SAFETY DATA SHEETS

This SDS packet was issued with item:

074304093

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).

074302709 074302717 074302725 074302733 074303400 074303418 074303426 074303434 074304069 074304127 074304150

KERR

Material **S**afety **D**ata **S**heet
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: TWA/TLV: 3 mg/m^3 (Germany, Austria, Denmark & Sweden); STEL: 5 mg/m^3 (Austria & Sweden); 15 mg/m^3 (Great Britain)
8.2 Exposure control measures *8.2.1 Precautionary Measures:* *(according to communitarian directives 89/686/EEC & article 4 of 98/24/EC)*	
Ventilation:	Local Exhaust Ventilation: Good general ventilation should be sufficient to keep vapour concentration under listed limits. Special Ventilation: None. Mechanical (General) Ventilation: Should be sufficient. Other Ventilation: 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	
Appearance: White paste	Odour: Sulphur odour
9.2 Infromation related to health, safety and environment	
pH: Not determined	Relative density: Not available
Boiling point: Not applicable (N/A)	Specific gravity: > 1 g/ml
Flash point: N/A	Solubility: Insoluble in water
Flammability: Not flammable.	Partition coefficient n-octanol/water: N/D
Lower Explosivity Limit (L.E.L.): N/A	Viscosity: Similar to water
Upper Explosivity Limit (U.E.L.): N/A	Vapour density (air = 1): N/A
Oxidizing properties: None	Evaporation rate (n-butane = 1): N/A
Vapour pressure: N/A	Melting point: N/A
9.3 Other information (according to communitarian directives 94/9/EC):	
Miscibility: N/A.	Conducibility: N/A
Solubility in Lipids: N/A	Gases Group: 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 unlike 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

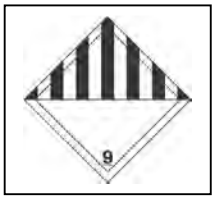
12.6 Other adverse effects: Not available

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 **C**hemicals **B**ureau (ECB – www.ecb.jrc.it)
European chemical **S**ubstances **I**nformation **S**ystem (ESIS - www.ecb.jrc.it/esis)
A.C.G.I.H. (www.**acgih**.org)
N.I.OS.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 2008	First version in compliance of Community Regulation 2006/1907/EC (R.E.A.Ch.)
28th May 2009	Second 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.

Material Safety Data Sheet

Permlastic Base

1 . Identification of the material and supplier

Names

Product name : Permlastic Base

ADG : UN3077

Manufacturer : **Kerr Australia Pty Limited**
Unit 10, 112-118 Talavera Road
North Ryde, NSW 2113
Australia
Telephone no.: 1 800 643 603
Email general queries: kerraust.orders@sybrondental.com
Email technical queries: peter.green@sybrondental.com

Emergency telephone number : 61 401 690 670 (24 hours)

Uses

Area of application : Professional applications.

Material uses : Dental Products: Denture impression material.

Product type : Solid.

2 . Hazards identification

Classification : Repr. Cat. 2; R61
Repr. Cat. 3; R62
N; R51/53

Risk phrases : R61- May cause harm to the unborn child.
R62- Possible risk of impaired fertility.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S53- Avoid exposure - obtain special instructions before use.
S36/37- Wear suitable protective clothing and gloves.
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

Statement of hazardous/ dangerous nature : HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

3 . Composition/information on ingredients

Mixture : Yes.

Synonyms : Light-Bodied Permlastic; Regular Permlastic; Heavy-Bodied Permlastic

Ingredient name	CAS number	Concentration
BBP	85-68-7	<10

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

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.

4 . First-aid measures

First-aid measures

Inhalation : No special measures required. If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Ingestion : Large quantity :Get medical attention immediately. 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. Never give anything by mouth to an unconscious person. 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 : No special protection is required. In case of contact, immediately flush skin with plenty of water. Get medical attention if symptoms occur.

Eye contact : No special measures are required. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

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.

Advice to doctor : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : In case of major fire and large quantities: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. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
halogenated compounds
metal oxide/oxides

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.

Hazchem code : 2Z

6 . Accidental release measures

Personal precautions : Small Quantity. For professional use only. Absorb with an inert material and transfer the spilt material and absorbent to an appropriate waste disposal container.

Environmental precautions : Low release: Avoid dispersal of spilt 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods for cleaning up

Small spill : Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.

Large spill : Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). 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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Refer to special instructions/safety data sheet. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. 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. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

Combustible liquid Not applicable.

8 . Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
BBP	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** TWA: 5 mg/m³ 8 hours.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Exposure controls

Engineering measures : No special measures are required for small quantities under normal and intended conditions of product use. Large scale processes: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

8 . Exposure controls/personal protection

Hygiene measures : No special measures are required for small quantities under normal and intended conditions of product use. Large scale processes: 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes : 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 or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Hands : 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.

Respiratory : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : 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. Recommended: Lab coat.

Environmental exposure controls : No special measures are required for small quantities under normal and intended conditions of product use. Large scale processes: 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.

9 . Physical and chemical properties

Physical state : Solid. [Paste.]

Colour : White.

Odour : Sulfur.

Boiling point : Not available.

Melting point : Not available.

Vapour pressure : Not available.

Flash point : Not available.

Flammable limits : Not available.

Vapour density : Not available.

pH : Not available.

Viscosity : Not available.

Auto-ignition temperature : Not available.

Solubility : Insoluble in the following materials: cold water and hot water.

10 . Stability and reactivity

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.

Conditions to avoid : Avoid excessive heat.

Materials to avoid : Reactive or incompatible with the following materials: reducing materials.

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

11 . Toxicological information

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
BBP	LD50 Dermal LD50 Dermal LD50 Oral	Rabbit Rat Rat	>10000 mg/kg 6700 mg/kg 2330 mg/kg	- - -

Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Conclusion/Summary

Skin : Mucosal tissue: the average mucosal irritation score was within acceptable limits. The test article was not considered an irritant to the mucosal tissue of the rabbit and therefore not irritating to the mouth.

Sensitiser

Product/ingredient name	Route of exposure	Species	Result
Permlastic Base	skin	Guinea pig	Not sensitizing

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Product name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
BBP	-	-	Repr. Cat. 2; R61	Repr. Cat. 3; R62

11 . Toxicological information

Chronic effects : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : May cause birth defects.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : May impair fertility, based on animal data.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Skin : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Eyes : No specific data.

Target organs : Contains material which may cause damage to the following organs: the reproductive system, mucous membranes, upper respiratory tract, skin, eyes, nose/sinuses, ovary, testes.

12 . Ecological information

Ecotoxicity : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
BBP	Acute EC50 0.22 ppm Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 100 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 900 µg/l Fresh water	Crustaceans - Americamysis bahia	48 hours
	Acute EC50 0.76 mg/l Fresh water	Daphnia - Daphnia magna	2 days
	Acute LC50 510 µg/l Marine water	Fish - Cymatogaster aggregata - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 60 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 0.26 mg/l Fresh water	Daphnia - Daphnia magna	21 days

Conclusion/Summary : Not available.

Other ecological information

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
BBP	301B Ready Biodegradability - CO2 Evolution Test	93 % - 28 days	-	-

Conclusion/Summary : Not available.

12 . Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
BBP	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
BBP	4.77	1693.25	high

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

13 . Disposal considerations

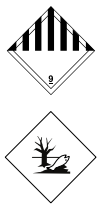
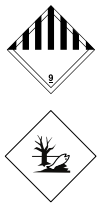
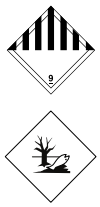
Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. 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 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14 . Transport information

International transport regulations

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (BBP)	9	III		The product is not regulated as a dangerous good when transported by road or rail in either an IBC, or in other container types if ≤500 kg. The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Hazchem code** 2Z **Special provisions** 179, 274, 331, 335, AU01

14 . Transport information

ADR	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (BBP)	9	III		The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Hazard identification number** 90 **Limited quantity** 5 kg **Special provisions** 274, 335, 601 **Tunnel code** (E)
IMDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (BBP). Marine pollutant (BBP)	9	III		The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules (EmS)** F-A, S-F **Special provisions** 274, 335, 966, 967
IATA	UN3077	Environmentally hazardous substance, solid, n.o.s. (BBP)	9	III		The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Passenger and Cargo Aircraft**Quantity limitation: 400 kg Packaging instructions: 956 **Cargo Aircraft Only** Quantity limitation: 400 kg Packaging instructions: 956 **Limited Quantities - Passenger Aircraft** Quantity limitation: 30 kg Packaging instructions: Y956 **Special provisions** A97, A158, A179

PG* : Packing group

15 . Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

No listed substance

Australia inventory (AICS)	:	Not determined.
EU Classification	:	Repr. Cat. 2; R61 Repr. Cat. 3; R62 N; R51/53

16 . Other information

Person who prepared the MSDS	:	IHS
Date of previous issue	:	1/06/2014.
Date of issue/ Date of revision	:	No previous validation.
Version	:	1

Indicates information that has changed from previously issued version.

Disclaimer

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.