CONSUMER PRODUCTS • SPECIALTY PRODUCTS

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-056

ISSUE DATE: 08/6/07

PRODUCT IDENTIFICATION 1.

ARM & HAMMER® Powder Laundry Detergent (All Forms: Phosphate, Non-phosphate, Fragrance-free, with Color Safe Bleach, and Fabric Softener)

Product Use: Laundry detergent Chemical Name: Mixture Chemical Formula: Mixture Synonyms/Common Names: detergent **Emergency Phone:** 1-609-683-5900 (USA)

Medical Emergency Phone: 1-888-234-1828

Information Phone: 1-800-617-4220

HAZARDS IDENTIFICATION 2.

EMERGENCY OVERVIEW

White granular powder; bleach version contains blue speckles; scented or unscented. Severe eye and respiratory irritant; moderate skin irritation potential. No significant environmental effects; not a fire hazard; stable.

These products are labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this MSDS differ from the labeling requirements of the CPSC and, as a result, this MSDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

HMIS Rating	g
Health	2
Fire	0
Reactivity	0

Potential Health Effects

EYE: Severe irritant; burns and potential injury upon prolonged contact.

SKIN CONTACT: Not a primary skin irritant; various severities of irritation are possible on prolonged, repeated or occluded contact.

INHALATION: Inhalation of aerosol dusts may cause sensitization in hypersensitive individuals, severe irritation, delayed pulmonary edema and nasal septum deviation.

INGESTION: Slightly toxic; ingestion can cause severe pain, diarrhea, and corrosive damage to GI tract. Potential aspiration hazard if ingested.

SUBCHRONIC EFFECTS/CARCINOGENICITY: Not listed as carcinogenic by: IARC, NTP, OSHA, or ACGIH.



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3. **COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Ingredient	<u>(% by Wt)</u>	CAS Number	Exposure Limits (TLV-TWA)
Alcohol Ethoxysulfate Salt	3-10%	68585-34-2	Not Established
Ethoxylated Alcohol	1-5%	68131-39-5	Not Established
Sodium Carbonate	70-85%	497-19-8	10 mg/m^3 inh. (ACGIH-PNOC) 3 mg/m^3 resp.
Sodium Tripolyphosphate	<2%	7758-29-4	Not Established
Enzyme Preparation	< 1%	9014-01-1	0.00395 mg/m^3 (calculated)
(as 100% pure protease)			0.00006 mg/m ³ (ACGIH)
Bentonite Clay	2-6%	Mixture	10 mg/m ³ inh. (ACGIH-PNOC)
(fabric softener formula only)			$3 \text{ mg/m}^3 \text{ resp.}$
[Bentonite clay may contain up to 7% naturally occurring crystalline silica]			

Workplace Considerations: Contains no other hazardous ingredients at 1% or more (0.1% for carcinogens) as

defined by 29 CFR 1910 or the Hazardous Products Act.

(PNOC = Particles Not Otherwise Classified)

4. FIRST AID MEASURES

EYES: Avoid contact with eyes. If contact occurs, flush immediately with clean flowing water, low pressure and lukewarm if possible. After an initial flush, check for and remove contact lenses if present. Continue flushing for 15 minutes occasionally lifting upper and lower eyelids. Seek medical attention.

SKIN: Remove contaminated clothing. Wash exposed areas with soap and water. Seek medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

INHALATION: Avoid inappropriate handling that may result in the generation of aerosol dusts. If inhaled, move away from contaminated area to fresh air. Seek medical attention if person has difficulty breathing, chest discomfort, or exhibits any other signs of allergic response.

INGESTION: Causes irritation to mouth and throat. If swallowed, do not induce vomiting. If person is conscious, give 1-2 glasses of water to drink. Never give anything orally to an unconscious person. Seek medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES FLAMMABLE LIMITS FLASHPOINT: Not combustible LFL: Not applicable METHOD USED: Not applicable UFL: Not applicable EXTINGUISHING MEDIA: Non-combustible material. Use extinguishing media for surrounding fire. FIRE FIGHTING INSTRUCTIONS: Firefighters should wear full protective equipment including bunker gear and a self-contained breathing apparatus (SCBA) to avoid inhalation of irritating dusts and contact of dusts with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.



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6. ACCIDENTAL RELEASE MEASURES

Avoid generation of airborne dust. Wear skin, eye and respiratory protection (See Section 8). Ensure sufficient ventilation. Remove as much material as possible by mechanical means (i.e., vacuum). Dilute remainder with plenty of water (avoid high pressure washes that can lead to the formation of aerosols) and collect in a waste system.

7. HANDLING AND STORAGE

Store in original containers in a cool dry place. Avoid formation of airborne dusts and contact with product during handling and clean up (See Personal Protection in Section 8). This product will react with acids to yield carbon dioxide gas, which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and carbon dioxide levels have been determined to be safe.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust if dust level exceeds the recommended exposure limit.

RESPIRATORY PROTECTION: Respiratory protection is required where engineering and work practice controls are not able to sufficiently control airborne exposure below the recommended limit. If exposure exceeds the recommended limit, wear a NIOSH approved air purifying respirator.

PROTECTIVE GLOVES: General purpose recommended for normal exposure to material. Use impermeable gloves for repeated or prolonged contact with powder or where solutions are involved.
EYE PROTECTION: Wear safety glasses with side shields or safety goggles. Do not wear contact lenses.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Clean full cover clothing is sufficient. Local eye wash is recommended.
PROTECTIVE WORK/HYGENIC PRACTICES: No special work requirements with respect to chemical

exposure other than those noted above.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White powder or white powder with blue speckles (bleach version), blue and pink speckles (fabric softener version) ODOR: Scented or unscented per label PHYSICAL STATE: Powder pH AS IS: Not applicable VAPOR PRESSURE: Not applicable VAPOR DENSITY: Not applicable BOILING POINT: Not applicable FREEZING/MELTING POINT: Not applicable SOLUBILITY IN WATER: Appreciable SPECIFIC GRAVITY (Water = 1): 0.65 g/cc @ 20°C APPARENT DENSITY: 5.5 lbs/gal % VOLATILE: Not applicable VOLATILE ORGANIC COMPOUNDS: Not applicable.

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MOLECULAR WEIGHT: Not applicable (mixture)

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Direct exposure to prolonged high humidity or other moist/damp conditions may cause product to cake. Color safe bleach product will also lose oxygen.

INCOMPATIBILITY WITH OTHER MATERIALS: Heavy metals and reducing agents. Reacts with acids to yield carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition, although highly unlikely, will emit carbon dioxide, sulfur oxides, and sodium oxide. Decomposition of bleach product will also include oxygen and hydrogen peroxide.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: A severe eye irritant based on the alkaline nature and level of surfactants.

SKIN EFFECTS: Not a primary skin irritant. The FHSA Primary Dermal Irritation Index (PDII) on a similar product tested unoccluded for 4 hours was <1.0. Other similar carbonate-based detergent formulations have typically scored between 2.0-3.0 in 24 hour occluded tests. Product was not a skin sensitizer when tested in a human Repeat Insult Patch Test (RIPT).

ACUTE ORAL EFFECTS: Slightly toxic; LD_{50} estimated to be ≥ 3.0 g/kg. The principal component, sodium carbonate, has a reported LD_{50} of ranging from a low of approximately 3000 mg/kg to a high of approximately 5000 mg/kg.

INHALATION EFFECTS: Inhalation of dust may cause respiratory allergy in susceptible individuals. Inhaled dust or aspirated product from ingestion may cause upper respiratory irritation and delayed pulmonary effects.

12. ECOLOGICAL INFORMATION

TOXICITY: No data available. PERSISTENCE: Not expected to persist in the environment. BIOACCUMULATION: Not expected to bioaccumulate in the environment.

13. DISPOSAL CONSIDERATIONS.

Landfill in accordance with all local, state and federal environmental regulations. Local and state laws may differ from federal, so be sure to consult with appropriate agencies for specific rules. Dilute and drain small amounts to sewer (Avoid formation of aerosol). Discard empty containers as general trash.

14. TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

CORPORATE HEADQUARTERS: 469 North Harrison Street • Princeton, New Jersey 08543-5297 • Phone (609) 683-5900



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All ingredients in these products are reported in the EPA TSCA Inventory List and appear on the Canadian DSL.

CONSUMER USE:

<u>USA</u>: Regulated by and labeled in accordance with the Consumer Product Safety Act and Federal Hazardous Substances Act. As such, these products are exempt from the OSHA requirements under 29 CFR 1910.1200.

16. OTHER INFORMATION SUPERSEDES DATE: 03/27/06

REASON FOR REVISION: Formula revision.

For additional non-emergency health, safety and environmental information telephone 609.279.7705 or write to:

Church & Dwight Co. Inc. R&D Technical Regulatory Affairs 469 North Harrison Street Princeton, New Jersey 08543

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<u>CANADA</u>: Regulated by and labeled in accordance with the Hazardous Products Act. As such, these products are exempt from WHMIS.