Sigma Chemical Co. P.O. Box 14508

St. Louis, MO 63178 USA

APPEARANCE AND ODOR

PHYSICAL PROPERTIES

WHITE CRYSTALLINE POWDER

MELTING POINT: 273 C TO 276 C

SECTION 10. - - - - - - - STABILITY AND REACTIVITY - - - -

Phone: 314-771-5765

## MATERIAL SAFETY DATA SHEET SECTION 1. - - - - - - CHEMICAL IDENTIFICATION- - - - - - - -CATALOG #: P1751 NAME: D-PHENYLALANINE SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -CAS #: 673-06-3 MF: C9H11NO2 EC NO: 211-603-5 SYNONYMS NCI-C60195 \* D-PHENYLALANINE \* D-BETA-PHENYLALANINE \* SECTION 3. - - - - - - - HAZARDS IDENTIFICATION - - - -DATA NOT AVAILABLE SECTION 4. - - - - - - - - FIRST-AID MEASURES- - - - - - - -IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER. IF INHALED, REMOVE TO FRESH AIR. WASH CONTAMINATED CLOTHING BEFORE REUSE. SECTION 5. - - - - - - - FIRE FIGHTING MEASURES - - - - - - -EXTINGUISHING MEDIA WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS. SECTION 6. - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - -WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES. SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE. SECTION 7. - - - - - - - HANDLING AND STORAGE- - - - - - - - -REFER TO SECTION 8. SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - -CHEMICAL SAFETY GOGGLES. COMPATIBLE CHEMICAL-RESISTANT GLOVES. SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. NIOSH/MSHA-APPROVED RESPIRATOR. AVOID BREATHING DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINER CLOSED. STORE IN A COOL DRY PLACE. SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - -

INCOMPATIBILITIES STRONG OXIDIZING AGENTS ACIDS BASES HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS CARBON MONOXIDE, CARBON DIOXIDE NITROGEN OXIDES SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - -ACUTE EFFECTS MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. RTECS #: AY7533000 ALANINE, PHENYL-, D-TOXICITY DATA IPR-RAT LD50:5452 MG/KG ABBIA4 64,319,1956 TARGET ORGAN DATA GASTROINTESTINAL (HYPERMOTILITY, DIARRHEA) GASTROINTESTINAL (NAUSEA OR VOMITING) ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION. SECTION 12. - - - - - - ECOLOGICAL INFORMATION - - - - - - -DATA NOT YET AVAILABLE. SECTION 13. - - - - - - DISPOSAL CONSIDERATIONS - - - - - -DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. - - - - - - TRANSPORT INFORMATION - - - - - -CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION. SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - - - -REVIEWS, STANDARDS, AND REGULATIONS OEL=MAK NOES 1983: HZD X5535; NIS 1; TNF 7; NOS 2; TNE 307; TFE 251 EPA TSCA SECTION 8(B) CHEMICAL INVENTORY SECTION 16. - - - - - - - OTHER INFORMATION- - - - - - - - -THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE. COPYRIGHT 2001 SIGMA-ALDRICH CO. LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY