

SAFETY DATA SHEETS

This SDS packet was issued with item:

076749857

N/A

T3

TOKUYAMA CORP.

MATERIAL SAFETY DATA SHEET

SECTION I - IDENTIFICATION			
MANUFACTURERS NAME: TOKUYAMA CORP.	DATE: APRIL 25, 1994	EMERGENCY TELEPHONE NUMBER: 81-3-3597-5101	
ADDRESS: SHIBUYA KONNO BLDG. 3-3-1, SHIBUYA, SHIBUYA-KU TOKYO JAPAN 150			
CHEMICAL CODE: TOKUSO REBASE AID	UNIT OF ISSUE: GRAM		
CHEMICAL FAMILY: ORGANIC	APPLICATION: DENTURE RELINING		

SECTION II - HAZARDOUS INGREDIENTS			
MATERIAL	%	TOXICITY DATA	TLV (UNITS)
ORGANIC SOLVENTS	>99	ORAL - RAT LD 50: > 2,136 mg/kg	

SECTION III - PHYSICAL DATA			
BOILING POINT (°C) at 1 mmHg	39.8 °C	SPECIFIC GRAVITY (H ₂ O = 1)	1.326
VAPOR PRESSURE (mm.Hg.) at 25 °C	348.9	SOLUBILITY IN WATER g/water 100g	2.0
VAPOR DENSITY (AIR = 1)	2.93	EVAPORATION RATE ETHER = 100	71
APPEARANCE AND ODOR: CLEAR LIQUID, SLIGHT ODOR (PEPPERMINT)			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA			
FLASH POINT (METHOD USED): NONE	FLAMMABLE LIMITS IN AIR (% BY VOLUME):	Lel N.A.	Uel N.A.
EXTINGUISHING MEDIA: CHEMICAL FORM. CARBON DIOXIDE OR DRY CHEMICAL			
SPECIAL FIRE FIGHTING PROCEDURES: NONE			
UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE			

The information which is contained in this document is based on available data and is believed to be correct. However, it has not been assumed that these sources, including independent laboratories, is a precise method of measurement but is complete, accurate and can be relied upon. Tokuyama Corp has not attempted to conduct in any way the determination of the product listed herein, but makes no warranty as to such. Further, as Tokuyama Corp cannot anticipate all possible uses, the many conditions in which the listed products or ingredients may be used by our customers, there is no guarantee that the health and safety precautions suggested will be proper under all conditions. It is the user's responsibility to make use of the listed product to determine and comply with the requirements of all applicable laws and regulations regarding its use.

This information is given solely for the purpose of safety information and is not intended to be used for any other purpose. Any other use of this information is strictly prohibited.

6-10

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE:

N.A.

EFFECTS OF OVEREXPOSURE: DEFATTING ACTION ON SKIN, BUT REPEATED PROLONGED CONTACT MAY CAUSE SKIN INFLAMMATION.

EMERGENCY AND FIRST AID PROCEDURES:

SKIN: WASH WITH SOAP AND PLENTY OF WATER.

EYES: WASH IMMEDIATELY WITH PLENTY OF WATER. GET MEDICAL ATTENTION.

INGESTION: INDUCE VOMITING IMMEDIATELY. GET MEDICAL ATTENTION.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE	CONDITIONS TO AVOID:
	STABLE X	

INCOMPATIBILITY:

(MATERIALS TO AVOID)

STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: INCOMPLETE THERMAL DECOMPOSITION MAY CAUSE TOXIC GASES.

HAZARDOUS POLYMERIZATION: MAY OCCUR

WILL NOT OCCUR X

CONDITIONS TO AVOID:

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

CLEAN UP WITH AN INERT ABSORBENT MATERIAL AND DISPOSE OF IN THE APPROVED METHOD.

WASTE DISPOSAL:

FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION:

(SPECIFY TYPE)

USE ADEQUATE VENTILATION

VENTILATION	LOCAL EXHAUST: PREFERRED IF INDOORS	SPECIAL: N/A
	MECHANICAL: (GENERAL) ADEQUATE VENTILATION	OTHER: N/A

PROTECTIVE GLOVES: RECOMMENDED

EYE PROTECTION: RECOMMENDED

OTHER PROTECTIVE EQUIPMENT:

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

FOLLOW DIRECTIONS ON THE PACKAGE.
STORE IN A COOL, DARK PLACE.

OTHER PRECAUTIONS:

Revision Date 08/05/2014

SAFETY DATA SHEET

TOKUSO REBASE MR. BOND

1. IDENTIFICATION

Product Name	TOKUSO REBASE MR. BOND
Identified uses	Dental Adhesive. For dental professionals only.
Supplier	Tokuyama Dental America Inc. Tel: (877) 378 3548 (Toll-Free)
Contact Person	http://www.tokuyama-dental.com/contact.htm
Manufacturer	Tokuyama Dental Corporation 38-9, Taitou 1-chome, Taitou-ku, Tokyo 110-0016, Japan TEL: +81-3-3835-2261
Emergency Telephone	Washington National Capital Poison Center 3201 New Mexico Avenue, Suite 310 Washington, DC 20016 Telephone: +1 202 362 3867 Emergency telephone: +1 800 222 1222 Fax: +1 202 362 8377 E-mail: pc@poison.org Web site: http://www.poison.org San Francisco California Poison Control System at San Francisco General Hospital University of California San Francisco, Box 1369 1001 Potrero Avenue, Bldg 5 Rm 2A21 San Francisco, California 94143-1369 Telephone: +1 415 643 3200 Emergency telephone: +1 800 222 1222 Fax: +1 415 502 6010 E-mail: coadmin@calpoison.org Web site: http://www.calpoison.org http://www.who.int/ipcs/poisons/centre/en/

2. HAZARD(S) IDENTIFICATION

Appearance	Clear liquid.
Color	Yellowish
Odor	Characteristic.
GHS Pictogram	



Signal Word Danger

Hazard Statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.

TOKUSO REBASE MR. BOND

P403+233

Store in a well-ventilated place. Keep container tightly closed.

P501

Dispose of contents/container in accordance with local regulations.

Contains

11-methacryloxy-1,1-undecanedicarboxylic acid (MAC-10)

METHYL METHACRYLATE

GHS Classification

Physical and Chemical Hazards Flam. Liq. 2 - H225

Human health

Skin Irrit. 2 - H315; Skin Sens. 1 - H317; STOT SE 3 - H335

Environment

Not classified.

Hazard Not Otherwise Classified (HNOC)

Not applicable.

OSHA Regulatory Status

This Product is Hazardous under the OSHA Hazard Communication Standard.

General Information

May cause irritation to the respiratory system. IF SWALLOWED: Slightly irritating. (DIGESTIVE SYSTEM.) This chemical may cause skin/eye irritation. Product has a defatting effect on skin. May cause sensitization by skin contact.

3. COMPOSITION/INFORMATION ON INGREDIENTS**11-methacryloxy-1,1-undecanedicarboxylic acid (MAC-10)****1-5%****CAS No.: 108362-85-2****EC No.:**

GHS Classification

Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; STOT SE 3 - H335

dibutyl hydroxy toluene**< 1%****CAS No.: 128-37-0****EC No.: 204-881-4**

GHS Classification

Aquatic Chronic 1 - H410

MEQUINOL**< 1%****CAS No.: 150-76-5****EC No.: 205-769-8**

GHS Classification

Acute Tox. 4 - H302; Eye Irrit. 2 - H319; Skin Sens. 1 - H317

METHYL METHACRYLATE**80-100%****CAS No.: 80-62-6****EC No.: 201-297-1**

GHS Classification

Flam. Liq. 2 - H225; Skin Irrit. 2 - H315; Skin Sens. 1 - H317; STOT SE 3 - H335

4. FIRST-AID MEASURES**Description of first aid measures****General Information**

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

TOKUSO REBASE MR. BOND

Inhalation

Move the exposed person to fresh air at once.

Ingestion

Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention if any discomfort continues.

Skin Contact

Wash the skin immediately with soap and water.

Eye Contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

Most important symptoms and effects, both acute and delayed

Inhalation

Irritating to respiratory system.

Ingestion

Slightly irritating. (DIGESTIVE SYSTEM.)

Skin Contact

Slightly irritating. Product has a defatting effect on skin. May cause sensitization by skin contact.

Eye Contact

Irritating and may cause redness and pain.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician

CAUTION! First aid personnel must be aware of own risk during rescue! Wear suitable protective clothing.

5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%)

Not available.

Flammability Limit - Upper(%)

Not available.

Flash point (°C) 10°C

Extinguishing Media

Fire can be extinguished using: Foam. Carbon dioxide or dry powder.

Specific Hazards

When heated and in case of fire, irritating vapors/gases may be formed.

Special Fire Fighting Procedures

Avoid breathing fire vapors.

Protective Equipment For Fire-Fighters

Wear full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions

Do not allow to enter drains, sewers or watercourses.

Spill Clean Up Methods

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Do not contaminate water sources or sewer.

Reference to other sections

For personal protection, see section 8.

7. HANDLING AND STORAGE

Handling

All handling to take place in well-ventilated area.

Storage

Store under refrigerated conditions at temperatures between 0 to 10°C (32 to 50°F). Keep away from heat, direct sunlight, sparks and open flames.

TOKUSO REBASE MR. BOND

Storage Class

Flammable liquid storage.

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
dibutyl hydroxy toluene	ACGIH		2 mg/m ³			A4
METHYL METHACRYLATE	PEL	100 ppm	410 mg/m ³			
METHYL METHACRYLATE	ACGIH	50 ppm		100 ppm		A4, Sen
COMPONENT						IDLH
METHYL METHACRYLATE						1000 ppm

ACGIH=American Conference of Governmental Industrial Hygienists.

A4: Not Classifiable as a Human Carcinogen.

SEN: Sensitizer.

Protective Equipment



Engineering Measures

Provide adequate general and local exhaust ventilation.

Respiratory Equipment

In case of inadequate ventilation use suitable respirator.

Hand Protection

Wear protective gloves.

Eye Protection

Wear approved safety goggles.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid.
Color	Yellowish
Odor	Characteristic.
Solubility	No information available.
Initial boiling point and boiling range	101°C
Melting point (°C)	Not available.
Relative density	0.945
Vapor density (air=1)	3.45
Vapor pressure	47 20°C
Evaporation rate	Not available.
pH-Value, Conc. Solution	Not available.

TOKUSO REBASE MR. BOND

pH-Value, Diluted Solution

Not available.

Viscosity

Not available.

**Solubility Value (G/100G
H₂O@20°C)** 0.1 - 1

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not available.

Odour Threshold, Upper

Not available.

Flash point 10°C

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%)

Not available.

Flammability Limit - Upper(%)

Not available.

Partition Coefficient (N-Octanol/Water)

Not available.

Explosive properties

Not available.

Other Flammability

Not available.

Oxidising properties

Not available.

10. STABILITY AND REACTIVITY

Reactivity

May polymerise.

Stability

HIGHLY FLAMMABLE!

Hazardous reactions:

Not available.

Conditions To Avoid

Keep away from heat, sparks and open flame. Protect against direct sunlight.

Materials To Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Toxic gases are generated when heated.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Not available.

Skin Corrosion/Irritation:

Slightly irritating. Product has a defatting effect on skin.

Serious eye damage/irritation:

Irritating and may cause redness and pain.

Respiratory or skin sensitisation:

Respiratory sensitisation

Not available.

Skin sensitisation

:

TOKUSO REBASE MR. BOND

May cause sensitization by skin contact.

Germ cell mutagenicity:

Not available.

Carcinogenicity:

METHYL METHACRYLATE

EPA: Not likely to be carcinogenic to humans

IARC Carcinogenicity

METHYL METHACRYLATE , Butylated hydroxytoluene (BHT) : IARC Group 3 Not classifiable as to its carcinogenicity to humans.

NTP - Carcinogenicity

Not listed.

OSHA - Carcinogenicity

Not listed.

Reproductive Toxicity:

Not available.

Specific target organ toxicity - single exposure:

Irritating to respiratory system.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

Not available.

Aspiration hazard:

Viscosity

Not available.

12. ECOLOGICAL INFORMATION

Toxicity

No data available.

Degradability

No data available.

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not available.

Mobility:

No information available.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Other adverse effects

Not known.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

UN No. (DOT/TDG)	1133
UN No. (IMDG)	1133
UN No. (ICAO)	1133
DOT Proper Shipping Name	ADHESIVES, CONTAINING A FLAMMABLE LIQUID
TDG Proper Shipping Name	ADHESIVES, CONTAINING A FLAMMABLE LIQUID

TOKUSO REBASE MR. BOND

DOT Hazard Class

3

DOT Hazard Label

Flammable Liquid

TDG Class

3

TDG Label(s)

3

IMDG Class

3

ICAO Class

3

Transport Labels

DOT Pack Group

II

IMDG Pack Group

II

Air Pack Group

II

Environmentally Hazardous Substance/Marine Pollutant

No.

EMS

F-E, S-D

Special precautions for user

Not applicable.

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes

Not applicable.

15. REGULATORY INFORMATION

Regulatory Status (US)

This Product is Hazardous under the OSHA Hazard Communication Standard.

Regulatory References

29 CFR 1910. 1200(g) Federal Regulations (OSHA Standard).

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed.

METHYL METHACRYLATE; 1, 000 lbs (454 Kg)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

The following ingredients are listed.

METHYL METHACRYLATE

CAA Accidental Release Prevention

None of the ingredients are listed.

SARA (311/312) Hazard Categories

Fire Acute

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

TOKUSO REBASE MR. BOND

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed.

METHYL METHACRYLATE

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

Rhode Island "Right To Know" List

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

Minnesota "Right To Know" List

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

New Jersey "Right To Know" List

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

Pennsylvania "Right To Know" List

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

International Inventories

EU - EINECS/ELINCS

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

Canada – DSL/NDL

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

US - TSCA

The following ingredients are listed.

dibutyl hydroxy toluene

MEQUINOL

METHYL METHACRYLATE

US – TSCA 12(b) Export Notification

None of the ingredients are listed.

16. OTHER INFORMATION

Revision Comments

This is first issue.

Revision Date

08/05/2014

Disclaimer

The information which is contained in this document is based on available data. However, as such has been obtained from various sources, including independent laboratories, it is given without warranty or representation that is complete, accurate and can be relied upon. Tokuyama Dental Corp. has not attempted to conceal in any way the deleterious aspects of the product listed herein, but makes no warranty as to such.