SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product identifier used on the label:

Product Name: **Westco AOZ 100**

Other means of identification:

Product Description: Anti-oxidant use for manufacturing of general rubber goods.

Synonyms: DTPD 3100, 1,4-Benzenediamine, N,N'-mixed Ph and tolyl derivatives

Recommended use of the chemical and restrictions on use:

Product Use/Restriction: Antioxidant used in the manufacture of rubber goods.

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.
* Hazardous to the aquatic environment; Acute Category 1, Chronic Category 1.

Hazard Statements:
* May cause an allergic skin reaction. Danger of cumulative effects
* Very toxic to aquatic life with long lasting effects.

Precautionary Statements:
* Wear protective gloves/protective clothing/eye protection/face protection.
* IF ON SKIN: Wash with plenty of soap and water.
* If skin irritation or rash occurs: Get medical advice/attention.
* Wash contaminated clothing before reuse.
* Avoid release to the environment.

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

Carcinogenicity: NOAEC 1 900 mg/kg Source: Iatropoulos, M.J. (1997)
Based on available data, the classification criteria are not met.

Signs/Symptoms: Most import ant symptoms and effects, both acute and delayed:
Skin contact: Irritation, burns in case of long-term or repeating exposure, may cause allergic reaction.
Eye contact: Mechanical irritation, redness, tearing.
Ingestion: Stomach pain, nausea, vomiting

Diphenylamine

Emergency Overview:
* Sensitizer.
* Irritant.
* Avoid contact with skin, eyes and clothing.
* Exposure to dust may be irritating to eyes, nose, and throat.

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

Eye:
* May cause eye irritation.
* Overexposure may cause eye watering or discomfort, redness and swelling.

Skin:
* Symptoms include redness and itching.
* Prolonged skin contact causes burns.

Inhalation: Inhalation may result in irritation to nose and throat.

Ingestion:	Ingestion can cause nausea, vomiting, diarrhea and gastrointestinal irritation.
Chronic Health Effects:	Prolonged or repeated skin contact may cause burns.
Carcinogenicity:	None known (IARC, NTP, OSHA & ACGIH)
Potential Environmental Effects:	Very toxic to aquatic life with long lasting effects.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Diphenylamine	122-39-4	Concentration range: < 2% %	
1,4-Benzenediamine, N,N'-mixed Ph and tolyl derivs	68953-84-4	Concentration range: > = 97% %	

SECTION 4 : FIRST AID MEASURES

Description of necessary measures:

Eye Contact:	Wash out with plenty of water with the eyelid hold wide open, for 10-15 min. Remove any contact lenses. Avoid powerful water stream-risk of cornea damage.obtain medical attention immediately.
Skin Contact:	Take off contaminated clothes. Wash out skin with plenty of water with soap. Consult a doctor, if symptoms persist.
Inhalation:	Remove to fresh air, keep warm and calm in case of respiratory symptoms consult a doctor-show the container or label.
Ingestion:	Rinse mouth with water; give plenty of water to drink. Consult a doctor-show the container or label. Do not give anything to drink to an unconscious person.

Indication of immediate medical attention and special treatment needed:

Note to Physicians:	In case of inhalation of decomposition products. Symptoms may be delayed. Keep exposed person under observation for 48 hours.
Notes :	Most import ant symptoms and effects, both acute and delayed: Skin contact: Irritation, burns in case of long-term or repeating exposure, may cause allergic reaction. Eye contact: Mechanical irritation, redness, tearing. Ingestion: Stomach pain, nausea, vomiting Indication of any immediate medical attention and special treatment needed: Physician makes a decision regarding further medical treatment after thoroughly examination of the injured.

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media:	Suitable: Dry extinguishing, carbon dioxide, water spray. Use extinguishing measures that are appropriate to the environment.
Unsuitable extinguishing media:	water jet due to risk of the propagation of the flame.
Unusual Fire Hazards:	May produce toxic fumes, eg. carbon oxide and nitrogen oxide if burning. Do not inhale combustion products-it can be dangerous for health.

Special protective equipment and precautions for fire-fighters:

Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Fire Fighting Instructions:	Clear area of all not-emergency personnel. Do not enter confined fire space without full bunker gear including positive pressure self-contained breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personnel Precautions:	Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Wear adequate personal protective equipment. Avoid contact with skin and eyes. Ensure adequate ventilation. Avoid form and inhalation dusts.

Environmental precautions:

Environmental Precautions:	In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

Methods and materials for containment and cleaning up:

Methods for containment:	Collect spilled material in containers. Avoid forming dusts. Disposal in accordance with the local legislation. Clean the contamination place by solvents, eg. acetone, toluene, xylene (use in accordance with good occupational hygiene and safety practices), and afterwards by water.
Methods for cleanup:	Collect spilled material in containers. Avoid forming dusts. Disposal in accordance with the local legislation. Clean the contamination place by solvents, eg. acetone, toluene, xylene (use in accordance with good occupational hygiene and safety practices), and afterwards by water.
Notes :	Reference to other sections: Appropriate conduct with waste product - section 13. Appropriate personal protective equipment - section 8.

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:

Handling:	* Ensure adequate ventilation. * Do not inhale dust. * Before break and after work, wash hands with soap and water. *Avoid contact with skin and eyes. * Keep container tightly closed when not in use. *Handle in accordance with good occupational hygiene and safety practices.
Hygiene Practices:	* Follow good industrial hygiene practices when handling this material. * Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

Conditions for safe storage, including any incompatibilities:

Storage:	*Keep only in original, tightly closed containers in dry, cool and well-ventilated place. *Protect against humidity and heating above 50 deg C. * Keep away from fire source. *Keep away from food, beverages or feed for animals. * Recommended material for packages: Paper Bag 25 kg, big-bags 1000 kg.

Specific end use(s):

Work Practices:	* Safety showers and eye wash stations should be available.
Notes :	.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Appropriate engineering controls:

Engineering Controls:	ACTIOPHRASE_125117 * 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:	Use safety glasses (goggles) in the case of dust.
Hand Protection Description:	Use gloves from PCV or rubber. Use natural protective clothing materials (cotton) orsynthetic fibers and protective footwear. The material that the gloves are made of must be impenetrable and resistant to the product's effects. The selection of material must be performed with consideration of breakthrough time, penetration speed and degradation. Moreover, the selection of proper gloves depends not only on the material, but also on other quality features and changes depending on the manufacturer. The producer should provide detailed information regarding the exact breakthrough time. This information should be followed.
Respiratory Protection:	Not required. In case of forming dust use dustmask.
PPE Pictograms:	
Notes :	Environmental exposure controls: Do not allow the large quantity of mixture to contaminate surface water/ground water.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State:	Granular
Color:	Grey-brown
Odor:	Aromatic
Odor Threshold:	Not determinated
Boiling Point:	Initial: Not applicable
Melting Point:	87 - 105 deg C
Density:	1,0 - 1,2 g/cm3
Solubility:	Insoluble in water, soluble in acetone, toluene, xylene
Vapor Density:	Not determinated
Vapor Pressure:	(25 deg C): Negligible
Evaporation Rate:	Not determinated
pH:	Not Applicable

Coefficient of Water/Oil Distribution:	n-octanol/water: 3,4 - 4,3
Flash Point:	Not Applicable
Lower Flammable/Explosive Limit:	Not Applicable
Upper Flammable/Explosive Limit:	Not Applicable
Auto Ignition Temperature:	Not Applicable
Explosive Properties:	Not display
Oxidizing Properties:	Not display

9.2. Other information:

Notes : Flammability (solid, gas): None

Other Information: None

SECTION 10 : STABILITY and REACTIVITY

Reactivity:

Reactivity: It reacts with strong oxidizing agents.

Possibility of hazardous reactions: None.

Chemical Stability:

Chemical Stability: The product is stable when stored in original container protected from heat and moisture.

Possibility of hazardous reactions:

Hazardous Polymerization: None under normal processing.

Conditions To Avoid:

Conditions to Avoid: High temperature, humidity, oxygen. Strong oxidizing agents, acids and bases.

Incompatible Materials:

Incompatible Materials: Strong oxidizing agents, acids and bases.

Hazardous Decomposition Products:

Special Decomposition Products: None.

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Diphenylamine :

Acute Toxicity:
LD50 (rat, oral) > 5000 mg/kg (EPA OTS 798.1175)
LD50 (rabbit, dermal) ok. 2000 mg/kg (OECD 402)
Based on available data, the classification criteria are not met.
Skin corrosion/irritation
Irritation (rabbit) slight irritation (OECD 404)
Based on available data, the classification criteria are not met.
Serious eye damage/irritation Irritation (rabbit) no irritation (OECD 405)
Based on available data, the classification criteria are not met.
Respiratory or skin sensitization:Sensitization (guinea-pig) sensitization (OECD 406)
Based on available data, the classification criteria are not met.

Eye: Mechanical irritation, redness, tearing.

Skin: Irritation, burns in case of long-term or repeating exposure, may cause allergic reaction.

Acute toxicity:
LD50 (rabbit, dermal): Ok. 2000 mg/kg (OECD 402) Source: Merriman, T.N. (1995a)

Inhalation: May cause irritation mucosal membrane of respiratory system, caught.

Ingestion: Stomach pain, nausea, vomiting.

Acute toxicity:
LD50 (rat, oral): > 5000 mg/kg (EPA OTS 798.1175) Source: Mallory, V.T. (1994)

Sensitization:
Respiratory or skin sensitization:
Sensitization (guinea-pig) sensitization (OECD 406) Source: Merriman, T.N. (1995a)
Based on available data, the classification criteria are not met.

Mutagenicity:
Germ cell mutagenicity:
In vitro and in vivo tests - negative.
Based on available data, the classification criteria are not met.

Reproductive Toxicity:
LOEC: 200 mg/kg (OECD 414) Source: Tyl, R.W. (1995)
Based on available data, the classification criteria are not met.

Reproductive toxicity (oral):
NOAEL: 16 mg/kg (method: calculated)
Based on available data, the classification criteria are not met.

Diphenylamine :

Carcinogenicity: None known (IARC, NTP, OSHA & ACGIH)

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity:	Toxicity: EC50 (fish): 0,48 mg/l/4 dni/Oncorhynchus mykiss/OECD 204 source: Dionne, E. (1997b) NOEC (fish): 0,14 mg/l/14 dni/ Oncorhynchus mykiss/OECD 204 source: Dionne, E. (1997b) EC50 (daphnie): 1,1-1,8 mg/l/48h/Daphnia magna/OECD 202 source: Putt, A.E. (1995) EC10 (daphnie): 0,0045 mg/l/21 dni/Daphnia magna/OECD 211 source: Sacker, D. (2010a) EC50 (algae): > 0,079 mg/l/72h/Selenastrum capricornutum/OECD 201 source: Hoberg, J.R. (1996) NOEC (sludge): Ok. 615,2 mg/l/28 dni/Chironomus riparius/OECD 218 source: Sacker, D. (2010b) Product is very toxic to aquatic life with long lasting effects.

Bioaccumulative potential:

Bioaccumulation:	Bioaccumulative potential: Product has bioaccumulative potential (BCF: 20-10 900)

Mobility in soil:

Mobility In Environmental Media:	Product is low mobile in soil. It is not soluble in water.

Other adverse effects:

Effect of Material On Aquatic Life:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal:	Disposal in accordance with the local legislation. Do not remove with household garbage. Store remaining in original containers. Recycle, if possible.
Contaminated Packaging:	Empty containers give for appropriate rubbish dump or for disposal in accordance with the local legislation. Dispose of uncleanable containers like of the product.
Notes :	Directive 2008/98/EC, 94/62/EC.

SECTION 14 : TRANSPORT INFORMATION

DOT Hazard Class:	Product is non-hazardous for transport.
DOT Pictograms:	
IATA Hazard Class:	Product is non-hazardous for transport.

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

TSCA Inventory Status:	All components of this product are listed in the TSCA inventory of Chemicals Substances.
SARA:	Section 302: Aniline <0.10% Section 311/312: Immediate health hazard Section 313: Aniline <0.10%, O-toluidine <0.10%, Diphenylamine <5.0%
California PROP 65:	Contains aniline considered to cause cancer.
Risk Phrases:	* R33 - Danger of cumulative effects. * R43 - May cause sensitization by skin contact. * R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrase:	* S 9 - Keep container in a well-ventilated place. * S22 - Do not breathe dust. * S24/25 - Avoid contact with skin and eyes. * S36/39 - Wear suitable protective clothing and eye/face protection.
EINECS Number:	204-539-4
EINECS Number:	273-227-8

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:	June 22, 2015
Notes :	Important Note: This information relates to the specific product described herein and may not be valid for

this material when used in combination with other raw materials. The information provided is without warranty regarding its accuracy or completeness. The information may not be valid under all conditions. The user has the final responsibility for determining the suitability of the product in a given application.