

# MATERIAL SAFETY DATA SHEET REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

DATE PREPARED: June 26, 2007 SECTION 1. ----- CHEMICAL IDENTIFICATION-----CODE#: AB0091 NAME: L-ASPARTIC ACID. FCC SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -THIS MATERIAL IS NOT CONSIDERED HAZARDOUS UNDER 29CFR 1910.1200. AS WITH ALL CHEMICALS EXERCISE CAUTION WHILE HANDLING. **SYNONYMS** (S)-AMINOBUTANEDIOIC ACID \* L-AMINOSUCCINIC ACID \* ASPARAGIC ACID \* L-ASPARAGIC ACID \* ASPARAGINIC ACID \* L-ASPARAGINIC ACID \* ASPARTIC ACID \* (L)-ASPARTIC ACID \* L-(+)-ASPARTIC ACID \* (S)-ASPARTIC ACID \* SECTION 3. ----- HAZARDS IDENTIFICATION -----LABEL PRECAUTIONARY STATEMENTS IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER. IF INHALED. REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT. GIVE OXYGEN. IF SWALLOWED. WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE. WEAR SUITABLE PROTECTIVE CLOTHING. 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. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. 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-----

CHEMICAL SAFETY GOGGLES.

USE PROTECTIVE CLOTHING, GLOVES AND MASK.

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.

NIOSH/MSHA-APPROVED RESPIRATOR.

SAFETY SHOWER AND EYE BATH.

MECHANICAL EXHAUST REQUIRED.

AVOID INHALATION.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

WASH THOROUGHLY AFTER HANDLING.

KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.

# SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE

**POWDER** 

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

**INCOMPATIBILITIES** 

STRONG OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:

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.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND

TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

**CHRONIC EFFECTS** 

RTECS #: CI9098500

ASPARTIC ACID, L-

**TOXICITY DATA** 

IPR-MUS LD50:6 GM/KG PCJOAU 25,569,91

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 -----OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. ----- TRANSPORT INFORMATION -----NOT REGULATED. SECTION 15. ----- REGULATORY INFORMATION -----**EUROPEAN INFORMATION** R: N/A S: N/A REVIEWS, STANDARDS, AND REGULATIONS OEL=MAK NOHS 1974: HZD 81861; NIS 3; TNF 803; NOS 3; TNE 5939 NOES 1983: HZD 81861; NIS 3; TNF 634; NOS 11; TNE 9033; TFE 6545 EPA GENETOX PROGRAM 1988, POSITIVE: SPERM MORPHOLOGY-HUMAN 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. BIO BASIC INC. 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.