



SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product identifier used on the label:

Product Name: Westco DPPD

Other means of identification:

Product Description: Westco DPPD protects NR and Synthetic Rubbers against oxidation, flex cracking, stress cracking and heat aging; improves ozone resistance in CR.

Synonyms: N,N'-Diphenyl-p-Phenylenediamine; Antioxidant H, Antioxidant DPPD

Recommended use of the chemical and restrictions on use:

Product Use/Restriction: Westco DPPD is suitable for use in rubber compounds where light discoloration or staining is not objectionable

Chemical distributor, or other responsible party Name, address, and telephone number:

Distributor Name: Western Reserve Chemical Corporation

Address: 4837 Darrow Road
Stow, OH 44224
USA

General Phone Number: 330 650 2244

General Fax Number: 330 650 2255

Emergency phone number:

Emergency Phone Number: Chemtrec 1 800 424 9300 USA

Website: www.wrchem.com

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:



Signal Word: WARNING!

GHS Class:

- * Skin Sensitizer, Category 1.
- * Skin Irritant, Category 2.
- * Eye Irritant, Category 2.
- * Acute Toxicity Oral, Category 4.

Hazard Statements:

- * May cause an allergic skin reaction.
- * Causes eye irritation.
- * May be harmful if swallowed or in contact with skin
- * Causes skin and eye irritation
- * Harmful to aquatic life with long lasting effects.

Precautionary Statements: Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protective equipment as required. IF exposed or concerned: Get medical advice/attention. Contaminated work clothing should not be allowed out of the workplace. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Avoid release to the environment.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Eye: May cause irritation or injury.

Skin: May cause irritation or allergic skin reaction.

Inhalation: May cause mild to severe irritation to the respiratory tract.

Ingestion: Ingestion may cause mild to serious irritation to mouth, throat & esophagus..

Carcinogenicity: The ingredients which the concentration is above 0.1% of this product, do not belong to carcinogens identified by ACGIH, International Agency for Research on Cancer (IARC) or European Commission (EC).

Physical Health Hazard: Physical/Chemical hazard : Combustible, low toxicity, easy oxidation and discoloration when exposed to air and sunlight

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
N,N'-Diphenyl-p-phenylenediamine	74-31-7	97% by weight	

SECTION 4 : FIRST AID MEASURES

Description of necessary measures:

Eye Contact:	Immediately flush eyes with plenty of water or normal saline for at least 15 minutes. Get medical attention if irritation persists.
Skin Contact:	Flush contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if redness or irritation occurs.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, provide artificial respiration. If breathing difficultly, provide oxygen. Seek medical care immediately.
Ingestion:	Wash out mouth with water, drink water, or milk. Do not induce vomiting. Seek medical attention.

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media:	Use water spray, foam, dry powder or CO2 fire extinguisher. CO2 may be ineffective on large fires due to lack of cooling capacity.
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Specific hazards arising from the chemical:

Hazardous Combustion Byproducts:	Irritating or toxic gases may be generated from decomposition/combustion products. Under low oxygen conditions, carbon, monoxide may be produced. No known fire or explosion hazards are associated with this material
Unusual Fire Hazards:	Unusual fire/Explosion hazard : The overflow material spill into the sewers can cause fire or explosion hazards.

Special protective equipment and precautions for fire-fighters:

Protective Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Fire Fighting Instructions:	Special fire-fighting process : Promptly isolate the scene by removing all persons from the vicinity of the incident if there's a fire. Move containers from fire area. Use water spray to keep fire-exposed containers cool for avoiding the pressure increase, combustion or explosion.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personnel Precautions:	Contact emergency personnel immediately. Remove all fire. Clear area of all non-emergency personnel. Don't handle the overflow material. Using appropriate protective equipment. Comply with all fire control procedures.
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Environmental precautions:

Environmental Precautions:	Leakage of contaminated areas shall be isolated. Recommend wearing emergency personal protective equipment. Avoid direct contact with the leak. Do not allow spilled material to enter sewers or waterways.
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Methods and materials for containment and cleaning up:

Spill Cleanup Measures:	Shovel or pick up spilled material into a container for re use or disposal. Avoid dispersal into soil, waterways, Sewers or drains. Use personal protective equipment as required.
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SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:

Handling:	Avoid contact with eyes, skin or clothing. Use only in well ventilated place to avoid breathing dust or mist. Store away from heat, sparks and flames. Containers and equipment shall be joined together and connected with ground wire to dissipate static electricity for avoiding fire or explosion when transfer materials. Use explosion-proof electronic (ventilation, lighting and material handling) equipment. Rinse thoroughly after operation.
Hygiene Practices:	Handle in accordance with good industrial hygiene and safety practice. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities:

Storage:	Store the container in tightly closed containers in a cool, dry, ventilated place. Avoid all sources may cause fire (spark or flame) before use.
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Specific end use(s):

Work Practices: Safety showers and eye wash stations should be available. Use explosion proof motors and equipment.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Appropriate engineering controls:

Engineering Controls: Use appropriate engineering controls such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures:

Eye/Face Protection: Chemical splash goggles.

Skin Protection Description: Wear appropriate protective clothing if contact with skin is expected such as coveralls or apron.

Hand Protection Description: Wear protective gloves if contact with skin is expected.

Respiratory Protection: Maintain adequate ventilation in use. Do not inhale dust fog. If ventilation is not enough, wear gas mask in high concentration environment. Advise to wear self-contained breathing apparatus in emergency rescue or escape.

PPE Pictograms:



SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Gray to light brown powder Pure powder is silvery white needle crystal

Color: Gray to light brown

Odor: Slight to strong aromatic odor.

Boiling Point: 282°C(1.067kPa), 220 ~225°C(0.667kPa)

Melting Point: 145~152

Density: Relative density :1.28 (20°C)°

Solubility: Soluble in benzene, chlorobenzene, toluene, acetic acid, ethyl ether, acetone, carbon disulfide, dichloroethane and chloroform, slightly soluble in ethanol and gasoline, insoluble in water.

Flash Point: 260° C

Auto Ignition Temperature: 180°C

SECTION 10 : STABILITY and REACTIVITY

Reactivity:

Reactivity: No hazardous reactions under normal processing.

Chemical Stability:

Chemical Stability: Stable under normal conditions.

Possibility of hazardous reactions:

Hazardous Polymerization: Will not occur.

Conditions To Avoid:

Conditions to Avoid: Far away from heat, sparks and flames. The product shall be stored away from oxidizing substances.

Incompatible Materials:

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products:

Special Decomposition Products: Decomposition products may include the following materials: Oxycarbide (CO,CO2).

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute Toxicity:

Oral toxicity in Rats: LD50: 1000 mg/kg
Dermal toxicity in Rabbits: LD50: >7940 mg/kg
Inhalation Toxicity in Mice LC50: No mortality at 90 mg/m3 for 4 hours

Repeated or prolonged exposure may cause eye damage, skin sensitization, or moderate to severe irritation to the respiratory tract.

Sensitization:

This product may cause skin sensitization with prolonged exposure.

Chronic Effects:

Repeated exposure to high concentrations, may cause human eye mucous damage, skin keratinization (thickening), tooth decay, pharyngeal hyperemia and edema, the bronchoconstriction,

and respiratory stimulation.

Carcinogenicity: Carcinogenicity: ACGIH – A4 IARC-3 EPA, NTP, OSHA – Not determined
Mutagenicity: This product is not a mutagenic agent according to the established laws, regulations and standards.
Reproductive Toxicity: Not reproductively toxic according to the established laws, regulations and standards.
Teratogenicity: This product does not cause deformity and has no toxicity to fetuses according to the established laws, regulations, and standards.

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: Acute LC50 (Trout) - 36 mg/l (96 hrs)
Acute LC50 Daphnia: >100 mg/l (48 hrs)
Effect of Material on Plants/Animals: Harmful to aquatic life with long lasting effects.

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal: Disposal considerations / Waste information: The spills shall not be disposed to the sewer. Please consult environmental professionals, to ensure the spilled or contaminated materials are classified as hazardous waste by the local, state or national laws and regulations. Only use approved transport, recycling equipment and processing, storage or disposal equipment. Dispose in accordance with all applicable local and national regulations.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Non regulated.

DOT Pictograms:



IATA Shipping Name: Non regulated.

IATA Pictograms:



IMDG Shipping Name : Non regulated.

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

N,N'-Diphenyl-p-phenylenediamine :

TSCA Inventory Status: All components of this product are listed in the TSCA inventory of Chemicals Substances.
SARA: SARA Title III: Under Title III, Section 313 this product is classified as an immediate, delayed health hazard material.
Clean Air Act: Not applicable.
Clean Water Act RQ: Not applicable.
State Regulations: CT, FL, IL, LA, MA, MI, MN, NJ, NY, PA: Right to Know: Product Listed
Risk Phrases: R36 - Irritating to eyes. R38 - Irritating to skin. R43 - May cause sensitization by skin contact. R52 - Harmful to aquatic organisms.
Safety Phrase: S 9 - Keep container in a well-ventilated place. S23 - Do not breathe gas/fumes/vapour/spray. S24 - Avoid contact with skin. S25 - Avoid contact with eyes. S36 - Wear suitable protective clothing.



SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 1
HMIS Fire Hazard: 1
HMIS Reactivity: 0
HMIS Personal Protection: J

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	J

SDS Revision Date: September 08, 2015

