

# Material Safety Data Sheet



RESTART

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## SECTION I - IDENTIFICATION

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MANUFACTURER'S NAME .....Haviland Consumer Products, Inc.  
MANUFACTURER'S ADDRESS .....421 Ann St., N.W., Grand Rapids, MI 49504  
PHONE NUMBER..... (616) 361-6691  
EMERGENCY PHONE NUMBER .....CHEMTREC (800) 424-9300  
EFFECTIVE DATE.....06/08/04  
TRADE NAME.....**RESTART**  
CHEMICAL FAMILY.....Peroxygen Salt

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## SECTION II - HAZARDOUS INGREDIENTS

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HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
Potassium Monopersulfate Compound	15 mg/m3, 8 hr. TWA, total dust	Not Established	70693-62-8

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## SECTION III - PHYSICAL DATA

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BOILING POINT ..... @ 760 mm Hg Decomposes  
FREEZING POINT ..... Not Established  
VAPOUR PRESSURE ..... Nil  
VAPOUR DENSITY (air=1) ..... Non-Volatile  
SOLUBILITY IN H<sub>2</sub>O..... 25.6% at 20°C  
ODOUR AND APPEARANCE ..... White, free-flowing granular with no odor  
SPECIFIC GRAVITY ..... 1.1-1.4  
pH..... Not Applicable

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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FLASHPOINT AND METHOD OF DETERMINATION .....Not Flammable  
LOWER EXPLOSIVE LIMIT (% by Volume) ..... Not Applicable  
UPPER EXPLOSIVE LIMIT (% by Volume) ..... Not Applicable  
MEANS OF EXTINCTION..... Water  
SPECIAL FIRE FIGHTING PROCEDURES..... Will release oxygen when heated, intensifying a fire. Acidic mist may be present; self contained breathing apparatus should be used.  
UNUSUAL FIRE HAZARD..... Improper storage of large masses of potassium peroxymonopersulfate can trap heat and lead to ignition of combustibles. Grinding or intensive mixing may cause decomposition with liberation of heat and oxygen; ignition of oxidizable material if present may occur.

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## SECTION V - HEALTH HAZARD DATA

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CARCINOGENICITY, REPRODUCTIVE EFFECTS .....	None
NTP?.....	No
IARC MONOGRAPHS?.....	No
OVER EXPOSURE EFFECTS .....	Material is a skin and eye corrosive, and a nose and throat irritant. May cause allergic skin reactions in sensitive individuals. Ingestion may cause inflammation and damage to the lining of the stomach, resulting in bleeding.
PRIMARY ROUTE(S) OF ENTRY .....	Inhalation, eye contact, skin contact, ingestion
SPECIFIC FIRST AID PROCEDURES .....	Eyes: Flush with water for at least 15 minutes, seek medical attention. Skin: Flush with water, if irritation occurs seek medical attention. Inhalation: Remove person into fresh air, seek medical attention. Ingestion: Do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Seek medical attention.
EXPOSURE AGGRAVATED MEDICAL CONDITIONS	Individuals with preexisting diseases of the skin or gastrointestinal tract may have increased susceptibility to the toxicity of excessive exposures.

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## SECTION VI - REACTIVITY DATA

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CHEMICAL STABILITY .....	Stable
CONDITIONS TO AVOID .....	None
INCOMPATIBLE MATERIALS.....	Mixed with compounds containing halides or active halogens can cause release of the respective halogen if moisture is present. Mixing with chlorides can cause release of chlorine gas. Mixing with cyanides can cause release of hydrogen cyanide gas. Mixing with heavy metal salts causes decomposition with release of oxygen and heat.
HAZARDOUS DECOMPOSITION PRODUCTS.....	Decomposes when heated or dampened, releasing oxygen and heat of decomposition.
HAZARDOUS POLYMERIZATION.....	Will Not Occur
POLYMERIZATION AVOID .....	Not Applicable

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## SECTION VII - SPILL OR LEAK PROCEDURE

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LEAK AND SPILL PROCEDURES.....	Sweep up. Flush area with low-pressure water.
WASTE DISPOSAL.....	Comply with all federal, state, and local regulations. Solutions > 3% by weight have a pH < 2.0, and may be a RCRA hazardous waste upon disposal. If approved, flush to sewer or waste treatment plant. Large quantities should be neutralized with soda ash.

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## SECTION VIII - SPECIAL PROTECTION

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RESPIRATORY PROTECTION .....	A NIOSH approved air-purifying respirator with an appropriate particulate cartridge or canister may be permissible under certain circumstances when airborne concentrations are expected to exceed exposure limits. None needed under normal circumstances.
VENTILATION .....	Use sufficient ventilation to keep employee exposure below recommended limits.
PROTECTIVE GLOVES.....	Impervious gloves
EYE PROTECTION.....	Wear safety glasses or coverall chemical splash goggles.
OTHER PROTECTIVE EQUIPMENT .....	A safety shower and eye bath should be available. Where there is potential for skin contact have available and wear as appropriate impervious apron, pants, and jacket.

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HANDLING PROCEDURES AND EQUIPMENT ..... Do not inhale. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Wash clothing after use. Store in a cool, dry, well-ventilated area away from heat sources. Keep packages dry. Do not store with combustible materials or with incompatibles.

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## SECTION IX - SPECIAL PRECAUTIONS

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HAZARD CLASS ..... Corrosive, 8, PG II or ORM-D if < 2.2 lb.  
DOT SHIPPING NAME..... Corrosive Solid, Acidic, Inorganic, N.O.S. (Monopersulfate Compound) or  
ORM-D if < 2.2 lb.  
UN NUMBER ..... UN3260 or ORM-D if < 2.2 lb.  
REPORTABLE QUANTITY (RQ)..... Not Listed

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REFERENCES

HMIS: H-2,F-0,R-1  
RESTART