

MATERIAL SAFETY DATA SHEET

July 1, 1986

SECTION I NAME

Product: GLYCERIN
 Chemical Synonyms: Animal Starch
 Formula: (C₆H₁₀O₅)_x
 Units) Size: 1.5, 10, 25 grams
 C.A.S. No.: 9005-79-2

| | | | |
|--|------|---------|-----|
| CHEMTRAC 800-424-9300 Day: 716-226-6177 Night: 716-334-4222 | | Health | 0 |
| HAZARD RATING | | Fire | 0 |
| LEAL | SKIN | AMBI | HAZ |
| 0 | 1 | 2 | 3 |
| | | EXTREME | 4 |

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

| Principal Hazardous Component(s) | % | TLV Units |
|----------------------------------|------|------------------|
| Glycerin | 100% | None established |

Low hazard for usual laboratory handling; non-toxic

SECTION III PHYSICAL DATA

| | | | |
|-------------------------|------------------------|---|------------------------|
| Melting Point (°F) | Decomposes | Specific Gravity (H ₂ O = 1) | Greater than 1 |
| Boiling Point (°F) | Decomposes | Percent Volatile by Volume (%) | Non-volatile (NA) |
| Vapor Pressure (mm Hg) | Negligible as solid | Evaporation Rate | = 1) Non-volatile (NA) |
| Vapor Density (Air = 1) | Data not listed | | |
| Solubility in Water | Appreciable | | |
| Appearance and Odor | White powder; no odor. | | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | | | | | |
|---------------------------|---|-------------------------|----|-------|-------|
| Flash Point (Method Used) | Non-flammable | Flammable Limits in Air | NA | Lower | Upper |
| Extinguisher Media | Water spray; carbon dioxide (CO ₂); dry chemical (ABC). | | | | |

SPECIAL FIREFIGHTING PROCEDURES
 In fire conditions, wear a NIOSH-approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce various hazardous hydrocarbons as decomposition products; can react with strong oxidizing materials.

D.O.T. NON-REGULATED



FREY SCIENTIFIC

905 HICKORY LANE MANSFIELD OHIO 44905

MSDS No. Effective Date

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value

None established. (ACGIH 1983-84).

Effects of Overexposure

Minimal; dust may be irritating to nose and eyes.

Emergency and First Aid Procedures

Unlikely to be necessary. Flush eyes with water. IRRIGATION: Remove to fresh air. If symptoms of illness develop, get medical attention.

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SECTION VI REACTIVITY DATA

| | | | |
|--------------------------------------|----------------|---------------------|---|
| Stability | Unstable | Conditions to Avoid | |
| | Stable | | Excessive temperature or heat. Practices which produce dust. |
| Incompatibility (Materials to avoid) | | | Oxidizing agents. |
| Hazardous Decomposition Products | | | Combustion will produce carbon dioxide, smoke and probably emits carbon monoxide. |
| Hazardous Polymerization | | Conditions to Avoid | |
| May Occur | Will Not Occur | | Not applicable. |

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled
 Sweep up, avoiding production of dust and place in a suitable container.

Waste Disposal Method

Uncontaminated material may be disposed of in a sanitary landfill or incinerate.

SECTION VIII SPECIAL PROTECTION INFORMATION

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

| | | | | | |
|---------------------------------------|--|-----------------|------------|-------------------------|----|
| Respiration Protection (Specify Type) | None should be needed in normal laboratory use. If dusty, work in fume hood or wear an approved (NIOSH) dust mask. | Local Exhaust | Not needed | Special | No |
| Ventilation (Mechanical/General) | | Explosive proof | | Other | No |
| Protective Gloves | None needed | Eye Protection | | Chemical safety glasses | |

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing
 Store in a cool, dry place away from oxidizing agents. Wash thoroughly after handling.

Other Precautions

Head label on container before using.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. No. 1 Date 1/2/87 Approved [Signature] Chemical Safety Coordinator [Signature]

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