Plasti Pigments Private Limited

MATERIAL SAFETY DATA SHEET
PLASPEROX® DTB

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

PRODUCT NAME: PLASPEROX® DTB
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MANUFACTURER: Plasti Pigments Private Limited
ADDRESS: Plot No. C – 8/5, TTC Industrial Area, Thane Belapur Road, Navi Mumbai - 400703. INDIA
EMAIL: support@plastipigments.com
CHEMICAL NAME: Di-tertiary-Butyl Peroxide (DTB)
CAS NO.: 110-05-4
CHEMICAL FAMILY: Organic Peroxides - Dialkyl Peroxides
CHEMICAL FORMULA: $C_8H_{18}O_2$

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	%
Di-tertiary-Butyl Peroxide	110-05-4	99

SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

PHYSICAL HAZARDS Organic Peroxide. Flammable. Contact with combustible materials may cause fire. Decomposition.
HEALTH HAZARDS Irritant.
EXPOSURE LIMITS Both ACGIH and OSHA PEL have not been established for this chemical.
ROUTES OF EXPOSURE
Skin Contact/ Severe skin irritant causes, redness, blistering, and edema. May be harmful if absorbed through the skin.
Eye Contact Eye contact causes severe corrosion and may cause blindness.
Ingestion Harmful if swallowed.
Inhalation Moderately toxic by inhalation. Material may be irritating to mucous membranes and upper respiratory tract.
EFFECTS OF OVER-EXPOSURE Prolonged inhalation of vapors may cause mucous membrane irritation and vertigo. There are no known medical conditions, which are recognized as being aggravated by exposure.

SECTION 4 - FIRST-AID MEASURES

SKIN Immediately remove any contaminated clothing. Wash contaminated area thoroughly with soap and copious amounts of water. If irritation or adverse symptoms develop, seek medical attention.
EYES Remove any contact lenses at once. Flush eyes with water for at least 15 minutes. Ensure adequate flushing by separating the eyelids with fingers. If irritation or adverse symptoms develop, seek medical attention.
INGESTION Contact a physician, hospital or Poison Control Center at once. DO NOT INDUCE VOMITING. Wash out mouth with water provided person is conscious.

INHALATION Remove to fresh air, if coughing, breathing becomes labored, irritation develops or other symptoms develop, seek medical attention at once, even if symptoms develop several hours after the exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT 50°F (10°C), C.O.C.
FLAMMABLE LIMITS .75% - 100%
AUTOIGNITION POINT Not established.
EXTINGUISHING MEDIA
Water from a safe distance - preferably with a fog nozzle or foam. In case of very small fires, other means such as carbon dioxide, foam or dry chemical extinguishers may be effective. Dry chemical combined with DTB may re-ignite. Light water additives may be effective at extinguishing DTB fires.
SPECIAL FIRE FIGHTING PROCEDURES
Evacuate all unnecessary personnel. Fight fire from a safe distance. Firemen should be equipped with protective clothing and SCBA's. In case of fire near storage area, cool the containers with water spray. If dry chemical is used to extinguish a DTB fire, the extinguished area must be thoroughly wetted down with water to prevent re-ignition.
UNUSUAL FIRE AND EXPLOSION HAZARDS
During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Contact with other material may cause fire. The heat of decomposition of the peroxide adds to the heat of the fire. Container explosion may occur under fire conditions. May explode when exposed to heat. Self-ignition is possible. Dry chemical fire extinguishing agent may catalyze the decomposition.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE
Evacuate area of all unnecessary personnel. Remove all sources of ignition. Refer to protective measures listed in Sections 7 and 8. Spilled material should be swept up with an inert, moist diluent such as perlite, vermiculite, or sand. Keep spilled material from entering drains, sewers, streams, etc. Carefully collect the material and transfer into a clean polyethylene lined or a polyethylene drum disposal container using non-sparking tools. Add water to container. Label container and store in a secure area for proper disposal. Flush spill area with copious amounts of water. Ventilate area and wash spill site after material pickup is complete

SECTION 7 - HANDLING AND STORAGE

HANDLING
Rotate stock using the oldest material first. Avoid contact with skin, eyes and clothing. Avoid breathing vapors and use with adequate ventilation. Avoid prolonged or repeated exposure. Use PPE as specified in Section 8. Keep containers closed to prevent contamination. Keep away from sources of heat, sparks or flame. Do not add to hot solvents or monomers as a violent decomposition and/or reaction may result. Take precautionary measures against static discharge. Keep in original container. DO NOT USE

NEAR FOOD OR DRINK. Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

STORAGE
The activity and stability of many organic peroxide formulations is directly related to the shipping and storage temperature history. Cool storage at 80°F (27°C) or below is recommended for longer shelf life and stability. Prolonged storage at elevated temperatures will cause product degradation, gassing and potential container rupture that can result in a fire and/or explosion. Do not store above 100°F (38°C). Store out of direct sunlight in a well ventilated area away from combustible and incompatible materials. DO NOT STORE WITH FOOD OR DRINK. Refer to the Storage and Handling section of www.plastipigments.com for additional storage information.

OTHER PRECAUTIONS
Unmixed, uncontaminated material, remaining at the end of the day, shall be returned to a proper organic peroxide storage area. Under no circumstances should material be returned to the original container. Do not reuse containers. Properly dispose of empty containers.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

VENTILATION Use with adequate ventilation.
RESPIRATORY PROTECTION Not generally required unless necessary to prevent respiratory irritation. If necessary use DISH approved cartridge respirator with organic vapor cartridges. In case of spill or leak of unknown concentration, use DISH approved supplied air respirator.
EYE PROTECTION Safety goggles recommended, goggles with a face shield are preferred.
HAND PROTECTION Protective gloves recommended, solvent resistant. (Neoprene, nitrile or polyethylene)
OTHER A safety shower and eyewash.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, colorless liquid with a mild odor.
BOILING POINT: 111°C (232°F) **SPECIFIC GRAVITY:** .79
VAPOR PRESSURE: ~ 19.5mmHg @ 20°C **FLASH POINT:** 50°F (10°C)
VAPOR DENSITY: ~ 5 (air = 1) **FLAMMABLE LIMITS:** .75% - 100%
EVAPORATION RATE: <1 (ethyl ether = 1) **SADT** ~ 80°C (176°F)
% VOLATILE BY VOLUME: 100 **pH:** Not applicable.
SOLUBILITY IN WATER: <1%

SECTION 10 - STABILITY AND REACTIVITY

STABILITY Stable when stored at, or below, the recommended maximum temperature.
CONDITIONS TO AVOID Direct sunlight, heat, flames, sparks. Contamination. Prolonged storage at elevated temperatures. Storage above SADT. Storage near flammable or combustible materials.
MATERIALS TO AVOID Promoters, accelerators, heavy metals salts, polymerizing initiators, amines, strong acids, corrosives, oxidizing and reducing agents, or any hot material.
HAZARDOUS DECOMPOSITION PRODUCTS Carbon monoxide, carbon dioxide, flammable gases, and other potentially harmful gases.

HAZARDOUS POLYMERIZATION Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Di-tertiary Butyl Peroxide
Hazard Data:
Inhalation: Rat--LD50: >4103 ppm/4hr (male)
Intraperitoneal: Rat--LD50: 3210 mg/kg (male)
Oral: Mouse--LD50: >50 ml/kg; Rat--LD50: >25,000 mg/kg
Skin: Mouse--LD50: ~19,000 ml/kg;

SECTION 12 - ECOLOGICAL INFORMATION

No data is available on the preparation itself. The product should be prevented from entering drains, sewers, streams, etc.

SECTION 13 - DISPOSAL CONSIDERATIONS

Prevent material from entering drains, sewers, streams, etc. Immediately dispose of waste material at an approved hazardous waste management facility in accordance with central, state and local regulations.
DOT Shipping Name: ORGANIC PEROXIDE TYPE E, LIQUID, (Di-tert-butyl peroxide, ≤100%)

SECTION 14 - TRANSPORT INFORMATION

DOT Hazard Class: 5.2
UN/NA ID No.: UN3107
DOT Packing Group: PG II
Labels: 5.2 (Organic Peroxide)
2004 ERG GUIDE NO.: 145

SECTION 15 - REGULATORY INFORMATION

The following chemicals are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
Chemical Name CAS Number Percent
None N/A N/A
Australian Inventory of Chemical Substances (AICS)
The ingredients in this product are listed in the Australian AICS Inventory.
Canadian Domestic Substances List (DSL)
The ingredients in this product are listed in the Canadian DSL Inventory.
Chinese Inventory of Existing Chemical Substances Manufactured or Imported in China (IECSC)
The ingredients in this product are listed in the Chinese IECSC Inventory.
European Inventory of Existing Commercial Chemical Substances (EINECS)

The ingredients in this product are listed in the European EINECS Inventory.

Japanese Exiting and New Chemical Substances (ENCS)

The ingredients in this product are listed in the Japanese ENCS Inventory.

Korean Existing Chemicals List (ECL)

The ingredients in this product are listed in the Korean ECL Inventory.

US Toxic Substances Control Act (TSCA)

The ingredients in this product are listed in the US TSCA Inventory.

Status of Carcinogicity

Not recognized as a carcinogen by the IARC, NTP or OSHA.

SECTION 16 - OTHER INFORMATION

VOC Information

No VOC data is currently available.

NFPA 432 Organic Peroxide Classification

Class III

NFPA 704 Rating HMIS Rating

Health Flammability Reactivity Health Flammability Reactivity

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MSDS Reference: DTB MSDS 06.08.01

DISCLAIMER OF LIABILITY

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This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.