1.Identification of the substance or mixture and of the supplier

1.1 Product Name:

RETENTION BEADS LQUID

1.2 Company /Undertaking identification

Manufacturer's Name: SHOFU INC.

Address: 11 Kamitakamatsu-cho, Fukuine, Higashiyama-ku, Kyoto 605-0983 ,JAPAN

Phone: +81-75-561-1112 Fax: +81-75-561-2273

Section in Charge: Quality Assurance Section

Date Prepared: 2014.9.29

1.3 Emergency Telephone Number

+81-75-561-1112

2.Hazards identification		
GHS CLASSIFICATION		
PHYSICAL HAZARDS	FLAMMABLE LIQUIDS	Category 2
	PYROPHORIC LIQUIDS	Not Classified
	SELF-HEATING SUBSTANCES AND MIXTURES	Not Classified
	CORROSIVE TO METALS	Not Classified
HEALTH HAZARDS	ACUTE TOXICITY-ORAL	Not Classified
	ACUTE TOXICITY-DERMAL	Not Classified
	ACUTE TOXICITY-INHALATION(VAPOURS)	Not Classified
	ACUTE TOXICITY-INHALATION(MIST)	Category 4
	SKIN CORROSION/IRRITATION	Category 2
	EYE DAMAGE/IRRITATION	Category 2A
	SENSITIZATION-SKIN	Category 1
	GERM CELL MUTAGENICITY	Not Classified
	CARCINOGENICITY	Category 2
	TOXIC TO REPRODUCTION	Category 1A
	SPECIFIC TARGET ORGAN SYSTEMIC	Category 1(central
	TOXICITY (SINGLE EXPOSURE)	nervous,kidney,
		respiratory system,
		nervous system)
		Category 2(lung)
		Category 3
		(respiratory
		tract irritation)
	SPECIFIC TARGET ORGAN SYSTEMIC	Category 1(central
	TOXICITY (REPEATED EXPOSURE)	nervous system,
		respiratory,
		peripheral nerve
		system)
		Category 2
		(liver,testis)
ENVIRONMENTAL HAZARD	HAZARDOUS TO THE AQUATIC	Category 2
	ENVIRONMENT-ACUTE HAZARD	
	HAZARDOUS TO THE AQUATIC	Not Classified

ENVIRONMENT-CHRONIC HAZARD

The thing without mention is out of a classification object. Or cannot classify it.

LABEL ELEMENTS SYMBOL







SIGNAL WORD

Danger

HAZARD STATEMENTS

Highly flammable liquid and vapor

Causens skin irritation

May cause allergic skin reaction Causens serious eye irritation

Harmful if inhaled

May cause respiratory irritation Suspected of causing cancer

May damage fertility or the unborn child

Causes damage to organs(central nervous,kidney,respiratory

system, nervous system)

May cause damage to organs(lung)

Causes damage to organs through prolonged or repeated

exposure(central nervous system,respiratory,peripheral nerve system)

Waming May cause damage to organs through prolonged or

repeated exposure(liver,testis)

Toxic to aquatic life

PRECAUTIONARY STATEMENTS

[Prevention]

Obtain special instruction before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves and eye/face protection.

Do not breathe dust/fume/gas/mist/vapours/spray.

Do not eat, drink or smoke when using this product.

Avoid exposing if necessary with a personal protection tool and a ventilator

Keep away from ignition sources such as heat/sparks/open

flames-No smoking.

Ground/Bond container and receiving equipment.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workspace.

Keep container tightly closed.

Wash hands thoroughly after handling.

Avoid release to the environment.

[Response]

If inhaled, remove victim to flesh air and keep at rest in a position comfortable for breathing. If symptom concerning

breath gose out, call a POISON CENTER to doctor.

If you feel un-well, get medical advice/attention.

If on skin, wash with plenty of soap and water. If on skin, skin irritation, get medical advice/attention.

If in eyes, rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

If eye irritation persists, get medical advice/attention.

[Storage]

Store in a cool and dark area.

[Disposal]

Dispose of contents and container in accordance with regulation.

3. Composition/information on ingredients

Acrylic ester $$\stackrel{\$}{=}$30\%$ Di-n-butyl phthalate [Cas No.84-74-2] $$\stackrel{$\stackrel{\$}{=}$}{=}$20\%$ N-Butyl acetate [Cas No.123-86-4] $$\stackrel{$\stackrel{\$}{=}$}{=}$40\%$ Ethyl acetate [Cas No.141-78-6] $$\stackrel{\$}{=}$$ $$\stackrel{\$}{=}$$ Others

4.First-aid measures

4.1 Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present.

and easy to do. If eye irritation persists, get medical advice/attention.

4.2 Skin contact: Wash immediately with saop and plenty of water. If on skin, skin irritation, get medical

advice/attention.

4.3 Ingestion: Rinse mouth. Get medical advice/attention.

4.4 Inhalation: Remove victim to flesh air and keep at rest in a position comfortable for breathing.

If symptom concerning breath gose out, call a POISON CENTER to doctor.

5.Fire-fighting measures

5.1 Suitable Extinguishing Media: CO₂, Dry chemical, Foam, Dry sand

5.2 Extinguishing Media Should not be used: N/A5.3 Special Exposure Hazards Arising: N/A

5.4 Special Protective Equipment: Wear fire protective cloth and self-contained

breathing apparatus if necessary.

6.Accidental release measures

6.1 Personal Precautions: Avoid eye and skin contact. See section 8.

6.2 Environmental Precautions: Send to approved treatment/disposal company or dispose

according to local, state and federal regulations.

6.3 Methods for Cleaning Up: Absorb with suitable absorbent (e.g., paper towel, cloth, dry

sand, saw dust and vermiculite) and discard in a suitable

container.

7. Handling and storage

7.1 Handling: Avoid inhalation of grindings and prolonged skin contact.

Handle in a well ventilated place. Keep away from sources of ignition-No smoking.

Do not empty into drain.

7.2 Storage: Store in a well ventilated dark area, keep away from ignition sources.

Take precautionary measures against static discharge.

8.Exposure controls/personal protection

8.1 Exposure limits: Cas.No. OSHA (PEL) ACGIH (TLV)

Di-n-butyl phthalate 84-74-2 5mg/m³(TWA) 5mg/m³(TWA)

n-Butyl acetate 123-86-4 150ppm(TWA) 150ppm (TWA),200ppm(STEL)

Ethyl acetate 141-78-6 400ppm (TWA) 400ppm (TWA),A4

8.2 Respiratory Protection: Use local exhaust and protective gas mask for organic gas, if necessary.

8.3 Hand Protection: Latex or rubber gloves

8.4 Eye Protection: Safety goggles (May be required)

8.5 Skin Protection: Not required (Observe normal care when working with chemicals.)

9. Physical and chemical properties

9.1 Appearance/Odor/pH Colorless transparent liquid

9.2 Boiling Point/Boiling Range: N/D 9.3 Melting Point/Melting Range: N/D <3°C 9.4 Flash point: 9.5 Auto flammability: N/D N/D 9.6 Explosive Properties: 9.7 Oxidizing Properties: N/D 9.8 Vapour Pressure: N/D 0.9 9.9 Relative Density: 9.10 Solubility: water solubility Insoluble

10.Stability and reactivity

10.1 Stability: Stable under normal temperatures and pressures.

10.2 Condition to Avoid: Avoid direct sunlight and high temperature.

10.3 Materials to Avoid: Strong acid and oxidizing materials.

11.Toxicological information

Di-n-butyl phthalate:

Oral rat LD50: 8000 mg/kg; inhalation rat LC50: 4250 mg/m 3 ; skin rabbit LD50: > 20 mL/kg. Investigated as a tumorigen, mutagen, reproductive effector.

n-Butyl acetate:

Oral rat LD50: 10.8 g/kg; inhalation rat LC50: 390 ppm/4H Skin rabbit LD50: >17,600 mg/kg; Irritant, skin rabbit (Std. Draize): 500 mg/24H, moderate. Irritant, eye rabbit: 100 mg moderate. Investigated as a reproductive effector.

Ethyl acetate:

Oral rat LD50: 10.8 g/kg; inhalation rat LC50: 390 ppm/4H Skin rabbit LD50: >17,600 mg/kg; Irritant, skin rabbit (Std. Draize): 500 mg/24H, moderate. Irritant, eye rabbit: 100 mg moderate. Investigated as a reproductive effector.

12.Ecological information

The product should not be allowed to drain into sewers.

13.Disposal considerations

Dispose of contents/container to in accordance with local/regional/national/international regulations.

14.Transport information

UN/ID no. 1123, (Haz Class 3 Pack Group Ⅲ) as Butyl acetates

15.Regulatory information

Follow all regulations in your country.

16.Other information

This product is intended for use by dental professionals. (instrument/material)