SAFETY DATA SHEETS

This SDS packet was issued with item:

071435163

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

071437086

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

071435148 071435155 071436534 071436567 071436591 071439538

Bosworth Company SAFETY DATA SHEET

NAME OF PRODUCT: NEW TRULINER® Liquid SDS DATE: 06/19/2014

FILE NO.: SDS976

SECTION 1: IDENTIFICATION

PRODUCT NAME: NEW TRULINER Liquid

PRODUCT CODES: 0921970, 0921971, 0921972, 0921976, 0921977, 0921978, 0921979, 0921986

IDENTIFIED USES: Dentistry
USES ADVISED AGAINST: Non-dental use

MANUFACTURER: Harry J. Bosworth Company

ADDRESS: 7227 North Hamlin Avenue, Skokie, Illinois 60076-3999, USA

 TELEPHONE:
 847-679-3400

 FAX:
 847-679-2080

 EMAIL:
 hjbinfo@bosworth.com

EMERGENCY PHONE: 800-535-5053 (US and Canada) 352-323-3500 (International)

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Flammable liquids (Category 3)

Acute toxicity, Oral (Category 5)
Acute toxicity, Dermal (Category 5)
Skin irritation (Category 2)
Skin sensitization (Category 1)
Eye irritation (Category 2A)

Acute toxicity, Inhalation (Category 5)

Specific target organ toxicity - single exposure (Category 3), Respiratory system

Reproductive toxicity (Category 2)

Specific target organ toxicity - repeated exposure (Category 2)

Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 4)

LABELING: FDA regulated device - exempt from Regulation (US) 29 CFR 1910.1200.

PICTOGRAM:



SIGNAL WORD: Warning HAZARD STATEMENTS: H226

H226 Flammable liquid and vapor.
H303 May be harmful if swallowed.
H313 May be harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H333 May be harmful if inhaled.
 H335 May cause respiratory irritation.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H413 May cause long lasting harmful effects to aquatic life.

PRECAUTIONARY STATEMENTS: P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P234 Keep only in original container. P235+P410 Keep cool. Protect from sunlight.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
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.
P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse

skin with water/ shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

PREPARED BY: SS PAGE 1 OF 5

Bosworth Company SAFETY DATA SHEET

NAME OF PRODUCT: NEW TRULINER® Liquid SDS DATE: 06/19/2014

breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

FILE NO.: SDS976

present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/ attention.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

P342+P313 If experiencing respiratory symptoms: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P370+P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

for extinction.

P391 Collect spillage.
P402 Store in a dry place.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	%WT	OSHA PEL - TWA	ACGIH TLV - TWA	CLASSIFICATION
Isobutyl	97-86-9	60-100	N/E	N/E	Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2A;
methacrylate					Skin Sens. 1; STOT SE 3; Aquatic Acute 1;
					H226, H315, H317, H319, H335, H400
Dibutyl	84-74-2	5-15	5 mg/m ³	5 mg/m ³	Repr. 1B; Aquatic Acute 1; Aquatic
phthalate					Chronic 1; H360, H410
N,N-Dimethyl-	99-97-8	1-5	N/E	N/E	Flam. Liq. 4; Acute Tox. 3; STOT RE 2;
p-toluidine					Aquatic Acute 3; Aquatic Chronic 3;
					H227, H301+H311+H331, H373, H412

For full text of H-statements mentioned in this section, see section 16.

SECTION 4: FIRST-AID MEASURES

INHALATION: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

SKIN: Wash off with soap and plenty of water. Consult a physician.

EYE: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and nitrogen.

SPECIAL HAZARDS: Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors

are heavier than air and may travel to ignition source. Vapors are uninhibited and may form polymers in vents

or flame arrestors resulting in stoppage of vents.

ADVICE FOR FIREFIGHTERS: Fight fires from safe distance or protected areas. Cool containers of material exposed to heat with cold water

spray. Wear self contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form

explosive concentrations. Vapors can accumulate in low areas.

ENVIRONMENTAL PRECAUTIONS: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the

environment must be avoided.

CONTAINMENT AND CLEANUP: Soak up with inert absorbent material and collect with an electrically protected vacuum cleaner or by wet-

brushing. Place in suitable, closed container for disposal according to official regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Product is intended for dental use only. Handling of this product should be by trained dental healthcare

professionals only. Observe normal care for working with chemicals. Avoid contact with the eyes and skin. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. Keep away from foodstuffs, beverages and animal feed.

PREPARED BY: SS PAGE 2 OF 5



NAME OF PRODUCT: NEW TRULINER® Liquid

SDS DATE: 06/19/2014

FILE NO.: SDS976

CONDITIONS FOR SAFE STORAGE: Store only in the original package. Keep container tightly sealed in a dry and well-ventilated place. Protect

from heat and direct sunlight. Store away from food and beverages.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Handle in accordance with good industrial hygiene and safety practice. Use with adequate general or local

exhaust ventilation to maintain exposure levels below the occupational exposure limits. Local exhaust ventilation is preferred since it prevents contamination dispersion into the work area by controlling it at its source. Provide eyewash and safety shower if contact or splash hazard exists. Wash hands before breaks and

at the end of work.

EYE/FACE PROTECTION: Safety glasses.

SKIN PROTECTION: Glove material impermeable and resistant to the product.

BODY PROTECTION: Protective work clothing.

RESPIRATORY PROTECTION: NIOSH (US) or CEN (EU) approved respirators and components.

ENVIRONMENTAL EXPOSURE: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the

environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/COLOR: Clear, colorless liquid

ODOR: Acrid

BOILING POINT: 311°F (155°C) **FLASH POINT:** 113°F (45°C)

 EVAPORATION RATE (BuAc = 1.0):
 0.5

 UPPER FLAMMABILITY LIMIT:
 8.2

 LOWER FLAMMABILITY LIMIT:
 1.8

 VAPOR PRESSURE:
 3 mmHg

 VAPOR DENSITY (AIR=1.0):
 4.91

 RELATIVE DENSITY (H2O=1.0):
 0.90 g/cm³

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. Polymerizes with evolution of heat. Avoid contact with

incompatible materials. Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often adding to bulk liquid if needed. Do not blanket or mix with

oxygen-free gas as it renders inhibitor ineffective.

HAZARDOUS REACTIONS: Vapors may form explosive mixture with air. Polymerizes readily unless inhibited.

CONDITIONS TO AVOID: Heat, flames, sparks, aging, contamination and absence of an oxygen containing atmosphere above the

product. May polymerize upon exposure to light. Extremes of temperature and direct sunlight.

INCOMPATIBLE MATERIALS: Strong acids, strong bases and oxidizing agents. Material has strong solvent properties and can soften paint

and rubber.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

SKIN SENSITIZATION:

POTENTIAL HEALTH EFFECTS: EYES: May cause eye irritation with redness, tearing and stinging.

<u>SKIN:</u> May cause skin irritation with redness, swelling and itching. Repeated or prolonged contact may cause

drying, defatting of the skin and dermatitis.

<u>INGESTION</u>: May cause mucous membrane and gastrointestinal irritation with nausea, vomiting and diarrhea. May cause nervous system depression with symptoms of headache, dizziness, nausea, vomiting, weakness,

fatigue, confusion, and unconsciousness.

<u>INHALATION:</u> May cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness, drowsiness, nausea, vomiting, and unconsciousness. High vapor

concentrations may cause burning sensation of the nose and throat and watering of the eyes. May cause allergic skin reaction.

CARCINOGENICITY: OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or possible carcinogen by OSHA.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

<u>NTP:</u> No component of this product present at levels greater than or equal to 0.1% is identified as a known or

anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confirmed human carcinogen by IARC.

REPRODUCTIVE TOXICITY: Dibutyl phthalate is a presumed human reproductive toxicant. Overexposure may cause reproductive

disorders based on tests with laboratory animals.

PREPARED BY: SS PAGE 3 OF 5

Bosworth Company SAFETY DATA SHEET

NAME OF PRODUCT: NEW TRULINER® Liquid SDS DATE: 06/19/2014

SECTION 12: ECOLOGICAL INFORMATION

ADVERSE EFFECTS: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic

to aquatic life. May cause long lasting harmful effects to aquatic life. Avoid release to the environment.

FILE NO.: SDS976

SECTION 13: DISPOSAL CONSIDERATIONS

PRODUCT: Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical

incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal must be made

according to official regulations.

CONTAMINATED PACKAGING: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER: UN2283

PROPER SHIPPING NAME: Isobutyl methacrylate, stabilized

HAZARD CLASS: 3
PACKING GROUP: III

LABEL STATEMENT: Flammable Liquid

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA: This product is an FDA regulated device and not subject to TSCA regulations.

CERCLA: This product is an FDA regulated device and not subject to reporting requirements. There may be specific

reporting requirements at the local, regional, or state level.

SARA 313 TOXIC CHEMICALS: The following components are subject to reporting levels established by SARA Title III, Section 313 (40 CFR

372): Dibutyl Phthalate, CAS NO. 84-74-2.

SARA 311/312 HAZARDS: This product is an FDA regulated device and not subject to reporting requirements.

US STATE REGULATIONS

CALIFORNIA PROPOSITION 65: This product may contain a chemical known to the State of California to cause cancer and/or reproductive

toxicity.

INTERNATIONAL REGULATIONS

CANADIAN ENVIRONMENTAL

PROTECTION ACT:

This product is a medical device and not subject to chemical notification requirements.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES

(EINECS): This product is a medical device and not subject to chemical notification requirements.

SECTION 16: OTHER INFORMATION

FULL TEXT OF H STATEMENTS REFERRED TO UNDER SECTION 3

Acute Tox. Acute toxicity
Aquatic Acute Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity

Eye Irrit. Eye irritation
Flam. Liq. Flammable liquids

H226 Flammable liquid and vapor.

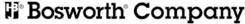
H227 Combustible liquid.

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H360 May damage fertility or the unborn child.

PREPARED BY: SS PAGE 4 OF 5



SAFETY DATA SHEET

NAME OF PRODUCT: NEW TRULINER® Liquid

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

 Repr.
 Reproductive toxicity

 Skin Irrit.
 Skin irritation

 Skin Sens.
 Skin sensitization

STOT RE Specific target organ toxicity – repeated exposure STOT SE Specific target organ toxicity – single exposure

NFPA RATING

Health Hazard 2
Fire Hazard 2
Reactivity Hazard 2

PREPARATION INFORMATION: This SDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product.

DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, The Harry J. Bosworth Company does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

FILE NO.: SDS976

SDS DATE: 06/19/2014

PREPARED BY: SS PAGE 5 OF 5

Bosworth Company

NAME OF PRODUCT: NEW TRULINER® Powder

SECTION 1: IDENTIFICATION

PRODUCT NAME: NEW TRULINER Powder (PINK, VEIN, CLEAR)

PRODUCT CODES: 0921970, 0921971, 0921972, 0921973, 0921974, 0921975, 0921977, 0921978, 0921979, 0921980, 0921981,

FILE NO.: SDS973

SDS DATE: 06/19/2014

0921982

IDENTIFIED USES: Dentistry
USES ADVISED AGAINST: Non-dental use

MANUFACTURER: Harry J. Bosworth Company

ADDRESS: 7227 North Hamlin Avenue, Skokie, Illinois 60076-3999, USA

 TELEPHONE:
 847-679-3400

 FAX:
 847-679-2080

 EMAIL:
 hjbinfo@bosworth.com

 EMERGENCY PHONE:
 800-535-5053 (US and Canada)

 352-323-3500 (International)

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Acute toxicity, Oral (Category 5)

Acute toxicity, Dermal (Category 5)
Skin sensitization (Category 1)
Eye irritation (Category 2B)

Acute toxicity, Inhalation (Category 5)

Specific target organ toxicity - single exposure (Category 3), Respiratory system

Germ cell mutagenicity (Category 2) Carcinogenicity (Category 2) Reproductive toxicity (Category 2)

Specific target organ toxicity - repeated exposure (Category 2)

Chronic aquatic toxicity (Category 4)

LABELING: FDA regulated device - exempt from Regulation (US) 29 CFR 1910.1200.

PICTOGRAM:

♦

SIGNAL WORD: Warning

HAZARD STATEMENTS:H303May be harmful if swallowed.H313May be harmful in contact with skin.H317May cause an allergic skin reaction.

H320 Causes eye irritation.
H333 May be harmful if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H413 May cause long lasting harmful effects to aquatic life.

PRECAUTIONARY STATEMENTS: P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P234 Keep only in original container. P235+P410 Keep cool. Protect from sunlight.

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.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P330 IF SWALLOWED: Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

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.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P321 Specific treatment (see supplemental first aid instructions on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

PREPARED BY: SS PAGE 1 OF 4



NAME OF PRODUCT: NEW TRULINER® Powder

SDS DATE: 06/19/2014

FILE NO.: SDS973

P342+P313 If experiencing respiratory symptoms: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.
P402 Store in a dry place.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	%WT	OSHA PEL - TWA	ACGIH TLV - TWA	CLASSIFICATION
Poly(ethyl	9003-42-3	60-100	15 mg/m³ (T); 5 mg/m³ (R)	10 mg/m³ (T); 3 mg/m³ (R)	N/A
methacrylate)					
Benzoyl	94-36-0	1-5	5 mg/m ³	5 mg/m ³	Org. Perox. B; Eye Irrit. 2A; Skin Sens. 1;
Peroxide					H241, H317, H319
Cadmium	7440-43-9	0.5-1.5	0.005 mg/m ³ (as Cd)	0.01 mg/m ³ (T); 0.002	Acute Tox. 3; Acute Tox. 4; Acute Tox. 2;
Pigments				mg/m ³ (R) (as Cd)	Muta. 2; Carc. 1B; Repr. 2; STOT RE 1;
					Aquatic Acute 1; Aquatic Chronic 1; H301,
					H312, H330, H341, H350, H361, H372, H410
Titanium	13463-67-7	0.5-1.5	15 mg/m ³ (T)	10 mg/m ³	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT
Dioxide					SE 3; H315, H319, H332, H335

Cadmium pigments and Titanium Dioxide are not included in clear shade. For full text of H-statements mentioned in this section, see section 16.

SECTION 4: FIRST-AID MEASURES

INHALATION: Move person into fresh air. If not breathing, give artificial respiration. If symptoms persist, get medical

attention.

SKIN: Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

EYE: Flush eyes with water for 15 minutes as a precaution. Get medical attention if irritation develops and persists. **INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

 $\textbf{HAZARDOUS DECOMPOSITION PRODUCTS:} \ Methacrylate \ monomers \ and \ oxides \ of \ carbon.$

SPECIAL HAZARDS: Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately

those of coal dust.

ADVICE FOR FIREFIGHTERS: Avoid extinguishing methods which may generate dust clouds. Water stream can disperse dust into air,

producing a fire hazard and possible explosion hazard if exposed to ignition source. Wear self contained

breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

ENVIRONMENTAL PRECAUTIONS: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the

environment must be avoided.

CONTAINMENT AND CLEANUP: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers

for disposal.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Product is intended for dental use only. Handling of this product should be by trained dental healthcare

professionals only. Observe normal care for working with chemicals. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid inhalation of dust. Provide appropriate exhaust ventilation at places

where dust is formed. Keep away from foodstuffs, beverages and animal feed.

CONDITIONS FOR SAFE STORAGE: Store only in the original package. Keep container tightly closed in a dry and well-ventilated place. Protect

from heat and direct sunlight. Store away from food and beverages.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Handle in accordance with good industrial hygiene and safety practice. Use with adequate general or local

exhaust ventilation to maintain exposure levels below the occupational exposure limits. Local exhaust

PREPARED BY: SS PAGE 2 OF 4

Bosworth Company

SAFETY DATA SHEET

NAME OF PRODUCT: NEW TRULINER® Powder

ER® Powder SDS DATE: 06/19/2014 ventilation is preferred since it prevents contamination dispersion into the work area by controlling it at its

source. Provide eyewash and safety shower if contact or splash hazard exists. Wash hands before breaks and

FILE NO.: SDS973

at the end of work.

EYE/FACE PROTECTION: Safety glasses.

SKIN PROTECTION: Glove material impermeable and resistant to the product.

BODY PROTECTION: Protective work clothing.

RESPIRATORY PROTECTION: NIOSH (US) or CEN (EU) approved respirators and components.

ENVIRONMENTAL EXPOSURE: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the

environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/COLOR: Fine pink, pink/vein or white powder

ODOR: Faint odor in bulk
FLASH POINT: 579°F (304°C)
RELATIVE DENSITY (H2O=1.0): 1.25 g/cm³
WATER SOLUBILITY: Insoluble

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:Stable under recommended storage conditions.HAZARDOUS REACTIONS:No further relevant information available.CONDITIONS TO AVOID:Temperatures above 464°F (240°C).

INCOMPATIBLE MATERIALS: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Methacrylate monomers and oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS: <u>EYES:</u> May cause eye irritation.

SKIN: May be harmful if absorbed through skin. May cause skin irritation.

INGESTION: May be harmful if swallowed.

INHALATION: May be harmful if inhaled. May cause respiratory tract irritation.

CARCINOGENICITY: OSHA: Cadmium is a regulated carcinogen by OSHA.

<u>ACGIH</u>: Cadmium is identified as a suspected human carcinogen by ACGIH. NTP: Cadmium is identified as a known human carcinogen by NTP.

<u>IARC:</u> Cadmium is identified as a human carcinogen by IARC. Titanium dioxide is identified as a possible human carcinogen by IARC. Benzoyl peroxide is identified as not classifiable as to its carcinogenicity to

humans by IARC.

REPRODUCTIVE TOXICITY: Cadmium is a suspected human reproductive toxicant. Overexposure may cause reproductive disorders based

on tests with laboratory animals.

SECTION 12: ECOLOGICAL INFORMATION

ADVERSE EFFECTS: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. May cause

long lasting harmful effects to aquatic life. Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

PRODUCT: Offer surplus and non-recyclable solutions to a licensed disposal company. Must not be disposed of together

with household garbage. Do not allow product to reach sewage system. Disposal must be made according to

official regulations.

CONTAMINATED PACKAGING: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER: N/A
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
PACKING GROUP: N/A
LABEL STATEMENT: N/A

SECTION 15: REGULATORY INFORMATION

PREPARED BY: SS PAGE 3 OF 4

Bosworth Company

NAME OF PRODUCT: NEW TRULINER® Powder

US FEDERAL REGULATIONS

TSCA: This product is an FDA regulated device and not subject to TSCA regulations.

CERCLA: This product is an FDA regulated device and not subject to reporting requirements. There may be specific

reporting requirements at the local, regional, or state level.

SARA 313 TOXIC CHEMICALS: The following components are subject to reporting levels established by SARA Title III, Section 313 (40 CFR

372): Cadmium, CAS NO. 7440-43-9; Benzoyl Peroxide, CAS NO. 94-36-0.

FILE NO.: SDS973

SDS DATE: 06/19/2014

SARA 311/312 HAZARDS: This product is an FDA regulated device and not subject to reporting requirements.

US STATE REGULATIONS

CALIFORNIA PROPOSITION 65: This product may contain a chemical known to the State of California to cause cancer and/or reproductive

toxicity.

INTERNATIONAL REGULATIONS

CANADIAN ENVIRONMENTAL

PROTECTION ACT: This product is a medical device and not subject to chemical notification requirements.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES

(EINECS): This product is a medical device and not subject to chemical notification requirements.

SECTION 16: OTHER INFORMATION

FULL TEXT OF H STATEMENTS REFERRED TO UNDER SECTION 3

Acute Tox. Acute toxicity
Aquatic Acute Acute Acute aquatic toxicity
Aquatic Chronic Chronic Chronic aquatic toxicity
Carc. Carcinogenicity

Eye Irrit. Eye irritation

H241 Heating may cause a fire or explosion.

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H330 Fatal if inhaled. H332 Harmful if inhaled.

H335 May cause respiratory irritation.
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.

H410 Very toxic to aquatic life with long lasting effects.

Muta. Germ cell mutagenicity
Org. Perox. Organic peroxides
Repr. Reproductive toxicity
Skin Irrit. Skin irritation
Skin Sens. Skin sensitization

STOT RE Specific target organ toxicity – repeated exposure STOT SE Specific target organ toxicity – single exposure

NFPA RATING

Health Hazard 1
Fire Hazard 1
Reactivity Hazard 0

PREPARATION INFORMATION: This SDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product.

DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, The Harry J. Bosworth Company does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

PREPARED BY: SS PAGE 4 OF 4



SAFETY DATA SHEET

Bonding Liquid

Section 1. Identification

GHS product identifier

: Bonding Liquid

Other means of identification

: Not available.

Product code

: 0921788, 0921789, 0921983, 0921984

Product type

: Liquid.

Product use

: Dental Products

MONOMER FOR POLYMETHACRYLATE RESINS; IMPREGNATION OF CONCRETE.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Supplier's details

: Keystone Industries 52 West King Street Myerstown, PA 17067 (856) 663-4700

Emergency telephone number (with hours of operation)

: (800) 535-5053

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

GHS label elements

Hazard pictograms





Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction. May cause respiratory irritation.

Precautionary statements

Prevention

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 1/12

Section 2. Hazards identification

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

Storage

: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture
Other means of
identification

: Substance: Not available.

CAS number/other identifiers

CAS number : Not available.

May contain one or more of the following components in quantities considered hazardous:

Ingredient name	CAS number	EC number	%
methyl methacrylate	80-62-6	201-297-1	100.00

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 2/12

Section 4. First aid measures

Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact: Adverse symptoms may include the following:

redness irritation

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 3/12

Section 5. Fire-fighting measures

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 4/12

Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
methyl methacrylate	ACGIH TLV (United States, 3/2016). Skin sensitizer. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours. TWA: 410 mg/m³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 410 mg/m³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 410 mg/m³ 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Date of issue/Date of revision : 9/12/2016 : 9/12/2016 Version: 1.01 Date of previous issue

Section 8. Exposure controls/personal protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Colorless.

Odor : Characteristic.

pH : Not available.

Melting point : -48°C (-54.4°F)

Boiling point : 102°C (215.6°F)

Flash point : Closed cup: 10°C (50°F)

Lower and upper explosive

(flammable) limits

: Lower: 2.1% Upper: 12.5%

Vapor pressure : 3.7 kPa (27.75 mm Hg) [room temperature]

Vapor density : 3.5 [Air = 1]
Relative density : 0.95

Solubility : Not available.
Solubility in water : 15.3 g/l

Partition coefficient: n-

octanol/water

: 1.38

Auto-ignition temperature : 400°C (752°F) **Viscosity** : Not available.

Aerosol product

Heat of combustion : -26.52 kJ/g

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Hazardous reactions or instability may occur under certain conditions of storage or use.

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 6/12

Section 10. Stability and reactivity

Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials

: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
methyl methacrylate	LC50 Inhalation Vapor	Rat	78000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	7872 mg/kg	-

Classification

Product/ingredient name	OSHA	IARC	NTP
methyl methacrylate	-	3	-

Specific target organ toxicity (single exposure)

Name	• •	Route of exposure	Target organs
methyl methacrylate	Category 3		Respiratory tract irritation
methyl methacrylate	Category 3		Respiratory tract irritation

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : May cause respiratory irritation.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact: Adverse symptoms may include the following:

redness irritation

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 7/12

Section 11. Toxicological information

Short term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

Carcinogenicity
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
methyl methacrylate	Acute LC50 130000 μg/l Fresh water	Fish - Pimephales promelas - Adult	96 hours

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
methyl methacrylate	1.38		low
methyl methacrylate	1.38	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 8/12

Section 13. Disposal considerations

when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS#		Reference number
Methyl methacrylate (I,T); 2-Propenoic acid, 2-methyl-, methyl ester (I,T)	-	Listed	U162

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN1247	UN1247	UN1247	UN1247	UN1247	UN1247
UN proper shipping name	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized
Transport hazard class(es)	3	3	3	3	3	3
Packing group	II	II	II	II	II	II
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	Reportable quantity 1000 lbs / 454 kg [126.25 gal / 477.89 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).		_	-	_

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Date of issue/Date of revision : 9/12/2016 : 9/12/2016 Version: 1.01 9/12 Date of previous issue

Section 14. Transport information

Transport in bulk according to Annex II of MARPOL and

the IBC Code

: Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 311: Bonding Liquid

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)**

Clean Air Act Section 602

Class I Substances

: Not listed

: Listed

Clean Air Act Section 602

Class II Substances

: Not listed

: Not listed

DEA List I Chemicals

(Precursor Chemicals)

DEA List II Chemicals

: Not listed

(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard

Immediate (acute) health hazard

Composition/information on ingredients

Name		hazard	Sudden release of pressure		(acute)	Delayed (chronic) health hazard
methyl methacrylate	100.00	Yes.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Bonding Liquid	-	100.00
Supplier notification	Bonding Liquid	-	100.00

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: METHYL METHACRYLATE

New York The following components are listed: Methyl methacrylate; 2-Propenoic acid, 2-methyl-,

methyl ester

: The following components are listed: METHYL METHACRYLATE; 2-PROPENOIC **New Jersey**

ACID, 2-METHYL-, METHYL ESTER

The following components are listed: 2-PROPENOIC ACID, 2-METHYL-, METHYL Pennsylvania

ESTER

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 10/12 Version: 1.01

Section 15. Regulatory information

Canada inventory International regulations International lists

- : All components are listed or exempted.
- : Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory (ENCS): All components are listed or exempted. **Japan inventory (ISHL)**: All components are listed or exempted. **Korea inventory**: All components are listed or exempted.

Malaysia Inventory (EHS Register): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or

Turkey inventory: All components are listed or exempted.

Chemical Weapons Convention List Schedule

I Chemicals

Chemical Weapons Convention List Schedule II Chemicals

Chemical Weapons Convention List Schedule : Not listed

: Not listed

: Not listed

III Chemicals

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997. National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of revision : 9/12/2016 : 9/12/2016 Date of previous issue Version: 1.01 11/12

Section 16. Other information

Date of printing : 9/12/2016 Date of issue/Date of : 9/12/2016

revision

Date of previous issue : 9/12/2016 Version : 1.01

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Information contained within this SDS is only to be distributed as required by law.

Date of issue/Date of revision : 9/12/2016 Date of previous issue : 9/12/2016 Version : 1.01 12/12