

SAFETY DATA SHEETS

This SDS packet was issued with item:

074302717

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

074302709 074302725 074302733 074303400 074303418 074303426 074303434 074304069 074304093 074304127

074304150 074306296

MATERIAL SAFETY DATA SHEET

Revised 10/1/86

DATE OF PREP

1/84

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

Section I

MANUFACTURER'S NAME Kerr Manufacturing Company, Division of Sybron Corporation

STREET ADDRESS 28200 Wick Road

CITY, STATE, AND ZIP CODE Romulus, Michigan 48174

EMERGENCY TELEPHONE NO (313) 946-7800

PRODUCT CLASS

MANUFACTURERS CODE IDENTIFICATION

TRADE NAME PERMLASTIC (Regular/Heavy Bodied/Light Bodied) BASE

Section II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV		LEL	VAPOR PRESSURE
		PPM	mg/m ³		
Polyoxymercaptans*	Approx 35%				--
Sulfur*	Approx 0.5%				

*The skin of certain individuals may be sensitized by sulfur compounds.

Section III - PHYSICAL DATA

BOILING RANGE N/A

VAPOR DENSITY ☐ HEAVIER. ☐ LIGHTER THAN AIR

EVAPORATION RATE ☐ FASTER ☐ SLOWER THAN ETHER
N/A

PERCENT VOLATILE BY VOLUME N/A
SPECIFIC GRAVITY Heavy paste

Section IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY

Non Flammable

FLASH POINT

N/A

LEL

N/A

EXTINGUISHING MEDIA

Water spray, CO₂, dry chemical, fog

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

SPECIAL FIRE FIGHTING PROCEDURES

None

N/A = Not available

Section V – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Not established for product

EFFECTS OF OVEREXPOSURE

Avoid excessive exposure to skin.

EMERGENCY AND FIRST AID PROCEDURES

Consult physician

Section VI – REACTIVITY DATA

STABILITY ☐ UNSTABLE ☒ STABLE

CONDITIONS TO AVOID Stable under normal conditions

INCOMPATIBILITY (Materials to avoid)

None known

HAZARDOUS DECOMPOSITION PRODUCTS

Sulfur gases may form.

HAZARDOUS POLYMERIZATION ☐ MAY OCCUR ☒ WILL NOT OCCUR

CONDITIONS TO AVOID Excessive heat.

Section VII – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wipe clean with cloth, aromatic solvents. Place in appropriate container for disposal.

WASTE DISPOSAL METHOD

Landfill in authorized facilities in accordance with federal, state and

Section VIII – SPECIAL PROTECTION INFORMATION local regulations

RESPIRATORY PROTECTION

None

VENTILATION

Normal ventilation.

PROTECTIVE GLOVES =Chemical-resistant gloves

EYE PROTECTION -safety glasses.

OTHER PROTECTIVE EQUIPMENT (Avoid spillage on clothing) Lab Coat.

Personnel should wash wash thoroughly after handling product.

Section IX – SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store at normal room temperatures (65°F-80°F)

OTHER PRECAUTIONS

1. This material when used with matching catalyst has been shown to be safe when taking oral impressions.
2. High temperatures and humidities will accelerate working time while low temperatures and humidities will retard working time.
3. Use base with matching catalyst only.

MATERIAL SAFETY DATA SHEET

NPCA 1-72

Revised 10/1/86

DATE OF PREP

1/84

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-201)

Section I

MANUFACTURER'S NAME **Kerr Manufacturing Company, Division of Sybron Corporation**

STREET ADDRESS **28200 Wick Road** CITY, STATE, AND ZIP CODE **Romulus, Michigan 48174**

EMERGENCY TELEPHONE NO. **(313) 946-7800**

PRODUCT CLASS _____ MANUFACTURER'S CODE IDENTIFICATION _____

TRADE NAME **PERMLASTIC (Regular/Heavy Bodied/Light Bodied) CATALYST**

Section II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV		LEL	VAPOR PRESSURE
		PPM	mg/m ³		
PbO₂ (Lead Dioxide)	approx. 30%				

Section III - PHYSICAL DATA

BOILING RANGE **N/A** VAPOR DENSITY ☐ HEAVIER, ☐ LIGHTER THAN AIR **N/A**

EVAPORATION RATE ☐ FASTER ☐ SLOWER THAN ETHER **N/A** PERCENT VOLATILE BY VOLUME **Non-Volatile** SPECIFIC GRAVITY **Heavy Paste**

Section IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY **Non-Flammable** FLASH POINT **N/A** LEL **N/A**

EXTINGUISHING MEDIA **Water spray, CO₂, dry chemical, fog**

UNUSUAL FIRE AND EXPLOSION HAZARDS **Do not expose to powerful reducing agents.**

SPECIAL FIRE FIGHTING PROCEDURES **None**

N/A = Not available

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Section V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE EFFECTS OF OVEREXPOSURE

Avoid excessive and prolonged contact with skin. Ingestion may cause lead poison.

EMERGENCY AND FIRST AID PROCEDURES

Consult physician.

Section VI — REACTIVITY DATA

STABILITY ☐ UNSTABLE ☒ STABLE

CONDITIONS TO AVOID

Stable under normal conditions

INCOMPATIBILITY (Materials to avoid) Powerful reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

None

HAZARDOUS POLYMERIZATION ☐ MAY OCCUR ☒ WILL NOT OCCUR when used as directed.

CONDITIONS TO AVOID Excessive heat.

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wipe up and place in appropriate container for disposal

WASTE DISPOSAL METHOD

Landfill in authorized facilities in accordance with Federal, State & local regulations

Section VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

None

VENTILATION

None

PROTECTIVE GLOVES -Chemical-resistant gloves

EYE PROTECTION -Safety glasses.

OTHER PROTECTIVE EQUIPMENT (Avoid spillage on clothing) Lab Coat. Personnel should wash thoroughly after handling product.

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store at normal room temperatures (65°F-80°F)

OTHER PRECAUTIONS

1. This material when used with the matching base has been shown to be safe when taking oral impressions.
2. High temperatures and humidities will accelerate the working time while low temperatures and humidities will retard working time.
3. Use catalyst with matching base only.

KERR

Material Safety Data Sheet

in accordance with Community Regulation 2006/1907/EC (R.E.A.Ch.)

Revision Date: 28th May 2009

SECTION 1

Product & Company identification

1.1 Product name

PERMLASTIC BASE (Regular, Light & Heavy Bodies)

1.2 Uses/Application:

Dental impression material.

1.3 Company (Name, address and info phone number)

KERR ITALIA s.r.l.

Via Passanti, 332

84018 Scafati (SA) - Italy

00-800-41-050-505

1.4 Emergency phone (according to communitarian directive 99/45/EC, article 17)

+39.081.8508.325 (08.00-17.00, European time, GMT+1)

E-mail address: safety@kerrhawe.com

SECTION 2

Hazard identification

2.1 Hazard classification (according to communitarian directives 67/548/EEC & 99/45/EC)

Toxic for Reproduction (Cat. 1-2); Toxic to aquatic organisms.

2.2 Other hazard

None.

SECTION 3

Composition/Information on Ingredients

(according to communitarian directives 67/548/EEC, 99/45/EC & 2001/58/EC)

3.1 Hazardous ingredients

HAZARDOUS INGREDIENTS	%	HAZARD SYMBOLS	RISK PHRASES	CAS N.	EINECS N.
Polysulfide polymer	60-75	None	52-53	68611-50-7	Polymer
Butyl Benzyl Phthalate (BBP)	5-10	T; N	61-62-50/53	85-68-7	201-622-7
Octamethylcyclotetrasiloxane	1	Xn	62-53	556-67-2	209-136-7

3.2 Other non-hazardous ingredients

None.

SECTION 4**First aid measures**

- 4.1 Treatment for eye contact: Flush with large amounts of water.
- 4.2 Treatment for skin contact: Normal hygienic practices.
- 4.3 Treatment for inhalation (breathing): None particular.
- 4.4 Treatment for ingestion (swallowing): Induce vomiting. Consult a physician.

SECTION 5**Fire-fighting Measures**

- 5.1 Suitable extinguishing media: Not applicable.
- 5.2 Forbidden extinguishing media: Not determined.
- 5.3 Special fire fighting measures: None.
- 5.4 Unusual fire and explosion hazards: Unknown.
- 5.5 Special protection equipment: Sealed overall.

SECTION 6**Accidental Release Measures**

- 6.1 Personal Precautions: Follow recommended precautions listed in other sections.
- 6.2 Environmental Precautions: Material should not be allowed to drain into sewers.
- 6.3 Reclaiming Methods: Absorb spill with paper towels and transfer into suitable containers.

SECTION 7**Handling and Storage** (according to article 5 of communitarian directive 98/24/EC)

- 7.1 Handling Precautions: Excessive heat may cause the aging of the product.
- 7.2 Precautions in case of Fire and Explosion: Extinguish all ignition sources.
- 7.3 Storage Conditions: Store at ambient temperature in a dry place
- 7.4 Suggested container(s): Original sealed containers provided by manufacturer.
- 7.5 Indication for Combined Storage: Avoid powerful reducing agents.
- 7.6 Environmental precautions: Do not allow product to reach sewers and rivers.
- 7.7 Other Precautions: Keep out of the reach of children. Do not ingest. Avoid contamination of food. Use according to directions.

SECTION 8**Exposure controls/personal protection**

8.1 Exposure Limits:	For BBP: <u>TWA/TLV</u> : 3 mg/m ³ (Germany, Austria, Denmark & Sweden); <u>STEL</u> : 5 mg/m ³ (Austria & Sweden); 15 mg/m ³ (Great Britain)
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8.2 Exposure control measures**8.2.1 Precautionary Measures:**

(according to communitarian directives 89/686/EEC & article 4 of 98/24/EC)

Ventilation:	<u>Local Exhaust Ventilation</u> : Good general ventilation should be sufficient to keep vapour concentration under listed limits. <u>Special Ventilation</u> : None. <u>Mechanical (General) Ventilation</u> : Should be sufficient. <u>Other Ventilation</u> : None.
Respiratory Protection:	When vapour concentration exceeds exposure limits, use self-contained breathing apparatus.
Hands Protection:	Impervious rubber or nitrile gloves.
Eyes Protection:	Safety glasses.
Skin Protection:	Handle in accordance with good personal hygiene and safety practices.
Other Protective Equipments:	It would be better use a lab coat.

*Measures listed in this paragraph are to be considered as indications and NOT prescriptions (89/656/EEC)***8.2.2 Environment exposure control measures**

Not Applicable.

SECTION 9**Physical and Chemical Properties****9.1 General information**

<u>Appearance</u> : White paste	<u>Odour</u> : Sulphur odour
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9.2 Information related to health, safety and environment

<u>pH</u> : Not determined	<u>Relative density</u> : Not available
<u>Boiling point</u> : Not applicable (N/A)	<u>Specific gravity</u> : > 1 g/ml
<u>Flash point</u> : N/A	<u>Solubility</u> : Insoluble in water
<u>Flammability</u> : Not flammable.	<u>Partition coefficient n-octanol/water</u> : N/D
<u>Lower Explosivity Limit (L.E.L.)</u> : N/A	<u>Viscosity</u> : Similar to water
<u>Upper Explosivity Limit (U.E.L.)</u> : N/A	<u>Vapour density (air = 1)</u> : N/A
<u>Oxidizing properties</u> : None	<u>Evaporation rate (n-butane = 1)</u> : N/A
<u>Vapour pressure</u> : N/A	<u>Melting point</u> : N/A

9.3 Other information (according to communitarian directives 94/9/EC):

<u>Miscibility</u> : N/A.	<u>Conducibility</u> : N/A
<u>Solubility in Lipids</u> : N/A	<u>Gases Group</u> : N/A

SECTION 10**Stability and Reactivity**

Stability: Stable.

10.1 Conditions to avoid: Excessive heat may cause the aging of the product.

10.2 Materials to avoid (incompatibility): Avoid powerful reducing agents.

10.3 Hazardous decomposition products: Sulphur gases may form.

Other precautions:

Hazardous Polymerization Products: Will not occur

Safety significance in case of change in physical appearance: None known

Stabilizers: No stabilizers are present in this product.

SECTION 11**Toxicological Information**

CMR effects (Carcinogenicity, Mutagenicity and toxicity for reproduction):

Possible.

Effects and hazards of eye contact: May cause irritation.

Effects and hazards of skin contact: May cause mild irritation.

Effects and hazards of Inhalation (Breathing): May cause low or mild irritation.

Effects and hazards of Ingestion (Swallowing): Although ingestion is an unlikely event, ingestion of uncured material may pose health hazard for reproduction (see Section 2.1).

Effects for prolonged Exposure: Same health hazards listed in Effects of ingestion (current section).

Toxic-kinetic effects: Unknown.

Effects on metabolism: Unknown.

Toxicological data for ingredients:

Polysulphide Polymer	LD ₅₀ (oral rat):	> 5000 mg/Kg
BBP	LD ₅₀ (oral rat):	20400 mg/Kg
	LD ₅₀ (skin rabbit):	> 10000 mg/Kg
	LC ₅₀ (inhalation rat/4 hours):	> 6,7 mg/l

SECTION 12**Ecological Information**

This product has not known ecological hazardous effects.

12.1 Eco-toxicity: Not available

12.2 Mobility: Not available

12.3 Persistence and degradability: Not available

12.4 Bioaccumulative potential: Data available for BBP only: 12 BCF, based on parent compound analysis;
Log Pow: 4.58.

12.5 Results of PBT (Persistent Bio-Toxicity) assessment: Not available

12.6 Other adverse effects: Not available

Aquatic toxicity data for single ingredient:

Polysulphide Polymer	LC ₅₀ (pimephales promelas):	320 mg/l (96 hours)
	LC ₅₀ (cyprinodont variegatus):	> 1000 mg/l (96 hours)
	EC ₅₀ (daphnia magna):	32 mg/l (48 hours)
	LC ₅₀ (mysidopsis bahia):	59 mg/l (96 hours)
	EC ₅₀ (alga, selenastrum capricornutum):	17 mg/l (72 hours)
BBP	LC ₅₀ (fishes, trout):	1,1 mg/l (96 hours)
	LC ₅₀ (fathead minnow):	1,5 mg/l (96 hours)
	LC ₅₀ (daphnia, water flea):	1,7 mg/l (48 hours)
	LC ₅₀ (alga):	1,5 mg/l (72 hours)

SECTION 13**Disposal considerations**

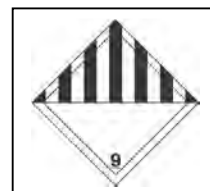
Dispose of in accordance of local regulations.

SECTION 14**Transport information**14.1 Sea transportation (IMDG)

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Stowage/segregation: Category A; Limited Quantity: 5 Kg

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.

14.2 Air transportation (ICAO/IATA)

UN number: 3077 Class: 9 Packing group: III Labels: 9

Maximum quantities: No limits (for both Passenger Aircraft and Cargo Aircraft only)

Limited Quantity: 30 Kg G Proper shipping name: Environmentally hazardous substance, solid, n.o.s.

14.3 Transportation by Road/Railway (RID/ADR)

UN number: 3077 Class: 9 Packing group: III Labels: 9

Limited Quantity: LQ27 (6 Kg/30 Kg for combined, 6 Kg/20 Kg for bandaged trays).

External package type: carton (4G) both for simple and combined packages;

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.

SECTION 15 (Classification according to communitarian directives 67/548/EEC & 99/45/EC)**Regulatory information**

Hazard labelling not required.

This product is an exempted medical device (directive 1999/45/EC, article 1, paragraph 5g).

SECTION 16**Other information**16.1 Risk phrases of all ingredients

- 61 May cause harm to the unborn child.
- 62 Possible risk of impaired fertility.
- 50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
- 52 Harmful to aquatic organisms
- 53 May cause long-term adverse effects in the aquatic environment.

16.1.1 Safety phrases of all ingredients

- 23 Do not breathe vapour
- 60 This material and its container must be disposed of as hazardous waste
- 61 Avoid release to the environment. Refer to special instructions / safety data sheets.

16.2 Sources of key data used to compile the Safety Data Sheet:

European Chemicals Bureau (ECB – www.ecb.jrc.it)

European chemical Substances Information System (ESIS - www.ecb.jrc.it/esis)

A.C.G.I.H. (www.acgih.org)

N.I.O.S.H. (www.cdc.gov/niosh/)

O.S.H.A. (www.osha.gov/)

U.E. (www.europa.eu/index_it.htm)

I.A.R.C. (www.iarc.fr/)

N.T.P. (www.ntp.niehs.nih.gov)

European Community Directives:

67/548/EEC:	Classification, packaging and labelling of dangerous substances.
99/45/EC:	Directive concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.
2001/58/EC:	Second amendment of directive 91/155/EEC for the definition of a detailed arrangement of specific information relating to dangerous preparations (art. 14 of 99/45/EC) and substances (art. 27 of 67/548/EEC).
89/656/EEC:	Directive on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace (third individual directive within the meaning of Article 16 (1) of Directive 89/391/EEC).
89/686/EEC:	Approximation of the laws of the Member States relating to personal protective equipment.
94/9/EC:	Approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres
98/24/EC:	Protection of the health and safety of workers from the risks related to chemical agents at work.

Document modification history:15th September 2008First version in compliance of Community Regulation 2006/1907/EC (R.E.A.Ch.)28th May 2009Second revision: Change in transport hazard classification (Section 14).**CAUTION: PRODUCT FOR PROFESSIONAL USE**

The information on this Safety Sheet is based on presently available data and to our best knowledge for the correct handling of the product under normal conditions. Any use of this product in any way not indicated on this Sheet or the use of this product together with any other process/procedure will be exclusively under the user's responsibility. This document does not constitute explicit or implicit warranty of product quality or fitness for a particular purpose.

SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: Permlastic Base (Light-Bodied)

Product Use: Dental product: Denture impression material.

Manufacturer: Kerr Corporation
1717 W. Collins Ave.
Orange, CA 92867-5422
U.S.A.

Information Phone Number: 1-800-841-1428 (Customer Service)

Chemical Emergency Phone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

SDS Date of Preparation/Revision: March 27, 2019

Section 2. Hazards Identification

GHS Classification:

Toxic to Reproduction Category 1B

Aquatic Chronic Toxicity Category 2

Label Elements:

Danger!



Hazard Phrases

May damage fertility or the unborn child.

Toxic to aquatic life with long lasting effects.

Precautionary Phrases:

Obtain special instructions before use.

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

Wash hands thoroughly after handling.

Avoid release to the environment.

Wear eye protection, protective gloves, protective clothing.

IF exposed or concerned: Get medical attention.

Collect spillage.

Store locked up.

Dispose of contents and container in accordance with local and national regulations.

Section 3. Composition/Information on Ingredients

Component	CAS No.	Amount
Benzyl butyl phthalate	85-68-7	5-10%
(R)-p-mentha-1,8-diene	5989-27-5	<1%
Cinnamaldehyde	104-55-2	<1%
Linalool	78-70-6	<1%

Section 4. First Aid Measures

Inhalation: Immediately remove victim to fresh air. Get medical attention if you feel unwell.

Skin Contact: Flush thoroughly with water. Get medical attention if irritation or symptoms of exposure develop. Remove and launder contaminated clothing before re-use.

Eye Contact: Rinse thoroughly with water. Get medical attention if irritation occurs and persists.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Keep the victim calm and warm. Get immediate medical attention.

Most important symptoms and effects, acute and delayed: May damage fertility or the unborn child.

Indication of immediate medical attention and special treatment, if needed: Immediate medical attention is required if large quantities have been ingested or inhaled.

Section 5. Fire Fighting Measures

Suitable (and Unsuitable) Extinguishing Media: Use any media appropriate for the surrounding fire. Cool fire exposed containers with water.

Specific Hazards Arising from the Chemical: Combustion may produce carbon dioxide, carbon monoxide, sulfur oxides, halogenated compounds, and metal oxides.

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool fire-exposed containers with water. Contain water used in firefighting from entering sewers or natural waterways.

Section 6: Accidental Release Measures

Personal precautions, Protective equipment, and Emergency procedures: Evacuate spill area and keep unprotected personnel away. Avoid contact with eyes, skin and clothing. Wear appropriate protective clothing and equipment. Do not breathe vapors.

Environmental Precautions: Avoid releases to the environment. Report spill as required by local and federal regulations.

Methods and Materials for Containment and Cleaning up: Prompt cleanup and removal are necessary. Absorb spills with an inert material and place it in an appropriate waste disposal container.

Section 7. Handling and Storage

Precautions for Safe Handling: Prevent contact with eyes, skin and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke in the work area. Do not breathe vapors. Use with adequate ventilation. Remove and wash contaminated clothing before reuse.

Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry, well-ventilated area away from direct sunlight. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

Section 8. Exposure Controls / Personal Protection

Exposure Limits

Chemical	Exposure Limit
Benzyl butyl phthalate	None Established
(R)-p-mentha-1,8-diene	None Established
Cinnamaldehyde	None Established
Linalool	None Established

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Respiratory Protection: None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, an approved respirator with particulate cartridges is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Hand protection: Impervious gloves are suggested to prevent skin contact. Contact your glove supplier for selection assistance.

Eye Protection: Chemical safety goggles are recommended if contact is possible.

Skin Protection: Wear protective clothing as needed to avoid skin contact and contamination of personal clothing.

Hygiene measures: Suitable eye and skin washing facilities should be available in the work area.

Section 9. Physical and Chemical Properties

Appearance:	White paste	Odor:	Sulfur
Odor Threshold:	Not available	pH:	Not available
Melting/Freezing Point:	Not available	Boiling Point/Range:	356.67°C (674°F) (mercury)

Flash Point:	Not flammable	Evaporation Rate:	Not available
Flammability: (Solid, Gas)	Not applicable	Flammability Limits:	LEL: Not applicable UEL: Not applicable
Vapor Pressure:	Not available	Vapor Density:	Not available
Relative Density:	>1	Solubilities:	Insoluble in water
Partition Coefficient: (N-Octanol/Water)	Not available	Autoignition Temperature:	Not available
Decomposition Temperature:	Not available	Viscosity:	Not available

Section 10. Stability and Reactivity

Reactivity: The product is not expected to be reactive.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to avoid: Avoid excessive heat.

Incompatible Materials: Reducing materials.

Hazardous decomposition products: None if stored normally.

Section 11. Toxicological Information

Potential Health Effects:

Inhalation: None known.

Skin Contact: May cause mild skin irritation.

Eye Contact: None known.

Ingestion: None known.

Chronic Hazards: Suspected of damaging fertility.

Skin corrosion/irritation: This product is not expected to cause skin irritation or corrosion.

Eye damage/ irritation: This product is not expected to cause eye irritation or corrosion.

Skin Sensitization: No adverse effects expected. Components are not sensitizers.

Respiratory Sensitization: No data available. This product is not expected to cause respiratory sensitization.

Germ Cell Mutagenicity: None of the components are mutagenic.

Carcinogen: None of the components are listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.

Developmental / Reproductive Toxicity: None of the components have been shown to cause reproductive or developmental toxicity.

Specific Target Organ Toxicity (Single Exposure): Single exposure to Benzyl butyl phthalate may cause respiratory tract irritation.

Specific Target Organ Toxicity (Repeated Exposure): No data available.

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:

Benzyl butyl phthalate: LD50 Oral rat: 2330 mg/kg; LC50 Inhalation rat: 6.7 mg/L/4 hr;

LD50 Dermal rabbit: >10000 mg/kg

Cinnamaldehyde: LD50 Oral rat: 2200 mg/kg; LD50 Dermal rabbit: 1260 mg/kg;

Linalool: LD50 Oral rat: 2790 mg/kg; LD50 Dermal rat: 5610 mg/kg; LD50 Dermal rabbit: 2000 mg/kg

Section 12. Ecological Information

Toxicity:

Benzyl butyl phthalate: 96 hr EC50 Pseudokirchneriella subcapitata 100 µg/L;

72 hr EC50 Skeletonema costatum 1.5 mg/L; 48 hr EC50 Daphnia magna- 0.76 mg/L;

48 hr EC50 Crustaceans 0.9 mg/L

Linalool: 96 hr EC50 Desmodesmus subspicatus 88.3 mg/L; 96 hr LC50 Leuciscus idus 22 – 46 mg/L;

48 hr EC50 Daphnia magna 20 mg/L

This product is classified as toxic to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

Persistence and degradability: Benzyl butyl phthalate is readily biodegradable.

Bioaccumulative Potential: Benzyl butyl phthalate has a BCF of 1693.25, log P_{ow} 4.77, potential for bioaccumulative is high.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

Section 13. Disposal Considerations

Disposal: For unused product, dispose of in accordance with Federal and local regulations.

Container Disposal: Dispose of empty container in accordance with Federal and local regulations.

Section 14. Transport Information

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	None	Not Regulated	None	None	Yes
EU ADR/RID	UN3077	Environmentally Hazardous Substance, solid, n.o.s. (BBP)	9	III	Yes
IMDG	UN3077	Environmentally Hazardous Substance, solid, n.o.s. (BBP). Marine pollutant (BBP)	9	III	Yes
IATA/ICAO	UN3077	Environmentally Hazardous Substance, solid, n.o.s. (BBP)	9	III	Yes

Special Precautions for User: None identified

Transport in Bulk According to Annex II MARPOL 73/78 and the IBC Code: Not applicable – product is transported only in packaged form.

Section 15. Regulatory Information

U.S. Federal Regulations:

EPA SARA 311/312 Hazard Classification: Refer to Section 2 for OSHA Hazard Classification.

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Protection Of Stratospheric Ozone: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

International Inventories

US EPA TSCA Inventory: All of the components of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or exempt.

Canada CEPA: All of the components of this material are listed on the DSL or exempt.

Section 16. Other Information

Effective Date: March 27, 2019

Supersedes Date: November 25, 2013

Revision Summary: All Sections – New SDS format

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date of preparation, however, KERR Corporation makes no warranty with respect to the accuracy or suitability of the recommendations, and assumes no liability to any use thereof.