## **SAFETY DATA SHEETS**

## This SDS packet was issued with item:

071495258

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 071495266 071495274 071495282 071495290 071495308 071495316 071495324 071495332 071495340 071495357 071495373 071495381 071495399 071495407 071495415 071495423 071495431 071495449 071495456 071495464 071495480 071495498 071495506



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

**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.

(Contd. on page 2)



Printing date 07/26/2018 Version 3 Reviewed on 07/25/2018

Trade name: CERABIEN ZR: FC Paste Stain

(Contd. of page 1)

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.

· Dangerou	s components:	
1313-99-1	angerous components:         313-99-1       nickel oxide       ≤1%	
	© Carc. 1A, H350; STOT RE 1, H372; © Eye Irrit. 2A, H319; Skin Sens. 1, H317; Aquatic Chronic 4, H413	
1314-62-1		≤1%
	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	
56-81-5	glycerol	15-35%
107-88-0		5-15%
	◆ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	

## 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.

(Contd. on page 3)



Printing date 07/26/2018 Version 3 Reviewed on 07/25/2018

Trade name: CERABIEN ZR: FC Paste Stain

(Contd. of page 2)

• 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

1313-77-1 11	CRCI VAIUC
PEL (USA)	Long-term value: 1 mg/m <sup>3</sup>
	as Ni
REL (USA)	Long-term value: 0.015 mg/m³ as Ni; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.2 mg/m <sup>3</sup> as Ni: inhalable fraction

(Contd. on page 4)



Printing date 07/26/2018 Version 3 Reviewed on 07/25/2018

Trade name: CERABIEN ZR: FC Paste Stain

\*as inhalable fraction

1314-62-1 vanadium pentoxide

PEL (USA) Ceiling limit value: 0.5\* 0.1\*\* mg/m³
as V2O5,\*respirable dust \*\*fume

REL (USA) Ceiling limit value: 0.05\* mg/m³
\*15-min, except V metal and carbide

TLV (USA) Long-term value: 0.05\* mg/m³

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 trough 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)

(Contd. on page 5)



Printing date 07/26/2018 Version 3 Reviewed on 07/25/2018

Trade name: CERABIEN ZR: FC Paste Stain

		(Contd. of page
Flash point:	177 °C (glycerol)	
· Flammability (solid, gaseous):	Product is not flammable.	
· Ignition temperature:	523 °C (glycerol)	
Decomposition temperature:	Not determined	
· Auto igniting:	Not determined	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	0.9 Vol % (glycerol)	
Upper:	Not determined	
Oxidizing properties	Not determined	
· Vapor pressure:	0.1 hPa (20°C, glycerol)	
Density:		
Relative density	Not determined	
Vapor density	Not determined	
Evaporation rate	Not determined	
Solubility in / Miscibility with		
Water:	Partly miscible.	
Partition coefficient (n-octanol/wa	ter): Not determined	
· Viscosity:	Not determined	
Dynamic:	Not determined	
· Kinematic:	Not determined	
Other information	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.

(Contd. on page 6)



Printing date 07/26/2018 Version 3 Reviewed on 07/25/2018

Trade name: CERABIEN ZR: FC Paste Stain

(Contd. of page 5)

· Additional toxicological information:

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

Harmful

Irritant

IIIItant		
· IARC (Int	ernational Agency for Research on Cancer)	
1313-99-1	nickel oxide	1
1314-62-1	vanadium pentoxide	2B
· NTP (Nati	onal Toxicology Program)	
1313-99-1	nickel oxide	K

## 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.

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
DOI, ADR, ADN, INIDG, 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	

itd. on page '



Printing date 07/26/2018 Version 3 Reviewed on 07/25/2018

Trade name: CERABIEN ZR: FC Paste Stain

		(Contd. of page 6)
Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
· UN "Model Regulation":	Void	

5 Regulatory i	information	
· Section 355 (ex	tremely hazardous substances):	
1314-62-1 vana	adium pentoxide	
Section 313 (Sp	pecific toxic chemical listings):	
1313-99-1 nick	rel oxide	
	adium pentoxide	
· SARA 311/312 · Proposition 65	: See Section 2 for the information on physical and health hazards.	
· Chemicals kno	wn to cause cancer:	
1313-99-1 nick		
1314-62-1 vana	adium pentoxide	
· Chemicals kno	wn to cause reproductive toxicity for females:	_
None of the ingr	redients is listed.	
· Chemicals kno	wn to cause reproductive toxicity for males:	
None of the ingr	redients is listed.	_
· Chemicals kno	wn to cause developmental toxicity:	
None of the ingr	redients is listed.	_
· EPA (Environi	mental Protection Agency)	
None of the ing	redients is listed.	_
· TLV (Threshol	ld Limit Value established by ACGIH)	-
1313-99-1 nick		I
1314-62-1 vana	adium pentoxide	1
NIOSH-Ca (Na	ational Institute for Occupational Safety and Health)	Ī

## 1313-99-1 nickel oxide • 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.



Printing date 07/26/2018 Version 3 Reviewed on 07/25/2018

Trade name: CERABIEN ZR: FC Paste Stain

(Contd. of page 7)

## 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 = 2Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



\*2 Health = \*2 0 Fire = 0 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.

- HS