Material Safety Data Sheet

SPECIAL BROMINATOR

SECTION I - IDENTIFICATION

MANUFACTURER'S NAME ........................................... Haviland Consumer Products Incorporated
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 .................................................. 4/9/01
TRADE NAME ...................................................... SPECIAL BROMINATOR
CHEMICAL FAMILY .................................................. Brominated imidazoline dione

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS ........................................ 1,3-dibromo-5,5-dimethylhydantoin
OSHA PEL ............................................................... Not Established
TLV (Units) ............................................................. Not Established
CAS NUMBER ......................................................... 77-48-5

SECTION III - PHYSICAL DATA

BOILING POINT ...................................................... Not Determined
FREEZING POINT ...................................................... 3200°F
VAPOUR PRESSURE .................................................... Not Applicable
VAPOUR DENSITY (air=1) ........................................... Not Applicable
SOLUBILITY IN H2O ................................................... Soluble
ODOUR AND APPEARANCE ......................................... White/Off-white solid; halogen odor.
SPECIFIC GRAVITY ................................................... Not Applicable
pH ......................................................................... Not Determined

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATION .............. Will Not Burn
LOWER EXPLOSIVE LIMIT (% by Volume) ....................... Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) ....................... Not Applicable
MEANS OF EXTINCTION ........................................... Dry chemical, water spray (fog), foam, or carbon dioxide.
SPECIAL FIRE FIGHTING PROCEDURES ....................... Toxic fumes may be liberated. Use self contained breathing apparatus in confined areas.
UNUSUAL FIRE HAZARD ........................................... None Currently Known

SECTION V - HEALTH HAZARD DATA

CARCINOGENICITY, REPRODUCTIVE EFFECTS ............... None
NTP? ................................................................. No
IARC MONOGRAPHS? ............................................... No
OVER EXPOSURE EFFECTS ........................................ Possible Irritation of eyes and skin. Inhalation and ingestion expected to be harmful.
PRIMARY ROUTE(S) OF ENTRY ................................... Inhalation
SPECIFIC FIRST AID PROCEDURES ....................... CONTACT: Eyes; Immediately flush eyes with plenty of water for at least 15 minutes. Get Medical Attention. Skin; Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get Medical Attention. INGESTION: Give large quantities of water. Do not induce vomiting. Get Medical Attention. Never give

12/19/01
EXPOSURE AGGRAVATED MEDICAL CONDITIONS

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: None Established.
INCOMPATIBLE MATERIALS: This product is a strong oxidizing and brominating agent. Avoid contact with aldehydes, strong reducing agents, acids, and ammonia containing products. Avoid contact with metals such as steel, aluminum, iron and copper.
HAZARDOUS DECOMPOSITION PRODUCTS: If strongly overheated, may release bromine.
HAZARDOUS POLYMERIZATION: Will Not Occur
POLYMERIZATION AVOID: Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES: Sweep or shovel spills into appropriate container for disposal.
WASTE DISPOSAL: This material is regulated as a hazardous waste material. Waste solid and solutions resulting from flushing spills should be disposed of at an approved hazardous waste disposal facility according to local, state and federal laws and regulations.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION: NIOSH approved dust/mist respirator under dusty or irritating conditions.
VENTILATION: Local exhaust.
PROTECTIVE GLOVES: Rubber or PVC
EYE PROTECTION: Safety glasses or chemical goggles.
OTHER PROTECTIVE EQUIPMENT: Flowing water source should be available. Prevent contact with skin & clothes by using protective garments.
HANDLING PROCEDURES AND EQUIPMENT: Store in well-ventilated cool, dry area. Keep container closed when not in use.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS: Oxidizer - 5.1 - P.G.II
DOT SHIPPING NAME: Oxidizing solid NOS(Brominator)
UN NUMBER: UN1479
REPORTABLE QUANTITY (RQ): Not Listed If less than 66 pound carton of 2.2 pound or less containers this product may be shipped ORM-D (Non-regulated)

REFERENCES

HMIS RATING: H-3, F-0, R-0, PPE-F EPA
REG. # 3377-61-57787 ZZ3SPBRO

12/19/01