

G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> **Butyl Benzyl Phthalate**

PRODUCT NUMBER(S)-----> 117000

TRADE NAMES AND SYNONYMS --> 1,2 benzenedicarboxylic acid, butyl phenylmethyl ester

CAS-No: 85-68-7

CHEMICAL FAMILY: Phthalate Ester

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RECOMMENDED USE: Plasticization of polymers

USES ADVISED AGAINST: BBP use in plastics for food contact, Toys.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: **G.J. CHEMICAL CO., INC.**

Address: **40 VERONICA AVENUE
SOMERSET, NJ 08873**

Telephone: 1-973-589-1450

Fax: 1-973-589-3072

1.4 Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

Reproductive toxicity (Category 1B), H360

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

2.2 GHS Label elements, including precautionary statements

Pictogram



GHS08

GHS09

Signal word: **DANGER**

Hazard statement(s)

H360 May damage fertility or the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention:

P201 Obtain special instructions before use.

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

P273 Avoid release to the environment.

P281 Use personal protective equipment as required.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. INGREDIENTS

3.1 SUBSTANCE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Butyl Benzyl Phthalate	85-68-7 EC-No.201-622-7 Index-No.607-430-00-3 Reg.-No. 01-2119489376-23-XXXX	>99	Reproductive toxicity (Category 1B), H360 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: BUTYL BENZYL PHTHALATE

****FIRST AID- Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.**

SKIN CONTACT: BUTYL BENZYL PHTHALATE

****FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

EYE CONTACT: BUTYL BENZYL PHTHALATE

****FIRST AID- Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. Consult a physician if irritation persists.**

INGESTION: BUTYL BENZYL PHTHALATE

****FIRST AID- Do not induce vomiting. Never give anything by mouth to an unconscious person. Have patient drink several glasses of water. Consult a physician or poison control center, treat symptomatically.**

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Eye: Mildly irritating;

Skin: Mildly irritating; May be harmful if absorbed through skin.

Inhalation: Due to its low vapor pressure the inhalation potential is regarded as low. However if this product is heated, misted or sprayed, it may be irritating to the mucous membranes and upper respiratory tract. May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May cause nausea, vomiting and diarrhea.

Chronic: Occupational exposure to this material has not been reported to cause any significant adverse human effects. On the basis of available information,

exposure to Butyl Benzyl Phthalate is not expected to produce any significant adverse human health effects when recommended safety precautions are followed.

Medical Conditions Aggravated by Exposure: No skin allergy was observed in humans following repeated exposure in a controlled skin contact studies.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Specific details on antidote: No recommendation given.

5. FIRE FIGHTING MEASURES

Flash Point: 113°C (235.4°F) CC

LEL %: 0.28% (calc.) (V)

Auto-Ignition Temp: 232.0°C (449.6°F)

UEL %: Not Known

UNIFORM FIRE CODE: Combustible Liquid Class IIIB

5.1 SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical-->

x

Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR

MIXTURE: Keep containers tightly closed. Combustible liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Water or foam may cause frothing.

CONDITIONS OF FLAMMABILITY: Not flammable or combustible.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) for confined spaces and where there is exposure to vapors. Use full fire-fighting protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY

PROCEDURES: Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent in spill area.

For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.

Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

REPORTABLE QUANTITY (RQ): 100 POUNDS

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the metropolitan Washington, D. C. area (40 CFR 302.6).

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 “Flammable and Combustible Liquids” and National Fire Protection Association (NFPA 77) “Recommended Practice on Static Electricity”.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally. Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Butyl Benzyl Phthalate	85-68-7 EC-No.201-622-7 Index-No. 607-430-00-3 Reg.-No. 01-2119489376-23-XXXX	>99	5mg/m3 TWA (ACGIH) 5mg/m3 TWA (OSHA)

Key: (PEL) = Permissible Exposure Limit OSHA
 (TLV) = Threshold Limit Value OSHA & ACGIH
 (STEL) = Short Term Exposure Limit ACGIH
 (WEEL) = USA. Workplace Environmental Exposure Levels
 TWA) = Time Weighted Average
 CAS = Chemical Abstracts Registry Number
 IDLH = Immediate Danger to Life and Health
 N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

For vapor concentrations 1 to 10 times ACGIH TWA an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times ACGIH TWA and in confined areas use a approved positive pressure full face-piece supplied air respirator.

BODY CLOTHING:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION:

Employee must wear appropriate protective gloves to prevent contact with this substance.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Splash contact

Material: Nature latex/chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 60 min

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash guards or face shield. Shower and eyewash should be located in an easily accessible location to the work area.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Butyl Benzyl phthalate 85-68-7

APPEARANCE:	Liquid
COLOR:	Colorless
ODOR:	No distinguishing odor.
ODOR THRESHOLD:	No Data Available
pH:	No Data Available
MOLECULAR WEIGHT:	312.36 amu
MELTING POINT:	< -34.99°C (< -30.98°F)
BOILING POINT:	370°C (698°F)
SPECIFIC GRAVITY:	1.12@25°C
DENSITY (25°C):	1.1 g/ml @25°C
VAPOR PRESSURE:	0.2 mmHg at 150.0°C (302.0°F)
VAPOR DENSITY:	10.9
WATER SOLUBILITY:	2.69mg/l@20°C
PARTITION COEFFICIENT N-OCTANOL/WATER	log Pow: 4.91 @20°C
FLASH POINT:	113.0°C (235.4°F) - closed cup
EVAPORATION RATE (BUTYL ACETATE=1):	Negligible
UPPER FLAMMABILITY LIMIT:	No Data Available
LOWER FLAMMABILITY LIMIT:	0.28% (V)
AUTO IGNITION TEMPERATURE:	232.0°C (449.6°F)
DECOMPOSITION TEMPERATURE:	No Data Available
VISCOSITY:	No Data Available
EXPLOSIVE PROPERTIES:	No Data Available
OXIDIZING PROPERTIES:	No Data Available

9.2 OTHER INFORMATION: No Data Available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)
Stable under normal temperatures and pressures.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: No data available.

HAZARDOUS POLYMERIZATION: May occur () Will not occur (X)

10.4 CONDITIONS TO AVOID: --> No data available.

10.5 INCOMPATIBLE MATERIALS --> Strong oxidizing agents, Strong bases

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Mildly irritating;

Skin> Mildly irritating; May be harmful if absorbed through skin.

Inhalation> Due to its low vapor pressure the inhalation potential is regarded as low. However if this product is heated, misted or sprayed, it may be irritating to the mucous membranes and upper respiratory tract. May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion> May cause nausea, vomiting and diarrhea.

Chronic: Occupational exposure to this material has not been reported to cause any significant adverse human effects. On the basis of available information, exposure to Butyl Benzyl Phthalate is not expected to produce any significant adverse human health effects when recommended safety precautions are followed.

Medical Conditions Aggravated by Exposure> No skin allergy was observed in humans following repeated exposure in a controlled skin contact studies.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50 (Rabbit)	Inhalation LC50
Butyl Benzyl Phthalate	2330mg/kg	>10000mg/kg	6.7mg/L/4hr

SKIN CORROSION/IRRITATION: No data available.

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - No data available.

RESPIRATORY OR SKIN SENSITIZATION: Guinea pig Result: Does not cause skin sensitization.

MUTAGENIC EFFECTS: Butyl Benzyl Phthalate has produced no genetic changes in standard tests using animal, bacterial and yeast cells.

Ames test S. typhimurium Result: negative

CARCINOGEN STATUS:

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Benzyl butyl phthalate) **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.

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.

NTP: 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. 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.

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

REPRODUCTIVE TOXICITY: Presumed human reproductive toxicant.

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals

No birth defects were reported in rabbits and rats given this material during pregnancy, even at levels that were produced toxic effects in rat mothers and offspring. Testicular changes and reduced fertility were reported in male rats fed high doses of BBP for 10 weeks. Studies show reduced body weights as well as spleen and sex organ changes following repeated inhalation (4 weeks) of Butyl Benzyl Phthalate by rats. Lower concentrations for a longer period (3 months) produced increased liver and kidney weights.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): No Data Available

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): No Data Available

ASPIRATION HAZARD: No Data Available

11.2 ADDITIONAL DATA: May cause endocrine disruption.

RTECS: TH9990000

12. ECOLOGICAL INFORMATION

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and pollution control officials.

Notify operators of nearby water intakes.

12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - Lepomis macrochirus (Bluegill) - 1.7 mg/l - 96.0 h

NOEC - Oncorhynchus mykiss (rainbow trout) - 0.48 mg/l - 96.0 h

LC50 - Pimephales promelas (fathead minnow) - 2.1 mg/l - 96 h flow through test

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates:

LC50 - Daphnia magna (Water flea) - 1.8 mg/l - 48 h static test

Toxicity to algae:

EC50 - Desmodesmus subspicatus (green algae) - 0.31 mg/l - 72 h growth inhibition.

12.2 PERSISTENCE AND DEGRADABILITY: Biodegradability aerobic

Result: 81% - 14 days; Readily biodegradable. Method: (OECD Test Guideline 201)

12.3 BIOACCUMULATIVE POTENTIAL: Lepomis macrochirus (Bluegill) - 21 d

Bio-concentration Factor (BCF): 663

12.4 MOBILITY IN SOIL: No data available.

12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment, and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Recommended methods are incineration or biological treatment at a permitted disposal facility. When discarded Butyl Benzyl Phthalate is not considered Hazardous waste as defined in 40CFR 361.

CONTAMINATED PACKAGING: Dispose of as unused product.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

Land Transport (DOT)

14.1 USDOT ID Number-----> UN3082

- 14.2 USDOT Shipping Name-----> Environmentally Hazardous Substances,
Liquid, n.o.s. (Butyl Benzyl Phthalate)
- 14.3 USDOT Hazard Classification-----> 9
USDOT Label Codes-----> 9
- 14.4 USDOT Package Code-----> III
- 14.5 Marine Pollutant-----> Yes
- 14.6 Special precautions for user-----> None
Emergency Response Guide-----> 171
Reportable Quantity-----> 100lbs,

Sea Transport (IMDG)

- 14.1 UN Number:-----> UN3082
- 14.2 Proper Shipping Name-----> ENVIRONMENTALLY HAZARDOUS
SUBSTANCES, LIQUID, N.O.S. (BUTYL BENZYL PHTHALATE)
- 14.3 Hazard Class:-----> 9
USDOT Label Codes-----> 9
- 14.4 Packing Group:-----> III
- 14.5 Marine Pollutant-----> Yes
EMS-No-----> F-A, S-F

Air Transport (IATA)

- 14.1 UN Number:-----> UN3082
- 14.2 Proper Shipping Name:-----> Environmentally Hazardous Substances,
Liquid, n.o.s. (Butyl Benzyl Phthalate)
- 14.3 Hazard Class:-----> 9
USDOT Label Codes-----> 9
- 14.4 Packing Group:-----> III
- 14.5 Environmental hazard-----> No

15. REGULATORY INFORMATION

**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION
SPECIFIC FOR THE SUBSTANCE OR MIXTURE:**

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not Listed

SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard, Chronic Health Hazard.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed

Butyl Benzyl Phthalate CAS 85-68-7

Reportable Quantity – 100lbs.

SECTION 101(14) Reportable Quantity: 100lbs.

Massachusetts Right to Know Components

Benzyl butyl phthalate CAS-No.85-68-7

Pennsylvania Right to Know Components

Benzyl butyl phthalate CAS-No.85-68-7

New Jersey Right to Know Components

Benzyl butyl phthalate CAS-No.85-68-7

California Prop. 65 Components

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Benzyl butyl phthalate CAS-No.85-68-7

TSCA (Toxic Substance Control Act)

Butyl Benzyl Phthalate CAS 85-68-7 is listed on the TSCA Inventory.

International Inventories:

<u>Country or Region</u>	<u>Inventory Name</u>	<u>On inventory yes/no</u>
<u>Australia</u>	Australian Inventory of Chemical Substances (AICS)	Yes
<u>Canada</u>	Domestic Substances List (DSL)	Yes
<u>Canada</u>	Non-Domestic Substances List (NDSL)	No
<u>China</u>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<u>Europe</u>	European Inventory of Existing Commercial Chemicals Substances (EINECS)	Yes
<u>Europe</u>	European List of Notified Chemical Substances (ELINCS)	No
<u>Japan</u>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<u>Japan</u>	Industrial Safety & Health Law Inventory (ISHL)	Yes
<u>Korea</u>	Existing Chemicals List (ECL)	Yes
<u>Mexico</u>	National Inventory of Chemical Substances (INSQ)	Yes
<u>New Zealand</u>	New Zealand Inventory	Yes
<u>Philippines</u>	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
<u>Switzerland</u>	Inventory of Notified New Substances (CHINV)	Yes
<u>Taiwan</u>	National Existing Chemical Inventory (NECI)	Yes
<u>United States & Puerto Rico</u>	Toxic Substances Control Act Inventory	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=1 Fire=1 Reactivity=0
HMIS RATINGS (SCALE 0-4): Health=1 Fire=1 Reactivity=0 PPE=B

Hazard statement(s) from Section 2 and 3:

H360 May damage fertility or the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Date of preparation-----> February 16, 1999

Revision Number-----> 1.5

Revision Content-----> Updated sections: 1, 3, 5, 8, and 11

Revision Date-----> January 4, 2019

Prepared by-----> T. G. Fenstermaker Jr.

Acronyms:

ACGIH	-	American Conference of Governmental Industrial Hygenists
AIHA	-	American Industrial Hygiene Association
ANSI	-	American Nation Standards Institute
API	-	American Petroleum Institute
CERCLA	-	Comprehensive Emergency Response, Compensation, and Liability Act
DOT	-	U.S. Department of Transportation
EPA	-	U.S. Environmental Protection Agency
HMIS	-	Hazardous Materials Information System
IARC	-	International Agency For Research On Cancer
MSHA	-	Mine Safety and Health Administration
NFPA	-	National Fire Protection Association
NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	-	Self-Contained Breathing Apparatus
STEL	-	Short-Term Exposure Limit (generally 15 minutes)
TLV	-	Threshold Limit Value
TSCA	-	Toxic Substances Control Act
TWA	-	Time Weighted Average (8hr.)
WHMIS	-	Canadian Workplace Hazardous Materials Information System

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