

Material Safety Data Sheet



CHLORINATING GRANULES 56%

SECTION I - IDENTIFICATION

MANUFACTURER'S NAMEHaviland Consumer Products, Inc.
MANUFACTURER'S ADDRESS421 Ann St., N.W., Grand Rapids, MI 49504
PHONE NUMBER..... (616) 361-6691
EMERGENCY PHONE NUMBERCHEMTREC (800) 424-9300
EFFECTIVE DATE.....4/21/03
TRADE NAME.....**CHLORINATING GRANULES 56%**
CHEMICAL FAMILY.....Miscellaneous Blend

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
Sodium Dichloro-isocyanurate dihydrate	Not Established	1.5 mg/m ³ =0.5 ppm for chlorine gas TWA	51580-86-0

SECTION III - PHYSICAL DATA

BOILING POINT No Information Available
FREEZING POINT 240-250°C (Decomposes)
VAPOUR PRESSURE Not Applicable
VAPOUR DENSITY (air=1) Not Applicable
SOLUBILITY IN H₂O..... 29g/100g @ 25°C
ODOUR AND APPEARANCE White Granular; Slight Chlorine Odor
SPECIFIC GRAVITY Not Applicable
pH..... 1% Solution: 6.0 - 7.0

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATIONOver 150°C
LOWER EXPLOSIVE LIMIT (% by Volume) Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) Not Applicable
MEANS OF EXTINCTION.....Water, carbon dioxide. Do not use powder based on ammonium salt and halogenous extinguishing media.
SPECIAL FIRE FIGHTING PROCEDURES.....For small fires, carbon dioxide extinguishers can be used. Firefighters and others subjected to products of decomposition should wear full protective clothing and self-contained breathing apparatus. Use large quantities of water (small amounts may aggravate the situation)
Product is not flammable, but may decompose at high temperatures emitting toxic gases. Isolate involved drums from the rest if possible, and let them consume.
UNUSUAL FIRE HAZARD.....Nitrogen trichloride can be generated by reaction of water on product under certain conditions. The reaction of water with this chlorinating composition generally does not present an explosion hazard as rate of nitrogen trichloride formation is very slow.

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SECTION V - HEALTH HAZARD DATA

CARCINOGENICITY, REPRODUCTIVE EFFECTS None
NTP? No
IARC MONOGRAPHS? No
OVER EXPOSURE EFFECTS Eye damage, burns to skin, irritation of nose and throat.
PRIMARY ROUTE(S) OF ENTRY Inhalation, eye and skin contact
SPECIFIC FIRST AID PROCEDURES In case of contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. If inhaled: Remove to fresh air. If swallowed: If conscious drink milk, white of egg or water. Call a doctor. Do Not Induce Vomiting. For Skin: Thoroughly flush skin with plenty of water and wash contaminated clothes before reuse.
EXPOSURE AGGRAVATED MEDICAL CONDITIONS None Currently Known

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY Stable under normal conditions. Product loses less than 1% chlorine after one year at 40°C.
CONDITIONS TO AVOID Humidity and temperatures over 50°C.
INCOMPATIBLE MATERIALS Product attacks metal in general. It reacts with water, oxidant and reducing agents, acids, alkalis, nitrogen products, ammonium salts, urea, amines, quaternary ammonium derivatives, oils, fats, peroxides, cationic tensioactives, etc.
HAZARDOUS DECOMPOSITION PRODUCTS In combination with the above-mentioned products, it decomposes and gives off a great quantity of heat, chlorine, nitrogen trichloride, etc. with possible danger of explosion.
HAZARDOUS POLYMERIZATION Will Not Occur
POLYMERIZATION AVOID Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES Contain spilled material. Do not allow water or other incompatible substances to come into contact with spilled material. Keep out of sewers, watersheds, lakes and water systems. Sweep up material and place in clean, dry, labeled container for disposal.
WASTE DISPOSAL Waste should be diluted with a great quantity of water treated with sodium carbonate and sodium sulfite and then can be poured to the sewer. Follow local regulations. Waste only contains a mixture of salts and cyanuric acid which is biodegradable. Disposal of dry product is by incineration mixing product with solvents. The incinerator should be provided with a washing system for chlorine combustion gases. Carry out according to local, state and federal regulations on industrial waste disposal.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION NIOSH approved equipment with full mask equipped with suitable filter (combined for dust and halogens) when dust is above allowable limits.
VENTILATION To maintain minimum dust levels.
PROTECTIVE GLOVES Rubber or other impervious materials.
EYE PROTECTION Chemical splash proof goggles.
OTHER PROTECTIVE EQUIPMENT Suitable working clothes fully protecting the body. A safety shower and eye bath should be available. For operations where spills or splashing may occur, use an impervious body covering and boots.
HANDLING PROCEDURES AND EQUIPMENT Store in cool, dry, well ventilated area. Keep containers closed when not in use.

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SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS None
DOT SHIPPING NAME..... None
UN NUMBER None
REPORTABLE QUANTITY (RQ)..... Not Listed

REFERENCES

ZZ1CC200 Product is toxic for fishes and algae. It may give off chlorine in contact with other products. EPA REG.# 57787-9 HMIS
RATING: H-3, F-0, R-2