nickel oxide
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1314-62-1	vanadium pentoxide
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· **SARA 311/312:** See Section 2 for the information on physical and health hazards.

### · Proposition 65

#### · Chemicals known to cause cancer:

1313-99-1	nickel oxide
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1314-62-1	vanadium pentoxide
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#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.	
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#### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.	
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#### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.	
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#### · EPA (Environmental Protection Agency)

None of the ingredients is listed.	
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#### · TLV (Threshold Limit Value established by ACGIH)

1313-99-1	nickel oxide	A1
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1314-62-1	vanadium pentoxide	A3
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#### · NIOSH-Ca (National Institute for Occupational Safety and Health)

1313-99-1	nickel oxide
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#### · Precautionary statements



**WARNING:** This product can expose you to chemicals including vanadium oxide which is known to the State of California to cause cancer. For more information go to <https://www.p65warnings.ca.gov/>.

#### · National regulations:

#### · Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

#### · Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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**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.

**· NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

**· HMIS-ratings (scale 0 - 4)**

Health = \*2

Fire = 0

Reactivity = 0

**· Abbreviations and acronyms:**

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1A: Carcinogenicity – Category 1A

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

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

US