



Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
	Health Hazard 3	Ŝ
30	Fire Hazard	
	Reactivity 0	See Section 15.

Section 1. Chemical Product and Company Identification			Page Number: 1	
Common Name/ Trade Name	1,8-Diazabicyclo[5.4.0]undec-7-ene		Catalog Number(s).	D2039
			CAS#	6674-22-2
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC.		RTECS	Not available.
	14422 S. SAN PEDRO STREET GARDENA, CA 90248		TSCA	TSCA 8(b) inventory: 1,8–Diazabicyclo[5.4.0]undec–7
Commercial Name(s)	Not available.		CI#	Not available.
Synonym	DBU; 2,3,4,6,7,8,10-Octahydropyrimidol[1,2-a]azeppine		- IN CASE OF EMERGENCY	
Chemical Name	1,8-Diazabicyclo[5.4.0]undec-7-ene			<u>EMERGENC Y</u> (24hr) 800-424-9300
Chemical Family	Not available.		CALL (310) 5 [.]	16-8000
Chemical Formula	C9-H16-N2			
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248			

Section 2.Composition and Information on Ingredients						
				Exposure Limits		
Name		CAS #	TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
1) {1,8-}Diazabicyclo[5.4.0]uno	dec-7-ene	6674-22-2				100
Toxicological Data on Ingredients	1,8-Diazabicyclo[5.4 ORAL (LD50): DERMAL (LD50):	I.0]undec-7-ene : Acute: 836 mg/kg Acute: 1233 mg/l		1		
Section 3. Hazards lo	dentification					
Potential Acute Health Effects	Very hazardous in case of skin contact (irritant), of eye contact (irritant). Hazardous in case of skin contact (corrosive), of eye contact (corrosive). Slightly hazardous in case of skin contact (permeator). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.					
Continued on Next	Page					

1,8-Diazabicyclo[5	4.0]undec-7-ene Page Number: 2
Potential Chronic Health Effects	Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS : Not available. MUTAGENIC EFFECTS : Not available. TERATOGENIC EFFECTS : Not available. DEVELOPMENTAL TOXICITY : Not available. The substance may be toxic to upper respiratory tract, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonge contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonge exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.
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 a least 15 minutes. Cold water may be used. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminate clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing befor reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediat medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Ge medical attention immediately.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt o waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mout resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitatio when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to a unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tigh clothing such as a collar, tie, belt or waistband.

Serious Ingestion	Not available.	
Section 5. Fire and	d Explosion Data	

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Points	CLOSED CUP: >96.111°C (205°F).
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2).
Fire Hazards in Presence of Various Substances	Slightly flammable to 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.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures Small Spill Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Large Spill Corrosive liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. 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. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. 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, acids.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.	
Personal Protection	Face shield. Full suit. Gloves. Boots.	
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. 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	Liquid.	Odor	Not available.
Molecular Weight	152.24 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Colorless.
Boiling Point	259°C (498.2°F)		
Melting Point	Not available.		
Critical Temperature	Not available.		
Specific Gravity	1.04 (Water = 1)		
Vapor Pressure	<0.2 kPa (@ 20°C)		
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.		
Solubility	Easily soluble in cold water, hot water.		

1,8-Diazabicyclo[5.4.0]undec-7-ene

Section 10. Stability	Section 10. Stability and Reactivity Data		
Stability	The product is stable.		
Instability Temperature	Not available.		
Conditions of Instability	Excess heat, incompatible materials		
Incompatibility with various substances	Reactive with oxidizing agents, acids.		
Corrosivity	Not available.		
Special Remarks on Reactivity	Incompatible with organic acids (i.e. acetic acid, citric acid, etc.), mineral acids.		
Special Remarks on Corrosivity	Not available.		
Polymerization	Will not occur.		
Section 11. Toxicolo	ogical Information		
Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.		
Toxicity to Animals	Acute oral toxicity (LD50): 836 mg/kg [Rat]. Acute dermal toxicity (LD50): 1233 mg/kg [Rabbit].		
Chronic Effects on Humans	May cause damage to the following organs: upper respiratory tract, skin, eyes.		
Other Toxic Effects on	Very hazardous in case of skin contact (irritant).		

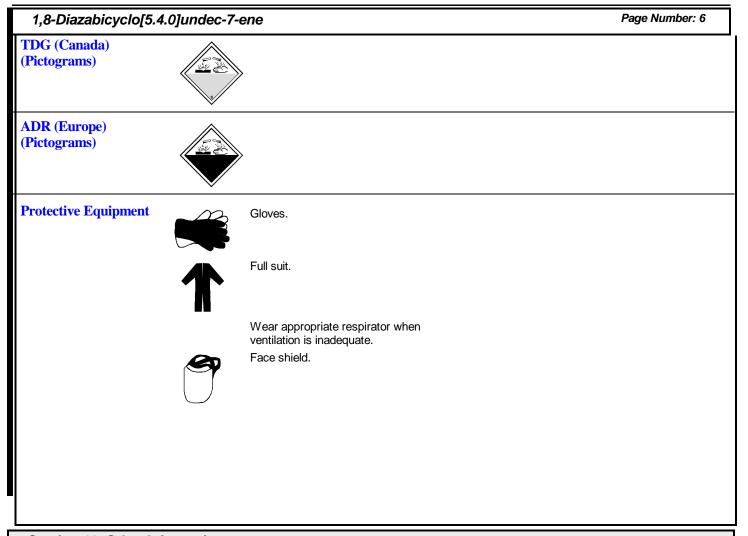
Other Toxic Effects on Humans	Very hazardous in case of skin contact (irritant). Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung corrosive). Slightly hazardous in case of skin contact (permeator).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Harmful if in contact with skin. Causes skin burns. It can be absorbed through the skin and cause systemic effects such as headache, dizziness, tiredness, nausea, vomiting. Eyes: Product vapor in low concentrations can cause lacrimation, conjunctivitis, and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema can cause the perception of "blue haze" or "fog" around lights. although this is a temporary effect and has no residual effect. Causes severe eye irritation or eye burns upon contact. It may cause blindness. Inhalation: Inhalation of the mist or aerosol may cause respiratory tract (nose, throat, and lung) irritation. Ingestion: Harmful if swallowed. It causes severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and stomach. Chronic Potential Health Effects: Prolonged or repeated contact may result in chemical burns and permanent damage. It may also cause sensitization, asthma, and eczemas.

Section 12. Ecological Information

Ecotoxicity	Ecotoxicity in water (LC50): 100 mg/l 96 hours [Fish (Golden Orfe (Leuciscus idus))]. 50 mg/l 48 hours [Daphnia (daphnia)].
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.

Continued on Next Page

1,8-Diazabicyclo[5.	4.0]undec-7-ene	Page Number: 5	
Special Remarks on the Products of Biodegradation	Not available.		
Section 13. Disposa	l Considerations		
Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.		
Section 14. Transpo	ort Information		
DOT Classification	Class 8: Corrosive material		
Identification	: Corrosive liquid, basic, organic, n.o.s (1,8-Diazabicyclo[5.4.0]undec-7-ene) UNNA: 3267 PG: III		
Special Provisions for Transport	Not available.		
DOT (Pictograms)	CORROSIVE 8		
Section 15. Other R	egulatory Information and Pictograms		
Federal and State Regulations	TSCA 8(b) inventory: 1,8-Diazabicyclo[5.4.0]undec-7-ene		
California Proposition 65 Warnings	California prop. 65: This product contains the following ingredients for which the State of California has foun 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 foun 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.		
Other Classifications	WHMIS (Canada) CLASS E: Corrosive liquid.		
	DSCL (EEC) R34- Causes burns.	S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).	
HMIS (U.S.A.)	Health Hazard3National Fire ProtectionFire Hazard0Association (U.S.A.)Reactivity0Personal Protection	Health Flammability Beactivity Specific hazard	
WHMIS (Canada) (Pictograms)			
DSCL (Europe) (Pictograms)			
Continued on Nex	t Page		



Section 16. Other Information			
MSDS Code	3685D		
References	Not available.		
Other Special Considerations	Not available.		
Validated by Sonia	Owen on 8/11/2006.	Verified by Sonia Owen.	
		Printed 9/12/2006.	
CALL (310) 516-80	000		

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.