



Safety Data Sheet (SDS)

Revision / Review Date: 2/27/15

1. Chemical Product and Company Identification

Product Name:	HB-DCDPA
Distributed By:	HB Chemical 1665 Enterprise Parkway Twinsburg Oh 44087 Phone - 330-920-8023
SDS Prepared By (w Suppliers Input):	HB Chemical
Chemical Name / Family:	4,4'-Bis(alpha, alpha-dimethylbenzyl) diphenylamin
Common name:	Dicumylated Diphenyl Amine
Molecular Formula:	C30H31N
Molecular Weight via GPC, Mn:	405.57
Product Use:	Antioxidants and Inhibitors
OSHA Status:	Not available
CAS No:	10081-67-1
EC No:	233-215-5

For emergency health, safety, and environmental information, calls 330-920-8023

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

<u>Warning:</u>	Not available.
<u>Signs and Symptoms of Exposure:</u>	Irritation to skin and eyes, nose, throat and respiratory tract.
<u>Primary Routes of Entry:</u>	Inhalation, skin and eyes.
<u>Medical Conditions Generally Aggravated by Exposure:</u>	Not available.
<u>Eye Contact:</u>	May cause eye irritation.
<u>Skin Contact:</u>	May cause skin irritation.
<u>Ingestion:</u>	May cause digestive irritation.
<u>Inhalation:</u>	May cause irritation to the nose, throat and upper respiratory tract.
<u>HMIS Hazard Ratings:</u>	Health-1, Flammability -1, Reactivity -0
<u>HMIS limitation statement:</u>	The HMIS hazard ratings numbers are meant to give a quick indication of the relative hazards associated with the product. All of the information contained in the SDS should be consulted to assist with the safe handling of this material.

3. Composition / Information on Ingredients

Weight Percent / Typical	Component Identity	CAS Registry Number
99%	4,4'-Bis(alpha, alpha-dimethylbenzyl) diphenylamin	10081-67-1

4. First Aid Measures

<u>Inhalation:</u>	Remove to fresh air. Obtain medical attention.
<u>Eyes:</u>	Immediately flush eyes with water and continue washing for several minutes. Obtain medical attention if irritation persists.
<u>Skin:</u>	Remove contaminated clothing. Wash thoroughly with warm water using a mild soap. Obtain medical attention if irritation persists.
<u>Ingestion:</u>	Do not induce vomiting. Rinse mouth with water. Obtain medical attention.

5. Fire-Fighting Measures

<u>Suitable Extinguishing Media:</u>	Dry Chemical, Carbon Dioxide CO ₂ , Foam or water fog.
<u>Special Fire Fighting Procedures:</u>	Do not discharge extinguishing waters into streams, rivers and lakes. Wear self-contained breathing apparatus and protective suit.
<u>Hazardous Combustion Products:</u>	Combustion products nitrogen oxides, carbon monoxide, carbon dioxide.
<u>Unusual fire and explosion hazards:</u>	Dust may form explosive mixture in air. Combustion will create very toxic, irritant, and extremely flammable vapors. Dust suspended in critical proportions in air represents a severe explosion hazard. Dust may be ignited by any significant heat source.

6. Accidental Release Measures

<u>Steps to be taken in case material is spilled:</u>	Wear protective clothing. Avoid contact with eyes and skin. Contain spreading. Clean up spillages using a suitable industrial vacuum or shovel up. Absorb on inert material such as sand, earth. Avoid creating dust and collect into a container for disposal as per local regulation. Recover the product and store it in a dry, labeled container.
<u>Environmental Disposal Information:</u>	Do not discharge into sewers. Do not allow this chemical to enter the environment. Do not contaminate surface water.

<u>Waste Disposal:</u>	Not available.
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7. Handling and Storage

<u>Empty Containers:</u>	Not available.
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<u>Precautions to be taken in handling:</u>	Avoid breathing vapor. Use with adequate ventilation. Prevent dust formation. Avoid contact with skin and eyes. Wash thoroughly after handling.
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<u>Storage:</u>	Containers should be stored tightly sealed in the original container in a dry place. Store away from moisture and heat.
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8. Exposure Controls / Personal Protection

<u>Exposure Controls:</u>	No other exposure limits have been established. Components with workplace control parameters.
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<u>Respiratory Protection:</u>	If breathable dust is formed. Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely.
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<u>Ventilation:</u>	Use with adequate ventilation.
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<u>Protective Gloves:</u>	Protective gloves.
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<u>Eye Protection:</u>	Safety goggles with side shields.
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<u>Skin and Body Protection:</u>	Chemical protective clothing.
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<u>Other Precautions:</u>	Before eating, drinking or smoking, wash hands and face thoroughly with soap and water.
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<u>Decontamination Facilities:</u>	Eye bath, safety shower.
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9. Physical and Chemical Properties

<u>Physical Form:</u>	Solid Powder
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<u>Appearance & Odor:</u>	White/ Characteristic
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<u>Specific Gravity:</u>	1.14
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<u>Softening Point, R&B:</u>	Not available.
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<u>Solubility in Water:</u>	Insoluble
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<u>Flash Point, TAG CC F:</u>	>250°C
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<u>Percent Volatiles (by weight):</u>	Not available.
<u>Evaporation Rate (Water ~ I):</u>	Not available.
<u>Vapor Pressure (mm Hg):</u>	<0.01 kPa (<0.075 mm Hg) at 20°C
<u>Vapor Density (Air ~ I):</u>	Not available.
<u>Boiling Point (°F) Initial:</u>	Not available.
<u>Auto ignition Temperature, °C:</u>	298°C
<u>Flammable Limits, %(V):</u>	Not available.
<u>Melting Point:</u>	98-102°C.
<u>Density:</u>	1000 kg/m3 (1 g/cm3) at 20°C

10. Stability and Reactivity

<u>Stability:</u>	This product is stable under normal conditions.
<u>Incompatibility (Materials to Avoid):</u>	Material reacts with strong mineral acids and oxidizing agents.
<u>Conditions to Avoid:</u>	Extreme heat.
<u>Hazardous Polymerization:</u>	Hazardous polymerization will not occur.
<u>Hazardous Decomposition Products:</u>	Thermal decomposition will evolve very toxic, irritant and extremely flammable vapors. Nitrogen oxides, carbon monoxide, carbon dioxide.

11. Toxicological Information

This material is not listed as a carcinogen or potential carcinogen by NTP, IARC, or OSHA.

<u>Oral:</u>	LD 50(Rat)>10,000mg/kg.
<u>Skin:</u>	May be irritating to skin. Rabbit: Negative.
<u>Eyes:</u>	Dust may cause irritation. Rabbit: Negative.
<u>Inhalation:</u>	Combustion or thermal decomposition will evolve very toxic and irritant vapors. Unlikely to be hazardous by inhalation unless heated.
<u>Mutagenicity Ames Salmonella:</u>	Negative.
<u>Long Term Exposure:</u>	No information available.

12. Ecological Information

No information available for the environmental effects.

13. Disposal Considerations

Contaminated packs should be emptied as far as possible; they can then be passed on for recycling after being thoroughly cleaned. Containers that cannot be cleaned must be treated as waste. Avoid discharge to sewers and natural waters. Must be disposed of by special means e.g. suitable insertion in accordance with local regulations.

14. Transport Information

<u>D.O.T. Shipping Name:</u>	Not regulated.
<u>Air - ICAO (international Civil Aviation Organization):</u>	Not regulated.
<u>Sea - IMDG (International Maritime Dangerous Goods):</u>	Not regulated.
<u>WHMIS Classification:</u>	Not a controlled product.
<u>TDG Classification:</u>	Not regulated.

15. Regulatory Information

All components of this material are on the TSCA Inventory.

All components of this material are on the Canadian DSL.

<u>EINECS/ELINCS (Europe):</u>	Ingredients listed on the EINECS inventory.
<u>Japanese Inventory (ENCS):</u>	Listed on the ENCS inventory.
<u>Korean Chemical Inventory(ECL):</u>	Listed on the Existing Chemicals List (ECL).
<u>Australian Chemical Inventories (AICS):</u>	Listed on the AICS inventory.
<u>New Zealand (NZ):</u>	Listed on the NZ inventory.
<u>Philippines (PICCS) Inventory:</u>	Listed on the PICCS inventory.
<u>China (ELECS):</u>	Listed on the ELECS inventory.
<u>SARA 313:</u>	None.
<u>SARA 311/312:</u>	None.
<u>SARA 302/304:</u>	None.
<u>California Proposition 65:</u>	None.

<u>New Jersey Right-to-Know List:</u>	4,4'Di(a,a-dimethylbenzl) diphenylamine, CAS NO. 10081-67-1
<u>Massachusetts Right To Know Components:</u>	4,4'Di(a,a-dimethylbenzl) diphenylamine, CAS NO. 10081-67-1
<u>Pennsylvania Right To Know Components:</u>	4,4'Di(a,a-dimethylbenzl) diphenylamine, CAS NO. 10081-67-1

16. Other Information

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.