MATERIAL SAFETY DATA SHEET

CLARIFIER

==================================================================
SECTION I - IDENTIFICATION
==================================================================

MANUFACTURER'S NAME........ Haviland Consumer Products Incorporated
ADDRESS (STREET,CITY,STATE,ZIP) 421 Ann St., N.W., Grand Rapids, MI 49504
PHONE NUMBER................. (616) 361-6691
EMERGENCY PHONE NUMBER....... CHEMTREC (800) 424-9300
EFFECTIVE DATE.............. 7/7/99
TRADE NAME.................. CLARIFIER
CHEMICAL FAMILY.............. Quaternary ammonia homopolymer

==================================================================
SECTION II - HAZARDOUS INGREDIENTS
==================================================================

HAZARDOUS COMPONENTS OSHA/PEL ACGIH/TLV (Units) PROD. CAS #

**SEE NOTE UNDER "REFERENCES" AT END OF MSDS**

==================================================================
SECTION III - PHYSICAL DATA
==================================================================

BOILING POINT................. 212oF
FREEZING POINT.............. No Information Available
VAPOR PRESSURE (mm Hg)....... No Information Available
VAPOR DENSITY (Air=1)....... No Information Available
SOLUBILITY IN H2O............ Complete
APPEARANCE/ODOR.............. Clear Blue Liquid; Slight Odor
SPECIFIC GRAVITY (H2O=1).... 1.01
PH........................... No Information Available

==================================================================
SECTION IV - FIRE AND EXPLOSION HAZARD DATA
==================================================================

FLASH POINT.................. >212oF
LOWER EXPLOSIVE LIMIT (% by Volume) Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) Not Applicable
EXTINGUISH MEDIA............. Water fog, carbon dioxide, foam, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES... Use SCBA with full face shield
UNUSUAL FIRE HAZARD........... None Currently Known

==================================================================
SECTION V - HEALTH HAZARD DATA
==================================================================

CARCINOGENICITY............... None
NTP........................... No
ARC......................... No
OVER EXPOSURE EFFECTS........ May cause irritation
PRIMARY ROUTE(S) OF ENTRY.... Eye Contact

01/18/2000
-1-
MATERIAL SAFETY DATA SHEET

CLARIFIER

FIRST AID PROCEDURES........ In case of contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists. If inhaled: Remove to fresh air. For Skin: Thoroughly flush skin with plenty of water and wash contaminated clothes before reuse. Ingestion: Do not induce vomiting. Get immediate medical attention.

EXPOSURE AGGRAVATED MEDICAL CONDITIONS None Currently Known

==================================================================================
SECTION VI - REACTIVITY DATA
==================================================================================

CHEMICAL STABILITY......... Stable
CONDITIONS TO AVOID......... Not Applicable
INCOMPATIBLE MATERIALS..... Strong oxidizing agents
DECOMPOSITION PRODUCTS.... None Currently Known
HAZARDOUS POLYMERIZATION... Will Not Occur
POLYMERIZATION AVOID....... Not Applicable

==================================================================================
SECTION VII - SPILL OR LEAK PROCEDURE
==================================================================================

OR SPILL ...................... Reclaim as much spilled material as possible. Cover residue with absorbent material and shovel into closedable containers. Do not flush away to sewers or any natural waterways.

WASTE DISPOSAL METHOD....... Comply with all federal, state and local regulations.

==================================================================================
SECTION VIII - SPECIAL PROTECTION
==================================================================================

RESPIRATORY PROTECTION...... None Required for Normal Use
VENTILATION.................. None Required for Normal Use
PROTECTIVE GLOVES......... Rubber or other impervious materials
EYE PROTECTION............... Safety glasses or chemical splash proof goggles.
OTHER PROTECTIVE EQUIPMENT... 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 AND STORAGE....... Store in cool, dry area. Wash thoroughly after handling.

==================================================================================
SECTION IX - SPECIAL PRECAUTIONS
==================================================================================

HAZARD CLASS................ None
DOT SHIPPING NAME............ WATER TREATMENT COMPOUND

01/18/2000 -2-
MATERIAL SAFETY DATA SHEET

CLARIFIER

UN NUMBER ......................... None
REPORTABLE QUANTITY (RQ)....... Not Listed

=================================

REFERENCES ZZ1CLRFR

HMIS H=1 F=0 R=0 P=B

*NOTE* Other components of this product are being withheld as trade secret in accordance with OSHA Hazard Communication Standard 29CFR 1910.1200(i). In medical emergency, health professionals may obtain identity of components by calling CHEMTREC (800) 424-9300 in accordance with 29CFR 1910.1200(i)(2). Otherwise 29CFR 1910.1200(i)(3) and (4) apply.