1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier Trade name/designation EX-3 PRESS LF / LF External Stain, LF Internal Stain, LF ES Glaze 1.2 Relevant identified uses of the substance or mixture and uses advised Relevant identified uses Dental Material Uses advised against No information 1.3 Details of the supplier of the safety data sheet •Manufacturer: Kuraray Noritake Dental Inc. 300 Higashiyama, Miyoshi-cho, Miyoshi, Aichi 470-0293, Japan • Supplier: For US Kuraray America, Inc. 33 Maiden Lane, 6th Floor, New York, NY 10038 U.S.A. Phone: 800-879-1676 Fax: 888-700-5200 Website: www.kuraraydental.com For Europe Kuraray Europe GmbH Philipp-Reis-Str. 4, 65795 Hattersheim am Main, Germany Phone: +49 (0)69 305 35 840 Fax: +49 (0)69 305 35 640 E-mail: dental@kuraray.de For Other countries Kuraray Noritake Dental Inc.

•Information department: Supplier

2.HAZARDS IDENTIFICATION

- 2.1 Classification of the mixture
- GHS classification

Acute Tox. 4 Oral	H302
Res. Sens. 1	H334
Skin Sens. 1	H317
Carc. 1A	H350
STOT SE 2	H371
STOT RE 2	H373

2.2 Label elements

Hazard pictograms



Signal word: Danger <u>Hazard statements</u>: H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H350 May cause cancer.

H371 May cause damage to organs. H373 May cause damage to organs through prolonged or repeated exposure. Precautionary statements: P201 Obtain special instructions before use. P202 Do not handle until at safety precautions have been read and understood. P260 Do not breathe dust/fume/gas/mist/vapors/spray. P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective glove/protective clothing/eye protection/face protection. P281 Use Personal protective equipment as required. P285 In case of inadequate ventilation wear respiratory protection. P301+P312 If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell. P302+P352 If on skin: Wash with plenty soap and water. P304+P341 If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. P308+P313 If exposed or concerned: Get medical advice/attention. P309+P311 If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. P314 Get medical advice/attention if you feel unwell. P321 Specific treatment(see first aid statements on this label). P330 Rinse mouth. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

3.COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Description of the mixture:

3.2 Hazardous ingredients:

CAS No.	EC-No.	MITI-No.	% (w/w)	name	Remark
18186-89-0*		1–267,1–517,1 –550	<3	COBALT NICKEL GRAY PERICLASE(CPMA)	*

*Substance classified by the manufacture.

4.FIRST AID MEASURES

4.1 Description of first aid measure

If on skin	Wash with plenty soap and water.
If inhaled	If breathing is difficult, remove victim to fresh air and keep at rest in a position
	comfortable for breathing.
If swallowed	Call a POISON CENTER or doctor/physician if you feel unwell.
If in eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing

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

- No information
- 4.3 Indication of immediate medical attention and special treatment needed.

No information

5.FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Water-spray, CO₂, powder, sand or foam, etc.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unusable extinguishing media

No information available.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products There is a possibility that the gas with stimulation or toxicity is produced depending on the kind of a fire.

5.3 Advice for fire-fighters

If it is not very dangerous, move containers from a fire in the surrounding area.

During extinction, wear a suitable heat-resistant protective suits against chemicals and self contained breathing apparatus.

Extinguish fire by pouring or spreading extinguishing media on the origin of a fire.

Extinguish fire from windward side as much as possible.

Extinguish fire by the method of covering tightly or suffocation is preferable.

Even after extinction, cool down containers by using plenty of water.

6.ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency		
Protective equipment	Operators wear suitable protective equipment refer to section8 and avoid inhalation and contact with eyes and skin.	
Removal of ignition sour	rces, provision of sufficient ventilation, control of dust	
	Ventilate for exhaust to keep concentration in air below a limit of exposure.	
Emergency procedures	Isolate this product immediately and keep proper distance to every direction as released area.	
	Indicate that only authorized people can enter.	
	Do not touch released product and walk on it.	
For emergency respond	ers	
No information		
Environmental Precaution	ns	
Take notice not to discharge this product to rivers etc. and not to affect environment.		
Methods and material for	r containment and cleaning up	
<u>For containment</u>	No information.	
For cleaning up	If the amount of leakage is small, absorb it by dried sand, soil, sawdust and waste	
	paper and collect it into an tightly covered container made of metal.	
Other information	No information	
Reference to other secti	ons See section 8 and 13.	

6.5 Additional information No information.

7.HANDLING AND STORAGE

6.2

6.3

6.4

7.1 Precautions for safe handling

Information on safe handing

Take measure against equipments written in section8 and wear protective equipment. Exhaust locally and ventilate totally as written in section8.

	revent handling of incompatible substances or mixtures Avoid contact with incompatible materials. Please refer to section10.
	inimize the release to the environment
	Take notice not to discharge this product to rivers etc. and not to affect environment.
	ce on general occupational hygiene
	Obtain Instructions before using this product.
	Do not handle products until you have read and understood every instruction for safety.
	To prevent exposure, wear protective during operation.
	Watch out for fire.
	Prohibit using heated substances, sparks and fire on the periphery of this product.
	Ventilate for exhaust to keep concentration in air below a limit of exposure.
	Avoid inhaling dust and fume.
	Do not touch, inhale or swallow this product.
	Do not take polluted work clothes out of workshops.
	Do not drink, eat or smoke during using this product.
	Use this product only outside or well ventilated area.
	Wash hands well after handling this product.
	Avoid emitting this product to environment.
2 Condit	ions for safe storage, including any incompatibilities
Tech	nical measures and storage conditions
	Store in dried and properly ventilated place.
	Install equipments for lighting and ventilation which are necessary for handling and storing dangero
	goods in a storage place.
Pack	aging materials
	If containers are stipulated in transportation regulations of containers United Nations.
Requ	irements for storage rooms and vessels
	Store apart from dangerous substance to mix and touch.
	Seal a container and store it in a well ventilated and cool place.
	It is preferable to store a container in a locked place.
Furth	er Information on storage conditions
	No information
3 Specif	ic end use(s)
Reco	mmendations
	No information
Indus	trial sector specific solutions
	No information

8.1 Control parameters

Occupational Exposure limit values

-	ipational Exposure inflit values			
	Chemical Name	Class	Exposure Limits	BASIS
	Dust	Class3	Class3 Respirable dust 2mg/m3	Japan Society for Occupational Health (2009)
			Total dust 8mg/m3	
	COBALT NICKEL	L Nickel compounds As Ni 0.1mg/m3		Control Vaues :The Ministry of
	GRAY			Labor (Japan)
	PERICLASE(CPMA)	Cobalt and compounds	As Co 0.05mg/m3	Japan Society for Occupational Health
		Cobalt, Elemental and	As Co_0.02mg∕m3	AGCIH
		inorganic compounds	AS CO 0.02mg/m3	AGOIN
		Nickel, Insoluble	An Ni 0 2mg/m2	
		compounds As Ni 0.2mg/m3		

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Zirconiu	im and As Zr 5mg/m3
compo	unds

8.2 Exposure controls

Appropriate engineering controls

when the mists are generated, the ignition source is made to seal up, and the exhaust device is installed. Install ventilation facility if dust and fume occurs during hot heated processes.

	Personal	protection	equipment	
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Eye and face protection	: Use appropriate protectors for eyes.
Skin protection	
Hand protection	: Use appropriate protective gloves.
Body protection	: Use appropriate protective clothes and masks if necessary.
Other protection	: -
Respiratory protection	: Wear appropriate respiratory protection.
Thermal hazards	: -

9.PHYSICAL AND CHEMICAL PROPERTIES

pH Melting point/coagulation point Boiling point Flash point Explosive range Vapor pressure Vapor density(air=1) Relative density (density) Solubility Partition coefficient: octanol/ water Auto-ignition temperature Decomposition temperature	White, Brown, Red, Blue Powder No odor No data No data
Vaporization speed (butyl acetate=1) Combustion Characteristics (solid and gas)	
Viscosity	No data

10.STABILITY AND REACTIVITY

10.1	Reactivity
	_

10.2 Chemical Stability Stable, if it is use and a storage method described in this SDS.
10.3 Possibility of hazardous reactions Not in particular.
10.4 Conditions to avoid Not in particular.
10.5 Incompatible materials No data.
10.6 Hazardous decomposition product No data.

11.TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity
Harmful if swallowed.
Mixture ATE
ATE(oral) = 690 mg/kg
11.2 Skin corrosion/irritation
No information available
11.3 Serious eye damage/irritation
No information available
11.4 Respiratory or skin sensitization
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
As COBALT NICKEL GRAY PERICLASE(CPMA)
Res. Sens. 1, Skin Sens. 1 by manufacture MSDS.
11.5 Germ cell mutagenicity
No information available
11.6 Carcinogenicity
May cause cancer.
As COBALT NICKEL GRAY PERICLASE(CPMA)
Carc. 1A by manufacture MSDS.
11.7 Reproductive toxicity
No information available
11.8 STOT-single exposure
May cause damage to organs.
As COBALT NICKEL GRAY PERICLASE(CPMA)
STOT SE 1,2 by manufacture MSDS.
11.9 STOT-repeated exposure
May cause damage to organs through prolonged or repeated exposure.
As COBALT NICKEL GRAY PERICLASE(CPMA)
STOT RE 1 by manufacture MSDS
11.10 Aspiration hazard
Not applicable.
12.ECOLOGICAL INFORMATION
12.1 Toxicity
No information available
12.2 Persistence and degradability
No information available
12.3 Bioaccumulative potential
•
No information available

- 12.4 Mobility in soil No information available12.5 Other adverse effects
- No information

13.DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods <u>Product/ Packaging disposal</u>

In disposal, follow relevant regulations and standards of municipalities.

	If industrial waste disposer permitted by governors or regional public
	organization handle disposition, commit it to them.
	If you commit a disposal of waste, notify sufficiently disposer of risk and harmfulness beforehand.
	Clean and recycle containers or dispose them properly based on relative regulations and standards of municipalities.
	When empty containers are disposed, its content must be removed completely.
Waste treatment options	Dispose of waste according to applicable local, state, federal laws and regulations.
Sewage disposal options	Do not discharge to a water source.
Other disposal recommendations	No information
13.2 Additional information	
No information	

14.TRANSPORT INFORMATION

Road/Rail(ADR/RID)	Not subject to ADR/RID.
Sea transport(IMDG)	Not subject to IMDG code.
Air transport(IATA)	Not Subject to IATA regulations.

15.REGULATORY INFORMATION

This MSDS is according to Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Use in accordance with local/regional/national/international regulations.

16.OTHER INFORMATION

16.1 Indication of changes and preparation date				
Preparation date	25th	October, 2010		
Revised	25th	October, 2010		

16.2 Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute Toxicity Estimate
CAS No.	Chemical Abstract Service number
EC No.	EINECS and ELINCS Number
EINECS	European Inventory of Existing Commercial Substances
ELINCS	European List of notified Chemical Substances
GHS	Globally Harmonized System
LC50	Lethal concentration, 50%
LD50	Median Lethal Dose
MSDS	Material Safety Data Sheet
MITI No.	Ministry of International Trade and Industry Number
NITE	National Institute of Technology and Evaluation
OEL	Occupational Exposure Limit
STOT	Specific Target Organ Toxicity
(STOT) RE	Repeated Exposure
(STOT) SE	Single Exposure
TWA	Time Weighted Average

16.3 Key literature references and sources for data

The result of classification of substance by NITE Japan. (http://www.safe.nite.go.jp/ghs/list.html)

16.4 Handling of information given in this MSDS

Information given in this MSDS may be insufficient for not all records and references were investigated. Its content can be changed due to release of new data and correction of conventional theories. Therefore, when you use this MSDS for an important decision, it is recommended to check its content by running tests or to study its references carefully. We also do not guarantee the number about the content, physical or chemical properties. Notes are applicable to normal handling and care must be taken in case of special handling.