



## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** WESTCO™ ODP

### Other means of identification

**Chemical Name:** bis(4-(1,1,3,3-tetramethylbutyl)phenyl)amine

**Synonyms:** 4-octyl-N-phenylaniline, octylated diphenylamine

### Recommended use and restrictions on use

**Recommended use:** Antioxidant in rubber applications.

**Restrictions on use:** No additional information available.

### Supplier information

**Supplier:** Western Reserve Chemicals

**Supplier Address:** 4837 Darrow Road,  
Stow, OH 44224 USA

**Telephone:** 330-650-2244

**Fax:** 330-650-2255

**Website:** [www.wrchem.com](http://www.wrchem.com)

**Emergency phone number:** Chemtrec: 1-800-424-9300 US

## SECTION 2 – HAZARD(S) IDENTIFICATION

### GHS Classification of the substance or mixture in accordance with 29 CFR 1910.1200

Not a hazardous substance or mixture.

### GHS Label Elements

**Hazard Symbol:** None

**Signal word:** Warning

### Hazard statements:

May form combustible dust concentrations in air.

### Precautionary statements:

None

**SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

**Substance/mixture: Pure substance**

<b>Chemical Identity</b>	<b>CAS Number</b>
bis(4-(1,1,3,3-tetramethylbutyl)phenyl)amine	15721-78-5

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.

**SECTION 4 – FIRST AID MEASURES**

**Inhalation:** Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.

**Ingestion:** If swallowed, clean mouth with water. Do not induce vomiting. Consult a physician. Never give anything by mouth to an unconscious person.

**Skin contact:** Take off contaminated clothing and shoes immediately. Wash with soap and plenty of water. Consult physician if irritation persists.

**Eye contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Flush abundantly with clean water for at least 15 minutes and refer to a physician.

**Most important symptoms/effects, acute and delayed:**

**Potential acute health effects:**

<b>Eye contact:</b>	May cause irritation to eyes and mucous membrane.
<b>Inhalation:</b>	May be irritating to respiratory system.
<b>Skin contact:</b>	May cause irritation to skin. May cause dryness and cracking on skin.
<b>Ingestion:</b>	No information available.

**Over-exposure signs/symptoms:**

<b>Eye contact:</b>	No specific data.
<b>Inhalation:</b>	No specific data.
<b>Skin contact:</b>	No specific data.
<b>Ingestion:</b>	No specific data.

**Indication of immediate medical attention and special treatment needed:** Treat symptomatically.



## SECTION 5 – FIRE FIGHTING MEASURES

**Suitable extinguishing method:** In case of fire, use carbon dioxide (CO<sub>2</sub>), foam or dry chemical.

**Unsuitable extinguishing method:** Do NOT use water jet.

**Specific hazards arising from chemical:** Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Do not allow run-off from fire fighting to enter drains or watercourses.

**Firefighting equipment/instructions:** Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective equipment.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air. Non-sparking tools should be used. Avoid dust formation.

**Methods and materials for containment and cleaning up:**

Sweep up and shovel and keep in suitable, closed containers for disposal.

## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:**

Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Keep away from heat and sources of ignition. For personal protection, see Section 8.

**Conditions for safe storage, including any incompatibilities:** Store containers tightly closed in a dry and well-ventilated place. Avoid contact with strong oxidizing agents.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Appropriate engineering controls:**

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are de-signed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

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. Ensure adequate ventilation, especially in confined areas.

Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at work-places have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m<sup>3</sup> - total dust, 5 mg/m<sup>3</sup> - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m<sup>3</sup> - respirable particles, 10 mg/m<sup>3</sup> - inhalable particles.

#### Individual protection measures, such as personal protective equipment:

**Respiratory protection:** No personal respiratory protective equipment normally required.

**Eye/face protection:** Safety glasses.

**Skin and body protection:**

**Hand protection:** For prolonged or repeated contact use protective gloves.

**Other protection:** Protective clothing.

**Hygiene measures:** General industrial hygiene practice.

**Environmental exposure controls:** Do not let product enter drains.

## SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance:</b>	Solid (Flakes, Powder or Pastilles)
<b>Color:</b>	Brown
<b>Odor:</b>	Characteristic
<b>pH:</b>	5.7
<b>Boiling Point/Range:</b>	>464°F/240°C (1,013 hPa)
<b>Melting Point/Range:</b>	185-20°F/85-94°C
<b>Flash Point (°C):</b>	392°F/200°C (495°F) Method: closed cup
<b>Evaporation rate:</b>	No data available
<b>Flammability (solid/gas):</b>	No data available
<b>Lower explosion limit:</b>	No data available
<b>Upper explosion limit:</b>	No data available
<b>Vapor Pressure:</b>	<0.1 Pa (77°F/25°C) Method: estimated
<b>Vapor Density:</b>	Heavier than air
<b>Bulk Density:</b>	No data available



<b>Solubility:</b>	Soluble in other solvents. Practically insoluble in water.
<b>Partition Coefficient: (n-octanol/water)</b>	log Pow -10.81 calculated
<b>Auto-ignition Temperature:</b>	No data available
<b>Decomposition Temperature:</b>	No data available
<b>Explosive Properties:</b>	Not applicable
<b>Oxidizing properties:</b>	No data available

## SECTION 10 - STABILITY & REACTIVITY

**Reactivity:** Stable under recommended storage conditions.

**Chemical stability:** No decomposition if stored and applied under recommended storage and handling conditions.

**Possibility of hazardous reactions:** No adverse effects are expected under normal conditions of use.

**Conditions to avoid:** No data available.

**Incompatible materials:** Avoid contact with strong oxidizing agents.

**Hazardous decomposition products:** No hazardous decomposition products are known.

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Acute Toxicity:**  
**Oral:** LD50: >2,000 mg/kg  
**Inhalation:** Not classified due to lack of data.  
**Dermal:** LD50: >2,000 mg/kg

**Skin Irritation/Corrosion:** Non-irritant to the skin (Rabbit)

**Eye Damage/Irritation:** Non-irritant to the eyes (Rabbit)

**Respiratory or Skin Sensitization:** Not a skin sensitizer.

**Reproductive Toxicity:** Not classified due to data which are conclusive although insufficient for classification.

**Germ cell Mutagenicity:** Mutagenicity studies were negative.

**Carcinogenicity:** Not classified due to lack of data.

**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.



**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**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.

**STOT-single exposure:**

Not classified due to data which are conclusive although insufficient for classification.

**STOT-repeated exposure:**

Not classified due to data which are conclusive although insufficient for classification.

**Aspiration hazard:** No aspiration toxicity classification.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:**

Fish: No data available

Daphnia and other aquatic invertebrates: No data available

Algae: No data available

**Persistence and degradability:** Not readily biodegradable.

**Bioaccumulative potential:** Bioaccumulation factor (BCF): 1,000,000

**Mobility in soil:** No data available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Product**

**Methods of disposal:**

The generation of waste should be avoided or minimized 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. Disposal should be accordance with Federal, State and Local chemical and waste disposal regulations.

**Packaging**

**Methods of disposal:**

Contaminated packaging: Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.



## SECTION 14 - TRANSPORTATION INFORMATION

**49 CFR U.S. DOT Classification:**

Not regulated as a dangerous good.

**IATA-DGR:**

Not regulated as a dangerous good.

**IMDG-Code:**

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**

Not evaluated.

## SECTION 15 - REGULATORY INFORMATION

**U.S.**

**TSCA Inventory Status:** Listed as Active on the TSCA inventory.

**SARA 311/312 Hazards:** No SARA hazards.

**SARA 313:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop. 65:**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## SECTION 16 - OTHER INFORMATION

**Issue date:** 09-30-2021

**Revision date:** 2-25-2022

**Version #:** 02

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