HAAKE BUCHLER INSTRUMENTS, INC.
244 SADDLE RIVER RD.
SADDLE BROOK, NJ 07662
201 843-2320 TELEX: 219730

MATERIAL SAFETY DATA SHEET

DS#: 0001039

1. IDENTIFICATION OF PRODUCT
   PRODUCT NAME: ACRYLAMIDE-BIS PREMIX 3%
   SYNONYM:
   CHEMICAL NAME: ACRYLAMIDE MONOMER CONTAINING 3% W/W N,N-METHYLENEBISACRYLAMIDE
   FORMULA: C3H5NO (ACRYLAMIDE)
   CAS #: 79-06-1

2. HAZARDOUS MIXTURES
   ACRYLAMIDE
   N,N-METHYLENEBISACRYLAMIDE

3. PHYSICAL DATA
   BOILING PT. (DEG.C): N/A
   VAPOR PRESSURE (MMHG): 1.6 MM
   SPECIFIC GRAVITY (H2O=1): CA. 1.1
   AT 84.5 C
   % VOLATILE BY VOLUME: NEGLIGIBLE
   EVAPORATION RATE ( =1): N/A
   VAPOR DENSITY (AIR=1): 2.45
   SOLUBILITY IN WATER: VERY SOLUBLE
   APPEARANCE & ODOR: WHITE CRystALLINE SOLID, ODORLESS
   N/A = NOT AVAILABLE OR NOT APPLICABLE; N/D = NOT DETERMINED.

4. FIRE/EXPLOSION HAZARD DATA
   FLASH POINT (METHOD USED): N/A; FLAMMABLE LIMITS:__; UEL: LEL:__
   EXTINGUISHING MEDIUM: WATER SPRAY, CARBON DIOXIDE, HALONE OR DRY CHEMICAL.
   SPECIAL FIRE FIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS
   UNUSUAL FIRE/EXPLOSION HAZARDS: DUST MAY BE EXPLOSIVE IF MIXED WITH AIR
   IN CRITICAL PROPORTIONS AND IN THE PRESENCE OF A SOURCE OF IGNITION.

5. HEALTH HAZARD DATA
   TOXIC IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. DANGER OF CUMULATIVE EFFECTS! IRRITATING TO SKIN/EYES
   AND RESPIRATORY SYSTEM. LD50 ORALLY IN RATS: 294MG/KG. ACRYLAMIDE IS A
   NEUROTOXIC. NEUROTOXICITY CAN RESULT AFTER A SINGLE INGESTION BUT IS MORE
   LIKELY TO OCCUR AFTER INGESTION OF SMALL AMTS OVER A PERIOD OF SEVERAL DAYS/ WEEKS. ACRYLAMIDE IS RELIABLY ABSORBED THROUGH UNBROKEN SKIN. EARLY SYMPTOMS
   OF POISONING ARE PEELING/REDNESS OF SKIN ON AREAS OF EXPOSURE, SWEATING
   OF HANDS AND FEET, NUMBNESS, TINGLING AND WEAKNESS IN EXTREMITIES.
   EMERGENCY FIRST AID PROCEDURES: AVOID BREATHING DUST. AVOID CONTACT WITH
   SKIN/EYES. IN CASE OF SKIN CONTACT, REMOVE CONTAMINATED CLOTHING. CLEANSE
   SKIN THOROUGHLY WITH SOAP AND WATER. OBTAIN MEDICAL ATTENTION. IN CASE OF
   CONTACT WITH EYES, RINSE IMMEDIATELY W/PLENTY WATER & SEEK MEDICAL ADVICE.
   IF SWALLOWED, GET IMMEDIATE MEDICAL HELP.

6. REACTIVITY DATA
   STABILITY: UNSTABLE: X
   INCOMPATABILITY: OXIDIZING & REDUCING AGENTS, ACIDS, BASES & VINYL POLYMERIZATION INITIATORS (E.G. PEROXIDES). ALSO COPPER, ALUMINUM, BRASS & BRONZE.
   IRON OR RUST MAY TRIGGER RAPID EXOTHERMIC POLYMERIZATION OF ACRYLAMIDE SOLUTION.
   HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION OR COMBUSTION MAY
   PRODUCE OXIDES OF NITROGEN, CARBON MONOXIDE AND AMMONIA.
   HAZARDOUS POLYMERIZATION: MAY OCCUR
7. **Spill/Leak Procedures**

In case material is released/spilled: wear an approved respirator, gloves & rain-suit. Spills of acrylamide must be promptly removed. Use vacuum cleaner equipped with charcoal exhaust scrubber or hose from mechanical exhaust ventilation systems to vacuum spills. If these methods are not workable, sweep up spills and place in a covered waste disposal container. Flush area with water to chemical sewer. Dispose of in an approved incinerator equipped with an afterburner and scrubber. Observe all federal, state and local laws concerning health and environment.

8. **Special Protection Information**

Respiratory protection: utilize a closed system process where feasible. Where a closed system is not used, good enclosure and local exhaust ventilation should be provided. Organic vapor cartridges provide protection up to 10x the TLV. Cartridges must be changed at the beginning of each shift.

Protective gloves: impervious rubber or plastic.

Eye protection: chemical splash proof or goggles, a faceshield and head covering.

Other protective equipment: rubber shoes and long sleeved coveralls, which are to be provided clean daily. Safety shower and eyewash fountain when solutions are used.

9. **Special Precautions**

For handling and storing: store at -20 deg.C and under nitrogen to save high analytical grade. Keep container tightly closed to prevent acrylamide from subliming and entering the atmosphere. Acrylamide in contact with moisture will cake and may also slowly polymerize to form gels.

**DATE:** 10/31/85

Information accumulated herein is believed to be accurate, but is not warranted to be. Recipients are advised to confirm in advance of need that the information is current, applicable and suitable for their circumstances.