MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Dibutyl Phthalate

SECTION 1 Chemical Name and Company Information

CAS # 84-74-2

CHEMICAL NAME/FAMILY:

Dibutyl Phthalate

CHEMICAL SYNONYMS:

DBP

SUPPLIERS NAME:

Worldchem LLC

76 Northeastern Blvd.

Suite 33B

Nashua, NH 03062

SUPPLIERS PHONE NUMBER: 603 204 5031

TRANSPORTATION EMERGENCY PHONE NUMBER: CHEMTREC 1-800-424-9300

SECTION 2 Composition/ Information on ingredients

Name

CAS number

Weight %

DATE: 07/20/10

Dibutyl Phthalate

84-74-2

100%

SECTION 3 Hazards Identification

CAUTION!

MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS – SUCH AS BIRTH DEFECTS, MISCARRIAGES OR INFERTILITY BASED ON ANIMAL DATA.

HMIS ® Hazards Ratings:

Health:

1*

Flammability:

1

Chemical Reactivity:

0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

SECTION 4 First Aid Measures

Eyes:

Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Skin:

Wash with soap and water. Get medical attention if symptoms occur.

Inhalation:

If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Indestion:

Seek medical advice.

SECTION 5 Fire-Fighting Measures

Extinguishing Media:

Water spray, dry chemical, carbon dioxide, foam.

Special Fire-fighting Procedures:

Wear self-contained breathing apparatus and protective

clothing.

Hazardous Combustion Products:

Carbon dioxide, carbon monoxide.

Unusual Fire and Explosion Hazards:

None

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SECTION 6 Accidental Release Measures

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

For large spills:

Flush spill area with water spray. Prevent runoff from entering drains,

sewers or streams. Dike for later disposal.

SECTION 7 Handling and Storage

Personal Precautionary Measures:

Wash thoroughly after handling.

Prevention of Fire and Explosion:

Keep from contact with oxidizing materials.

Storage:

Keep container closed.

SECTION 8 Exposure Controls/Personal Protection

Country specific exposure limits have not been established or are not applicable unless listed below.

DiButyl Phthalate

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 5mg/m3

US, NIOSH: Pocket Guide to Chemical Hazards

Recommended exposure limit (REL): 5 mg/m3

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 5 ma/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Listed.

US. California Code of Regulations. Title 8, Section 5155. Airborne Contaminants Time Weighted Average (TWA) Permissible Exposure Limit (PEL): 5mg/m3

Ventilation:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appriopriate, government approved (where applicable), air-purifying filter, cartridge, or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection:

It is good industrial hygiene practice to minimize eye contact.

Skin Protection:

It is good industrial hygiene practice to minimize skin contact.

Recommended Decontamination Facilities: Eye bath, washing facilities.

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SECTION 9 Physical and Chemical Properties

Physical Form:

Liquid

Color: Odor:

Colorless Odorless

Specific Gravity:

1.048 (20°C)

Vapor Density:

9.6

Vapor Pressure:

20°C; 0.0000189 mbar

Freezing Point:

-35°C 340°C

Boiling Point: Flash Point:

191°C (Cleveland open cup)

Solubility in Water:

11.2 mg/l

Viscosity:

12.96 mPa.s (20°C)

Octanol/Water Partition Coefficient:

P: 61,660; loaP:4.79

Autoignition Temperature:

404°C (ASTM D2155)

Thermal Decomposition Temperature: (DTA) No exotherm to boiling

SECTION 10 Stability and Reactivity

Stability:

Stable: however. material can decompose at elevated

temperatures.

Incompatibility:

Material reacts with strong oxidizing agents.

Hazardous Polymerizations:

Will not occur.

SECTION 11 Toxicological Information

General:

High oral doses of this material given to pregnant animals produced some minor abnormalities in their offspring. However, high doses to humans handling this material are not expected since oral consumption is not a likely route to significant exposure. Because this material does not evaporate readily and it is not easily absorbed through human skin, it is not expected to produce such effects in humans through inhalation or skin exposure when handled in a manner consistent with the precautionary measures contained in this Safety Data Sheet.

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Oral LD50 (rat):

SECTION 12

20,000-25,000 mg/kg

Dermal LD50 (guinea pig): Dermal LD50 (rabbit):

>2,096 mg/kg > 2 ml/kg (highest dose tested) >20,960 mg/kg>20 ml/kg (highest dose tested)

Skin Irritation (guinea pig):

slight

Skin Irritation (rabbit):

none

Eye Irritation (human):

slight

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Oxygen Demand Data:

BOD-5: 340 mg/g BOD-5: 430 mg/g

COD (Chemical Oxygen Demand):: 1,710 mg/g

Ecological Information

ThBOD: 2,240 mg/g

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SECTION 12 Ecological Information continued

Acute Aquatic Effects Data:

96 h LC-50 (fathead minnow): 0.92 mg/l NOEC: 0.32 mg/l 96 h LC-50 (rainbow trout): 1.6 mg/l NOEC: 0.5 mg/l >0.6 mg/l NOEC: 0.6 mg/l

96 h LC-50 (sheepshead minnow):

96 h LC-50 (bluegill sunfish):

0.48 mg/l NOEC: 0.42 mg/l 3.0 mg/l NOEC: 1.7 mg/l

96 h LC-50 (daphnid):

SECTION 13 Disposal Considerations

Discharge, treatment, or disposal may be subject to national, state or local laws. Incinerate.

SECTION 14 Shipping Information

Transportation Emergency Number (CHEMTREC) 1-800-424-9300.

Important Note:

Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT (USA):

Class 9, Packing Group III when material is shipped in quantities in one package at or above the Reportable Quantity and when not other hazard class applies, otherwise, not regulated.

Reportable quantity:

4.5 kg (dibutyl phthalate)

Marine pollutant:

dibutyl phthalate

Possible shipping descriptions: not regulated

UN 3082 Environmentally hazardous substances, liquid, n.o.s. (dibutyl phthalate) 9 III

Sea- IMDG (International Maritime Dangerous Goods):

Marine pollutant:

dibutyl phthalate

Possible shipping descriptions:

UN 3082 Environmentally hazardous substances, liquid, N.O.S. (dibutyl phthalate) 9 III

Air- ICAO (International Civil Aviation Organization):

Class not regulated

Possible shipping descriptions: not regulated

SECTION 15 Regulatory Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status

Controlled

WHMIS (Canada) Hazard Classification:

D/2/B

SARA 311 - 312 Hazard Classification(s):

delayed (chronic) health hazard

SARA 313:

None, unless listed below

Dibutyl Phthalate

Carcinogenicity Classification (components present at 0.1 % or more): None, unless, listed

below

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SECTION 15 Regulatory Information continued

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from this listing.

EINECS (European Inventory of Existing Commercial Chemical Substances): This product is listed on EINECS or otherwise complies with EINECS requirements. EINECS Number: 201-557-4

AICS/ NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notifications and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act. 02214.

****** END OF REPORT *******

FOR Worldchem LLC

DATE ISSUED: 07/01/02 DATE REVISED: 07/20/10 UNK = UNKNOWN

< = LESS THAN

N/A = NOT APPLICABLE

> = MORE THAN

N/D = NOT DETERMINED
N/E = NOT ESTABLISHED

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