



SOVEREIGN CHEMICAL COMPANY
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Material Safety Data Sheet

Ozonox 100Z

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Manufacturer: Sovereign Chemical Company 1225 West Market Street Akron, Ohio 44313 Phone: 330-869-0500 Fax: 330-869-0518	Emergency Contact : Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
Trade Name(s): Ozonox 100Z Pastilles/Powder	MSDS Number: 1788
Chemical Name: N,N-diaryl-paraphenylene diamine mixture	Synonyms: Diaryl PPD, DTPD, Mixed diaryl-p-phenylenediamine
Prepared By: Sovereign Chemical Company	Date of Issue: May 15, 2009 Revision Number: 1 supersedes: (September 23, 2005) Change(s): 3 year update

2. INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>Percent</u>	<u>ACGIH (TLV)</u>	<u>OSHA (PEL)</u>
Diaryl-p-phenylene Diamines	68478-45-5	> 85%	NE	NE
Diphenyl amine	122-39-4	< 5%	10 mg/m ³	10 mg/m ³
o-Toluidine	95-53-4	< 1000 ppm	5ppm(TWA) 22mg/cum skin 50 ppm (IDLH)	2 ppm

Diphenylamine and o-toluidine are on Hazardous Substance List .

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Steel brown pastilles. Use water spray, foam, carbon dioxide or dry powder to extinguish fires. Wear full protective equipment including self-contained breathing apparatus when fighting fire. During fire situations fumes of nitrogen oxides and carbon monoxide may be emitted. Material can catch fire if strongly heated.

HMIS Rating: Health – 2, Flammability – 1, Reactivity – 0, Personal Protection Equipment - E - safety glasses, gloves, dust mask

This is recommended personal protection equipment, final personal protection equipment should be determined by the plant safety department based on the actual conditions under which the product is used.

Warning! Contains less than 0.1% (1000 ppm) orthotoluidine which has the following listing by IARC as possibly carcinogenic to humans (Group 2B, bladder cancer). NTP lists orthotoluidine as a reasonably anticipated to be a carcinogen. Exposure to orthotoluidine has been known to cause health problems with the liver, kidneys, blood (anoxia).

Potential Health Effects:

Eye: May cause irritation and reddening.

Skin Contact: May cause irritation. Risk of sensitization by skin contact. This product contains less than 0.1% orthotoluidine which has an OSHA skin exposure limit of 22 mg/cum (TWA) and an ACGIH skin exposure limit of 2 ppm (TWA).

Ingestion: May cause digestive system upset. May have a laxative effect.

Inhalation: May be irritating to the mucous membranes of the respiratory tract.

Warning! Contains orthotoluidine (less than 0.1 %) which has the following listing by IARC as possibly carcinogenic to humans (Group 2B, bladder cancer). NTP lists orthotoluidine as a reasonably anticipated to be a carcinogen. Exposure to orthotoluidine has been known to cause health problems with the liver, kidneys, blood (anoxia).

4. FIRST AID MEASURES

Skin: Wash thoroughly with mild soap and water. Seek medical attention if irritation develops. Remove any contaminated clothing and launder thoroughly before reuse.

Eye: Flush with tepid water for at least 15 minutes holding the eyelids wide open. Seek medical attention if irritation develops.

Ingestion: Not expected to be an important route of entry into the body. If large amounts of the product are ingested, give 2 glasses of water. Never give anything by mouth to an unconscious person. Seek medical attention. Symptomatic treatment.

Inhalation: Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention. Symptomatic treatment.

Notes to the physician: There is no specific antidote known. Treatment of overexposure should be directed at the control of symptoms and according to the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

Flash Point: ND **LEL:** ND **UEL:** ND **Auto Ignition Temperature:** ND

Use water spray, foam, carbon dioxide or dry powder to extinguish fires. Product in or near fires should be cooled with a water spray or fog. A self contained breathing apparatus (SCBA) operating in the positive pressure mode and full fire fighting protective clothing should be worn for combating fires.

6. ACCIDENTAL RELEASE MEASURES

Wear suitable protective equipment (gloves, safety goggle/face protection, dust mask and protective clothing (see Section 8). Provide sufficient ventilation to minimize exposure. Do not discharge into drains and the environment. Sweep and shovel up into clean dry covered containers. Minimize dust. Do not contaminate unspilled material. Flush area with water and collect cleaning water for proper disposal.

7. HANDLING AND STORAGE

Storage Conditions: Avoid contact with strong oxidizing agents and concentrated mineral acids. Avoid high temperatures. Store in closed containers in a dry environment.

Handling: Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Take measures against electrostatic charges. Electrically bond and ground all containers and equipment before transfer or use of material. Avoid skin and eye contact and dispersion of dust in air to reduce potential for dust ignition/explosion. Wash thoroughly after handling. Individuals handling this product should wear personal protective equipment specified in Section 8. Plant environment should include controls and equipment specified in Section 8.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practices" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Respiratory Protection: Wear dust mask.

Eye Protection: Use safety glasses.

Protection Gloves: Neoprene or nitrile gloves should be worn to prevent irritation and possible absorption. Cloth gloves are not recommended.

Other Protection Items: Neoprene or nitrile rubber coated apron or other body covering may be required if there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State: Steel brown pastilles	Melt Point: 102 – 114 °C
Vapor Density (Air = 1): NA	Octanol/Water Partition Coefficient: 3.5/4.5
Vapor Pressure: NA	Evaporation Rate BuOAC = 1: NA
Odor: Slight amine	Specific Gravity: 1.00 – 1.20
% Volatile by Volume: Not volatile	Boiling Point: NA
% Solubility (H₂O) : Insoluble	pH: NA
Other: Soluble in aromatic hydrocarbons	Thermal Decomposition: Thermally stable up to 200°C

10. STABILITY AND REACTIVITY

Stability /Polymerization: Stable under normal conditions. Hazardous polymerization will not occur.

Incompatibility (conditions to avoid): Avoid contact with strong oxidizing agents and concentrated mineral acids. Avoid high temperatures.

Hazardous Decomposition Products: Can catch fire if strongly heated and emit fumes of nitrogen oxides and carbon monoxides.

Special Sensitivity: None that are known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: LD₅₀ oral (rat) = >5000 mg/kg. Short term harmful effects are not expected by swallowing.

Skin irritation: No evidence of irritant effects from available information. LD₅₀ Rabbit dermal not established.

Eye Irritation: No evidence of irritant effects from available information.

Sensitization: No data available

Repeated/long-term exposure: No data available

Mutagenicity/carcinogenicity: No NTP or IARC ingredients

For Orthotoluidine:

This product contains less than 1000 ppm(0,1%) orthotoluidine which has the following regulations:

IARC Evaluation:

Ortho-toluidine is possibly carcinogenic to humans (Group 2B).

There is limited evidence in humans for the carcinogenicity of ortho-toluidine.

There is sufficient evidence in experimental animals for the carcinogenicity of ortho-toluidine.

NTP: NTP lists orthotoluidine as a reasonably anticipated to be a carcinogen.

OSHA and ACGIH: Exposure to orthotoluidine has been know to cause health problems with the liver, kidneys, blood and anoxia.

40 CFR 716.120(a): Orthotoluidine requires health and safety data reporting

Skin Exposure Limits:

OSHA of 22 ppm (TWA)

ACGIH skin exposure limit of 2 ppm (TWA).

12. ECOLOGICAL INFORMATION

96 hour LC50, fish (ppm): >10

48 hour LC50 Daphnia magna (mg/l): not established

WGK class (Germany): 2

13. DISPOSAL CONSIDERATIONS

Product: Dispose of in chemical land-fill not recommended. Incineration with flue gas-scrubbing recommended. Do not discharge into drains or the environment.

Packaging: Contaminated packaging should be disposed of as a chemical waste. Product should be disposed of in an EPA approved incinerator in accordance with all local, state, and/or federal regulations.

The product contains diphenylamine as an impurity. It may be necessary to contain and dispose of Diphenylamine containing waste as Hazardous Waste. Contact your state Department of Environmental Protection or your regional office of the Federal EPA for specific recommendations.

This product contains below 0.1% (1000 ppm) orthotoliudine which has the following regulations:

Release reporting, 40 CFR 372.65(a)40 CFR 372.65(b)

RCRA Hazardous waste, identification and listing, 40 CFR 261.33(f)40 CFR 261.38 Table 140 CFR 261 Appx. VII40 CFR 261 Appx. VIII, U-list U328

Superfund, reportable quantity, 40 CFR 302.4 Table, 100 lb. reportable quantity.

EPA priority chemical list under RCRA, 21 CRR text 77

14. TRANSPORTATION INFORMATION

US DOT and Canadian TDG:

Not regulated under DOT Regulations.

Freight Classification = Rubber Preservative, NOI

Regulated in Europe as Environmentally Hazardous Substance.

ADR/RID: Environmentally Hazardous Substance, solid, n.o.s., 9,UN 3077, PG III

AND/ADNR: Environmentally Hazardous Substance, solid, n.o.s., 9,UN 3077, PG III

IMDG: Environmentally Hazardous Substance, solid, n.o.s., 9,UN 3077, PG III

ICAO/IATA: Environmentally Hazardous Substance, solid, n.o.s., 9,UN 3077, PG III

15. REGULATORY INFORMATION

CERCLA/RCRA: No planning or reportable quantities.

TSCA: All Ingredients are listed on the TSCA inventory.

SARA Title III, Section 313, OSHA 1910.119, NTP, IARC, Subpart Z, NFPA, WHMIS, California Proposition 65: Not listed.

Canadian DSL: All ingredients listed.

This product contains lower than 0.1 % orthotoliudine which is listed in the following regulations:

Release reporting, 40 CFR 372.65(a)40 CFR 372.65(b)

RCRA Hazardous waste, identification and listing, 40 CFR 261.33(f)40 CFR 261.38 Table 140 CFR 261 Appx. VII40 CFR 261 Appx. VIII, U-list U328

Superfund, reportable quantity, 40 CFR 302.4 Table, 100 lb. reportable quantity.

EPA priority chemical list under RCRA, 21 CRR text 77,

40 CFR 21 App VII Hazardous Constituents K112, K113, K114

Sara Title II Section 313 Toxic Chemicals 40 CFR 372.65

Clean Air Act Hazardous Air Pollutants 40 CFR part 61

CA Director's List of Hazardous Substance, 8 CCR Sec. 339

CA-OSHA Workplace Airborne Contaminants, 2 ppm TWA, 9 mg/cum TWA, 8 CCR Sec. 5155

CA State Superfund Hazardous Substance, Health and Safety Code, Sec. 25316

CA Proposition 65 Carcinogens, 22 CCR Sec. 12000

CA Air Toxics Requiring Quantification (AB2588), 17 CCR Sec. 93300.5

CA Toxic Air Contaminants (AB 1907) List, 17 CCR Sec. 93000-93001

IL Hazardous Wastes, 35 IL Admin. Code, Sec. 700-870

IL Toxic Substance Disclosure to Employees List, 56 IL Admin. Code, Sec. 205; List: 56IAC Sec. 205, Table A

MA Substance List, 105 CMR 670.000 App. A

MI Critical Materials Register, MAC Sec. R 299.9001-9006

NJ Right-to-Know Hazardous Substances, ID# 1442

NY Hazardous Substance Bulk Storage List, 6 NRCRR part 597, RQ 100 lbs.

OH Emergency Response Law Toxic Chemicals

OH Hazardous Wastes
PA Hazardous Substances, 34 PC Sec. 301
TX Air Contaminants with Health Effects Screening Levels
TX Hazardous Wastes List, 31 Tex. Admin. Code, Section 335.1
Canada WHMIS: 0.1%

16. OTHER INFORMATION

NE = Not Established

NA = Not Applicable

ND = Not Determined

Information contained in this MSDS sheet have been gathered from the following documents:

ChemCheck Handbook, Specialty Technical Publishers,
Chemical REG-A-DEX, J.J.Keller, September
BNA Environment Library on CD, December
NIOSH Pocket Guide to Chemical Hazards,
Threshold Limit Values, ACGIH, 1999
HMIS Guidance Manual, 2nd Edition

IMPORTANT SAFETY NOTICE: The information in the Material Safety Data Sheet relates only to the specific material(s) described herein and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of this product are not within the control of Sovereign Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents, and contractors of the information on this Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.