

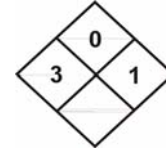
MATERIAL SAFETY DATA SHEET

PRODUCT _____ **HORIZON** _____



NFPA HAZARD RATINGS*

Health	3	High health hazard
Fire	0	Noncombustible
Reactivity	1	Slightly reactive



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO, Inc., 900 W. Main, Sedalia, MO 65301 (660) 826-3300
 EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
 Intended Product Use: Laundry bleach
 Synonyms: Oxygen bleach, "Color-safe" bleach, non-chlorine bleach

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Sodium perborate tetrahydrate	98.6	10486-00-7	5 mg/m ³ TWA (dust)	oral: 3600 mg/kg (rat)
Sodium metaborate	1.4	7775-19-1	Not listed	

SECTION 3: PHYSICAL DATA

Appearance: <u>White granular powder</u>	Boiling Point: <u>63°C (145°F)</u>
Odor: <u>None</u>	Solubility in Water: <u>2.55 wt. % @ 59°F</u>
Specific Gravity (20° C): <u>0.69</u>	Vapor Pressure (mm Hg): <u>10 @ 77°F</u>
pH (Water Solution): <u>10.0 - 10.4</u>	Vapor Density: <u>Heavier than air</u>

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): <u>None</u>	Upper Flammable Limit: <u>No data</u>
Extinguishing Media: <u>Water</u>	Lower Flammable Limit: <u>No data</u>
Special Fire Fighting Procedures: <u>None</u>	
Unusual Fire and Explosion Hazards: <u>Releases oxygen at high temperatures.</u>	

SECTION 5: REACTIVITY DATA

Stability: <u>Stable</u>	Conditions to Avoid: <u>Storage at temperatures above 100°F</u>
Incompatibility (materials to avoid): <u>Heavy metals, combustible organic matter</u>	
Hazardous Decomposition Products: <u>None</u>	
Hazardous Polymerization: <u>Will not occur.</u>	

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): <u>Very low</u>	
Effects of Overexposure:	Acute: <u>Corrosive to the eye causing ulceration. Skin contact may cause initiation with blistering on prolonged exposure. Skin absorption or ingestion of large amounts may cause vomiting, diarrhea of mucous and blood, convulsions, fever, low blood pressure, collapse and death.</u> Chronic: <u>Kidney damage has been reported.</u>
Carcinogenicity: <u>None of the ingredients of this mixture have been identified as a carcinogen or probable carcinogen by ACGIH, IARC, or OSHA.</u>	

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS 5 mg/m ³ TWA (sodium perborate tetrahydrate)	IRRITANCY OF PRODUCT Slight eye and skin	SENSITIZATION TO PRODUCT None known	CARCINOGENICITY No components are listed by ACGIH, IARC, or OSHA
TERATOGENICITY No effects reported	REPRODUCTIVE TOXICITY No effects reported	MUTAGENICITY None reported	SYNERGISTIC PRODUCTS None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation. Use a NIOSH/MSHA respirator with dust/mist cartridge when cleaning up large spills. In confined areas, self-contained breathing apparatus is recommended.

Ventilation: Normal industrial ventilation is adequate.

Protective Gloves: Ordinarily not needed. Use plastic or rubber gloves when contact is prolonged or frequent.

Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING:

Store in cool, dry place. Do not store with combustible organic matter or heavy metal salts.

SPILL OR LEAK PROCEDURES:

Small spills may be flushed to sewer with water. Large spills - sweep up for disposal or neutralize with sulfuric acid before flushing to sewer.

WASTE DISPOSAL METHOD:

Dispose of in landfill or neutralize and flush to sewer where local regulations permit. Not listed as toxic or hazardous material under SARA, CERCLA, DOT or IMO.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

Do NOT get into eyes. Avoid contact with skin. Avoid breathing dust. Harmful if swallowed.

FIRST AID:

Flush eyes for 15 minutes with water. Wash off of skin with soap and water. If swallowed, give two glasses of water and induce vomiting. If symptoms persist, seek medical assistance.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: If breathing is difficult give oxygen, if toxic symptoms or irritation exist seek medical assistance.

Eyes: Flush eyes for 15 minutes with water.

Skin: Wash off of skin with soap and water. Wash contaminated clothing.

Ingestion: Immediately give two glasses of water, induce vomiting. Activated charcoal or gastric lavage may be advisable.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does not contain any components which are under the reporting requirements of SARA Title III, Section 313.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCORE RESEARCH DEPARTMENT

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Date: May 10, 2004

Replaces MSDS of: March 27, 2000