

SAFETY DATA SHEET

Product identifier used on the labe	<u>l:</u>
Product Name:	Westco OBSH
Other means of identification:	
Product Description:	Hydrazide blowing agent
Synonyms:	Substance Name: 4,4'-oxydi(benzenesulphonohydrazide), 4,4'- oxydibenzenesulfonohydrazide
Recommended use of the chemica	l and restrictions on use:
Product Use/Restriction:	Blowing agent used in compounding, extruding, and foam.
Chemical distributor, or other respo	onsible 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
	TIFICATION

GHS Pictograms:	
Signal Word:	Warning
GHS Class:	 * Acute oral, dermal, and inhalation toxicity, Category 4. * Skin Irritant, Category 2. * Eye Irritant, Category 2. * Skin Sensitizer, Category 1. * Germ cell mutagenicity, Category 2. * Hazardous to the aquatic environment., Chronic, Category 2
Hazard Statements:	Suspected of causing genetic defects . Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
Precautionary Statements:	Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF exposed or concerned: Get medical advice/attention. IF swALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (seeon this label). Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Hazards not otherwise classified th	nat have been identified during the classification process:
Carcinogenicity:	Not classified

4,4'-oxydibenzenesulfonohydrazide

Emergency Overview: * Combustible.

	 * Harmful. * Sensitizer. * Avoid contact with the skin and the eyes. * May cause allergic skin reactions. * Harmful if inhaled or swallowed. * irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	 * This product is harmful by inhalation and if swallowed. * This product is irritating to the respiratory system and skin. * The product causes irritation of eyes and skin.
Eye:	May cause irritation. May cause irritation.
Skin:	* May cause skin irritation. * May cause allergic skin reaction.
Inhalation:	May cause mild respiratory irritation.
Carcinogenicity:	Not classified
Potential Environmental Effects:	Toxic to aquatic life with long lasting effects.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixtures:</u> Chemical Name	CAS#	Ingredient Percent	EC Num.
4,4'-oxydibenzenesulfonohydrazide	80-51-3	Cat.97%(w/w) by Mole	

SECTION 4 : FI	RST AID	MEASURES
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Description of necessary	measures:
Eye Contact:	In case of eyes contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention promptly if symptoms occur after washing.
Skin Contact:	In case of skin contact: Remove contaminated clothing immediately and wash skin with soap and water.
Inhalation:	In case of inhalation: Move subject to fresh air and keep him calm. In case of complaints get medical treatment
Ingestion:	In case of ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.
Notes :	Get medical attention if any discomfort continues.
	Most important symptoms and effects, both acute and delayed Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
	Indication of any immediate medical attention and special treatment needed Remove soiled, soaked clothing immediately. Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours In cases of doubt, seek medical advice.

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:		
Suitable Extinguishing Media:	Extinguish with dry sand. Water spray. Foam. Carbon dioxide (CO2).	
Unsuitable extinguishing media:	High volume water jet	
Specific hazards arising from the cl	nemical:	
Hazardous Combustion Byproducts:	Avoid strong oxidizing agents.	
Special protective equipment and p	precautions for fire-fighters:	
Protective Equipment:	As in any fire, wear an approved respiratory protective device and full protective gear.	
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.	
Notes :	Special hazards arising from the substance or mixture : Hazardous combustion products, Fire produces large volume of gases and toxic smoke.	

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:		
Personnel Precautions:	Personal precautions, protective equipment and emergency procedures: For non-emergency personnel: Provide adequate ventilation. Wear protective equipment. Avoid contact with skin and eyes. For emergency responders: Avoid inhalation of dust, wear protective gloves and approved safety goggles.	
Environmental precautions:		
Environmental Precautions:	Avoid release to the environment. Do not flush into surface water or sanitary sewer system.	
Methods and materials for containment and cleaning up:		
Spill Cleanup Measures:	Methods for Containment and Cleaning up: Collect in containers and seal securely, avoid dust formation, sweep up spilled substance and remove to safe place. Use respiratory equipment with particle filter, type P1.	
Notes :	Reference to other sections: See Section 7 for information on safe handling. See section 8 for information on personal protection equipment. See Section 13 for information on disposal.	
	Additional information: Keep away from heat. Keep away from sources of ignition-No smoking.	

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:		
Handling:	Use with adequate ventilation. Avoid breathing dust and contact with eyes, skin and clothing. Keep away from heat and sources of ignition.	
Hygiene Practices:	* Handle in accordance with good industrial hygiene and safety practice. Wash exposed areas thoroughly after handling this product. * When using, do not eat, drink or smoke. * Avoid contact with skin, eyes and clothing.	
Conditions for safe storage, includi	ing any incompatibilities:	
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, direct sunlight, and incompatible substances. Keep container tightly closed when not in use. Avoid exposure to temperatures above 70°C.	
Specific end use(s):		
Work Practices:	* Safety showers and eye wash stations should be available. *Material is Combustible. Avoid smoking, keep away from open flames and sources of static or electrical sparking. * Keep in a well-ventilated place.	
Notes :	Specific end use(s): Not applicable.	

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:	
Appropriate engineering controls:	
Engineering Controls:	Appropriate engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Individual protection measures:	
Eye/Face Protection:	Safety glasses with side shields or chemical safety goggles.
Skin Protection Description:	Body protection: Coveralls
Hand Protection Description:	Impervious rubber-nitrile or butyl gloves may be adequate.
Respiratory Protection:	Wear dust protection in case of liberation of dust. Wear suitable respiratory equipment in case of decomposition.
Other Protective:	Thermal hazards: Wear suitable protective clothing to prevent heat.
PPE Pictograms:	🗢 📏 🛉 📀
Notes :	Environmental exposure controls: Avoid dust formation.

Notes :

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:		
Physical State:	Appearance: solid at 20°C and 101.3 kPa	
Physical State Appearance:	Paste	
Color:	White	
Odor:	Slight	
Boiling Point:	(°C): study scientifically unjustified	
Melting Point:	(°C): The melting point of OBSH was not determined as the test substance decomposed at 155°C and above.	

Density:	Relative Density: 1.52 at 20°C
Specific Gravity:	158 (H2O = 1)
Solubility:	Negligible
Vapor Pressure:	Vapour pressure (25°C): 0.00000543 hPa at 80°C
Coefficient of Water/Oil Distribution:	n-Octanol/Water (log Po/w): Log Kow (Pow): 0.08
Flash Point:	(°C): study scientifically unjustified
Explosive Properties:	Explosive
Oxidizing Properties:	Adaption to column 2, Annex VII. OBSH was found to be explosive and the study therefore does not need to be conducted.
9.2. Other information:	
Notes :	Self-ignition temperature: study scientifically unjustified Surface tension: study scientifically unjustified Dissociation constant in water(pKa): study scientifically unjustified Flammability Non-flammable Granulometry : The particle size ranges between 14 and 17 microns. Stability in organic solvents and identity of relevant degradation products : study scientifically unjustified

SECTION 10 : STABILITY and REACTIVITY

Reactivity:	
Reactivity:	Reactivity: Stable under ordinary conditions. Self- accelerating decomposition during prolonged storage at or above 70°C.
	Possibility of hazardous reactions: May occur with strong oxidizing agents.
Chemical Stability:	
Chemical Stability:	Stable under ordinary conditions.
Conditions To Avoid:	
Conditions to Avoid:	Excess heat, ignition sources, heat source and dust generation.
Incompatible Materials:	
Incompatible Materials:	Not available.
Hazardous Decomposition Products	<u></u>
Special Decomposition Products:	Although OBSH decomposes quickly above 140°C, it can decompose slowly when heated above 50°C. Although OBSH decomposes to release nitrogen and water at normal decomposition temperatures, its decomposition products can be volatile and explosive in fire conditions. Dense smoke will be generated during fire. Hazardous reactions- Dangerous reactions are possible when OBSH is decomposed in the presence of alkalis, transition metal salts (e.g., Zn salts), amines and oxidizing agents.

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute Toxicity:	Acute toxicity: LD50(Oral, Rat): 1500 mg/kg bw LD50(Dermal, Rabbit): No study available LC50(Inhalation, Rat): No study available		
Sensitization:	Respiratory or skin sensitization: Sensitizing.		
Mutagenicity:	Germ cell mutagenicity: Adverse effect observed (positive)		
Reproductive Toxicity:	Not classified		
4,4'-oxydibenzenesulfonohydrazide :			
Eye:	Causes eye irritation.		
Skin:	Causes skin irritation.		

SECTION 12 : ECOLOGICAL INFORMATION

Persistence and degradability:	
Biodegradation:	Persistence and degradability: OBSH is not readily biodegradable according to OECD 301C.
Bioaccumulative potential:	
Bioaccumulation:	Bioaccumulative potential: OBSH is not bioaccumulative according to OECD 305E.
Mobility in soil:	
Mobility In Environmental Media:	Mobility in soil: low mobility in soil.
Other adverse effects:	
Effect of Material On Aquatic Life:	Acute toxicity: LC50 6.6 mg/L Time: 96h Species : Fish Method: OECD Guideline 203 (Fish, Acute Toxicity Test) Evaluation: N/A Remarks: 1 (reliable without restriction) key study experimental result
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Acute toxicity: EC50 15 mg/L Time: 48h Species : Daphnia Method: OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) Evaluation: N/A Remarks: 1 (reliable without restriction) key study experimental result

Acute toxicity: EC50 3 mg/L Time: 72h Species : Algae Method: OECD Guideline 201 (Alga, Growth Inhibition Test) Evaluation: N/A Remarks: 1 (reliable without restriction) key study experimental result

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:			
Waste Disposal:	Waste treatment methods Product: Recover or recycle if possible, otherwise perform incineration. Contaminated packaging: Contaminated container should be disposed off. Accordingly uncontaminated container should be thoroughly cleaned with water or solvent and then can be recycled.		
Contaminated Packaging:	Product / Packaging disposal: 13.2 Product / Packaging disposal: Contaminated packaging: Contaminated container should be disposed off as the substance Accordingly uncontaminated container should be thoroughly cleaned with water or solvent and then can be recycled.		
4,4'-oxydibenzenesulfonohydrazide :			
Waste Disposal:	Dispose of in accordance with applicable federal, state and local regulations. Waste generators must determine whether discarded material is to be classified as a hazardous waste. Product as purchased is considered a RCRA Hazardous Waste as listed 40CFR 262.21 (2) Ignitability D001 U028.		

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	SELF-REACTIVE SOLID TYPE D
DOT UN Number:	3226
DOT Hazard Class:	Transport hazard Class: 4.1
DOT Packing Group:	II
DOT Pictograms:	
IATA Shipping Name:	SELF-REACTIVE SOLID TYPE D
IATA UN Number:	3226
IATA Packing Group:	Transport hazard Class: 4.1
IMDG UN NUmber :	3226
IMDG Shipping Name :	SELF-REACTIVE SOLID TYPE D
IMDG Hazard Class :	Transport hazard Class: 4.1
IMDG Packing Group :	Not regulated
RID UN Number:	3226
RID Shipping Name :	SELF-REACTIVE SOLID TYPE D
RID Hazard Class :	Transport hazard Class: 4.1
RID Packing Group :	Not regulated
ICAO UN Number :	3226
ICAO Shipping Name:	SELF-REACTIVE SOLID TYPE D
ICAO Hazard Class :	Transport hazard Class: 4.1
ICAO Packing Group :	Not regulated

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

4,4'-oxydibenzenesulfonohy	rdrazide :
TSCA Inventory Status:	All components of this product are listed in the TSCA inventory of Chemicals Substances.
SARA:	Title III: This product does not contain any materials regulated under Section 313.
Risk Phrases:	 * R44 - Risk of explosion if heated under confinement. * R22 - Harmful if swallowed. * R43 - May cause sensitization by skin contact. * R51 - Toxic to aquatic organisms. * R61 - May cause harm to the unborn child. * R36/37/38 - Irritating to eyes, respiratory system and skin.
Safety Phrase:	* S 3 - Keep in a cool place.
	DOBSH Western Reserve Chemical Corporation, LLC : 06/10/15

- * S 7 Keep container tightly closed.
 * S36/39 Wear suitable protective clothing and eye/face protection.
 * S16 Keep away from sources of ignition No smoking.
 * S24/25 Avoid contact with skin and eyes.
 S 3/9/49 Keep only in the original container in a cool, well-ventilated place.

Other regulatory info.

Relevant information regarding authorization: Not applicable. Relevant information regarding restriction: Not applicable. Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals. Other National regulations: Not applicable







SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:			
HMIS Health Hazard:	1	Health Hazard	1
HMIS Fire Hazard:	3	Fire Hazard	3
HMIS Reactivity:	2	Reactivity	2
HMIS Personal Protection:]	Personal Protection	J
SDS Revision Date: MSDS Revision Notes: Notes :	June 10, 2015 Indication of changes Version 1.1 Amended by EU No 453/2010 Version 2.0 Placed exposure scenarios in the Annex (eSDS)		
Notes .	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.		

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