

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1" style="margin: auto;"> <tr><td style="background-color: #00FFFF;">Health Hazard</td><td style="text-align: center; border: 1px solid black;">1</td></tr> <tr><td style="background-color: #FFCCCC;">Fire Hazard</td><td style="text-align: center; border: 1px solid black;">2</td></tr> <tr><td style="background-color: #FFFF00;">Reactivity</td><td style="text-align: center; border: 1px solid black;">0</td></tr> </table>	Health Hazard	1	Fire Hazard	2	Reactivity	0	 See Section 15.
Health Hazard	1							
Fire Hazard	2							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/Trade Name	Azodicarbonamide	
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
Commercial Name(s)	Celosen AZ, Genitron, Kempore, Azofam E, Nitropore, Porofor 505, Porofor add/R, Unifoam AC, Uniform AZ	
Synonym	Azodicarboxylic Acid Diamide; Azodicarbonamide; Azobiscarboxamide; Azobiscarbonamide; Diazenedicarboxamide	
Chemical Name	Formamide, 1,1'-azobis-	
Chemical Family	Not available.	
Chemical Formula	C ₂ H ₄ N ₄ O ₂	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	Catalog Number(s).	A1386, A1587
	CAS#	123-77-3
	RTECS	LQ1040000
	TSCA	TSCA 8(b) inventory: Azodicarbonamide
	CI#	Not available.
<u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u> CALL (310) 516-8000		

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Azodicarbonamide	123-77-3				100
Toxicological Data on Ingredients	Azodicarbonamide: ORAL (LD50): Acute: >6400 mg/kg [Rat]. DERMAL (LD50): Acute: >500 mg/kg [Rat].				

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung sensitizer).
Potential Chronic Health Effects	Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Flammable.
Auto-Ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...).
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of heat.
Fire Fighting Media and Instructions	Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill	Flammable solid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.
Storage	Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Sensitive to light. Store in light-resistant containers.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystalline powder.)	Odor	Not available.
Molecular Weight	116.08 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Orange-Red. Yellow.
Boiling Point	Not available.		
Melting Point	Decomposition temperature: 225°C (437°F)		
Critical Temperature	Not available.		
Specific Gravity	Not available.		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water, diethyl ether.		
Solubility	Soluble in hot water. Partially soluble in diethyl ether. Very slightly soluble in cold water. Insoluble in organic solvents. Soluble in Dimethyl Sulfoxide.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Heat, ignition sources, incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents
Corrosivity	Not available.
Special Remarks on Reactivity	Sensitive to light.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): >6400 mg/kg [Rat]. Acute dermal toxicity (LD50): >500 mg/kg [Rat].
Chronic Effects on Humans	MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung sensitizer).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May affect genetic material (mutagenic)
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects Skin: May cause skin irritation. It may be absorbed by the skin. Eyes: May cause mechanical eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: May cause gastrointestinal tract irritation with hypermotility and diarrhea. May affect respiration (respiratory stimulation, asthma) Chronic Potential Health Effects Skin: Prolonged or repeated skin contact may cause skin sensitization (dermatitis) Inhalation: Prolonged or repeated inhalation may affect the liver, metabolism, blood. Ingestion: Prolonged or repeated ingestion may affect the kidneys, and endocrine system (thyroid hypofunction)

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations**Waste Disposal**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information**DOT Classification**

CLASS 4.1: Flammable solid.

Identification

UNNA: 3242 : Azodicarbonamide PG: II

Special Provisions for Transport

Not available.

DOT (Pictograms)**Section 15. Other Regulatory Information and Pictograms****Federal and State Regulations**

TSCA 8(b) inventory: Azodicarbonamide

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
 EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 204-650-8).
 Canada: Listed on Canadian Domestic Substance List (DSL).
 China: Listed on National Inventory.
 Japan: Listed on National Inventory (ENCS).
 Korea: Listed on National Inventory (KECI).
 Philippines: Listed on National Inventory (PICCS).
 Australia: Listed on AICS.

Other Classifications**WHMIS (Canada)**

CLASS B-4: Flammable solid.
 CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC)

R42- May cause sensitization by inhalation.
 R44- Risk of explosion if heated under confinement.
 S22- Do not breathe dust.
 S24- Avoid contact with skin.
 S37- Wear suitable gloves

HMS (U.S.A.)

Health Hazard	1
Fire Hazard	2
Reactivity	0
Personal Protection	E

National Fire Protection Association (U.S.A.)

Health	1	1	0	Flammability
				Reactivity
				Specific hazard

WHMIS (Canada) (Pictograms)

DSCL (Europe)
(Pictograms)



TDG (Canada)
(Pictograms)



ADR (Europe)
(Pictograms)



Protective Equipment



Gloves



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

Section 16. Other Information

MSDS Code A0272

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 5/28/2008.

Verified by Sonia Owen.
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CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.