MATERIAL SAFETY DATA SHEET Emergency Telephone (414) 251-4977

Name: Alliance Group, Inc. Address: N114 W18621 Clinton Drive

City: Germantown State: Wisconsin Zip Code: 53022

Product name: Spectrum BIO-154

Product code: 0154

	Section II - Haz	ardous	Ingredient	
CAS Number 126-06-7	Chemical Component 1-bromo-3-chloro-5, 5-dimethylhydantoin	% 60	TLV 0.2 mg/m ³	Hazard Data
118-52-5	1,3-dichloro-5, 5-dimethylhydantoin	27.4	0.2 mg/m ³	
89415-87-2	1,3-dichloro-5-ethyl- 5-methylhydantoin	10.6	0.2 mg/m ³	

Section III - Physical Data

Solid: X Liquid:

Vapor Density: Not Applicable

Boiling Point Not Applicable

Solubility in water: 0.54 grams/100 gms

025°C

Volatiles: 0.5%

Appearance: White tablets Odor: very slight pungent

Evaporation Rate <1 pH Not Applicable

Vapor Density: Not Applicable Melting/Freeze Pt. 120-148°C

Section IV - Fire and Explosive Data

Flash Point: Decomposes @ 165°C

Extinguishing Media: Large quantities of Water, Foam, Dry Chemical

Special Fire Hazards and Equipment Required: May ignite combustible materials and may produce noxious gases. To minimize the progressive generation of noxious gases, flood burning material with large quantities of water. Must wear MSHA/NIOSH approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.

Unusual Fire and Explosion Hazards: Material is a strong oxidizer and corrosive. May ignite combustible materials and may produce noxious gases. Products of combustion are toxic. Airborne dusts of this material in an enclosed space and in the presence of an ignition source (including static electricity) may constitute an explosive hazard. Use safety measures in accordance with the 1988 edition of NFPA 654 (Standard for the Prevention

of Dust Explosions in the Chemical, Dyd, Pharmaceutical and Plastic Industries)

Section V - Reactive Hazards

Product
Stable:No Yes X

Hazardous will not Polymerization: occur

Conditions to avoid: None known

Incompatability: Avoid any form of contamination, especially moisture strong acids and alkali, high storage temperature and readily oxidizable materials.

Hazardous Decomposition Products: Thermal composition releases unidentified noxious gases and oxides of Carbon and Nitrogen.

Section VI - Health Hazards

Eyes: Causes severe eye irritation and irreversible damage on prolonged contact.

Skin: Causes severe skin irritation and irreversible damage on prolonged contact.

Inhalation: Inhalation of high concentrations can be severely irritating to the lungs with potential systemic absorption and tissue damage.

Chemicals Listed by Carcinogen by: NTP: NO I.A.R.C.: NO OSHA: NO Principal Routes of Exposure: skin, eye and inhalation

First Aid Procedure - Never give fluids or induce vomiting if patient is unconscious or having convulsions.

CALL A PHYSICIAN

- Eyes: Immediately flush with large amounts of cool water for 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye. Seek immediate medical attention. If physician not available, flush for additional 15 minutes. Get immediate medical attention.
- Skin: Immediately wipe away excess material with a dry cloth while removing contaminated clothing and shoes. Under a safety shower, wash affected areas thoroughly with large amounts of water and soap if available, for at least 15 minutes. Get immediate medical attention. Discard or decontaminate clothing and shoes.
- Ingestion: If swallowed, immediately give several glasses of water. DO NOT induce vomiting. If vomiting occurs, give fluids again. Have

physician determine if patient's condition allows induction of vomiting or evacuation of stomach. DO not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

Inhalation: Remove to fresh air. If breathing has stopped, clear airway and start mouth to mouth artifical respiration or use a bag-mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen.

Section VII - Normal Handling Procedures

Precautions to be taken

in Handling and Storage: Store in a secure, cool, dry well ventilated area. isolated from all organic material. Keep container tightly closed when not in use. Protect from damage. Avoid heat and direct sunlight.

Protective Equipment:

Eyes: Chemical goggles, face shield

Gloves: Rubber or neoprene

Other: impervious clothing, eye bath, safety shower Ventilation Requirements: local exhaust ventilation

Corrosive Action on Materials: Corrosive to most metals

Section VIII - Spill or Leak Control Procedures

Steps to be taken in case of spills: Wear protective equipment (See Sec. VII) Contain spill, ventilate area. Collect in labelled approved drums for disposal. DANGER! Oxidizing and corrosive material. Do not get in eyes or on skin. Avoid breathing dust. For spills, wear appropriate protective gear and respiratory protection. Where dust may be generated, wear full face respiratory protection. For large spills, or when spilled material comes in contact with water, self-contained breathing apparatus is preferred.

Carefully sweep up spilled material (Avoid generating dusts) and place in an appropriate container for disposal. Do not contaminate with oxidizable materials. Neutralize any residual with dilute, alkaline sodium bisulfite or thiosulfate solution; absorb with sand or vermiculite and place in a compatible container for disposal. If spilled material is wet, neutralize and proceed as stated above.

Material is toxic to fish. Do not discharge into lakes, ponds or public water unless in accordance with a NPDES permit.

Waste disposal methods: Contact local environmental authorities. Incineration is the preferred method.

The above information is believed to be accurate and discloses the known hazards for this product as of this date. No additional warranties are made.

Date: April 29,1992 By: D.C. Miller

	HMIS Rating	
Health	3	4 = Severe Hazard
Flammability	1	3 = Serious Hazard
Reactivity	1	2 = Moderate Hazard
Redoctives		1 = Slight Hazard
		0 = Minimal Hazard

SARA Title III Sections 311/312 Reporti	ng	_
Chemical Name	CAS #	Hazard Categories
Bromochloro-5,5 dimethylhyantoin	126-06-7	A,R
1,3-dichloro-5,5-dimethylhydantoin	118-52-5	A,R
1,3-dichloro-5-ethyl-5-methylhydantoin	89415-87-2	A,R