

# MATERIAL SAFETY DATA SHEET

Human L-FABP Assay Kit 96 Test

MSDS DATE:07/01/2008

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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**PRODUCT NAME:** Human L-FABP ELISA Kit 96Test  
**SYNONYMS:** None  
**PRODUCT CODES:** Z-001  
**SUPPLIER:** CMIC Co., Ltd.  
**DIVISION:** L-FABP Business Department  
**ADDRESS:** Mass Bldg.2F, 2-16-10 Yushima, Bunkyo-ku Tokyo 113-0034, JAPAN  
**TEL PHONE:** +81-3-5745-7068  
**FAX PHONE:** +81-3-3830-5455

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## SECTION 2: COMPOSITION/INFORMATION ON COMPONENTS

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**PRINCIPAL HAZARDOUS COMPONENTS:** Substrate (OPD tablet 13mg)  
**INGREDIENT:** (1)o-Phenylenediamine dihydrochloride  
(2)Excipient  
**CAS NO.:** (1)615-28-1  
(2)None  
**%WT:** (1)20.6%  
(2)None  
**CHEMICAL NAME:** (1)o-Phenylenediamine dihydrochloride  
(2)None  
**CHEMICAL FAMILY:** (1)Amines  
(2) None  
**SYNONYMS:** (1)1,2-Diaminobenzene dihydrochloride  
(2)None  
**CHEMICAL FORMULA:** (1) $C_6H_4(NH_2)_2HCl$   
(2)None  
**IDENTIFICATION OF DANGER**  
**SYMBOL:** Xn, N  
**R-PHASE:** 22-36-40-43-51/53-68

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## SECTION 3: HAZARDS IDENTIFICATION

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Harmful if swallowed.  
Irritating to eyes.  
Limited evidence of a carcinogenic effects.  
May cause sensitization by skin contact.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Possible risks of irreversible effects.  
Harmful if inhaled.

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## SECTION 4: FIRST AID MEASURES

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**GENERAL ADVICE:** Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

**INHALATION:** Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

**SKIN CONTACT:** Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

**EYE CONTACT:** Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

**INGESTION:** Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

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## SECTION 5: FIRE-FIGHTING MEASURES

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**EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical powder, foam, water

**FIRE & EXPLOSION HAZARDS:** Toxic, irritating dust or smoke may be emitted.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:** Firemen should wear normal protective equipment(full bunker gear)and positive-pressure self-contained breathing apparatus.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**PERSONAL PRECAUTIONS:** Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spills from entering sewers, watercourses or low areas.

**METHODS FOR CLEAN UP:** Do not touch spilled material without suitable protection(See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

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## SECTION 7: HANDLING AND STORAGE

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**HANDLING:** Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

**STORAGE:** Store away from sunlight in a cool( 2-8 °C= 35.6-46.4 °F ) well-ventilated dry place. Keep container tightly closed.

**INCOMPATIBLE PRODUCTS:** Strong oxidizers

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**ENGINEERING MEASURES:** Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

**VENTILATION :** Local Exhaust; Necessary, Mechanical(General) ; Necessary Special; Closed system is recommended.

**PERSONAL PROTECTION ;**

Respiratory protection: NIOSH/MSHA or European Standard EN149 approved respirator

Hand protection: Chemical resistant gloves

Eye protection: Safety glasses(goggles)

Skin protection: Protective clothing

**CONTROL PARAMETER :** (1),(2); OSHA Final Limits : None established  
ACGIH TLV(s) : None established

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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**APPEARANCE :** White - slightly yellow tablet

**ODOR :** Not available

**pH :** Not available

**BOILING POINT :** Not available

**MELTING POINT :** Not available

**FLASH POINT :** Not available

**FLAMMABILITY (solid, gas) :** Not available

**DECOMPOSITION TEMPERATURE:** Not available

**EXPLOSIVE LIMITS :** Not available

**VAPOR PRESSURE :** Not available

**SPECIFIC GRAVITY :** Not available

**SOLUBILITY IN ;**

WATER : Soluble

log Po/w: Not available

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## SECTION 10: STABILITY AND REACTIVITY

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**CONDITION TO AVOID :** Sunlight, heat

**INCOMPATIBILITY(MATERIAL TO AVOID) :** Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS :** Carbon monoxide, nitrogen oxides and chlorine compounds may be formed.

**HAZARDOUS POLYMERIZATION :** Will not occur.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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**ACUTE TOXICITY DATA :** Not available as the mixture  
(1); LD50(ipr, rat) : 290mg/kg(NCIBR\* NCI-E-68-1311,1973)  
(2); LD50(ori, rat) : 2260mg/kg

**TOXICITY DATA :** Not available as the mixture and components

**IRRITATION DATA :** Not available as the mixture  
(2); Eye; rabbit; 750 µ g; Severe

**MUTATION DATA :** Not available as the mixture  
(1); Mutation in microorganisms; S.typhimurium; 100 µ g/plate(EMMUEG 19(SUPPL 21), 2, 1992)  
(2); DNA inhibition: Human: Fibroblast: 20mmol/L

**REPRODUCTIVE EFFECTS DATA :** Not available as the mixture and components

**TUMORIGENIC DATA :** Not available as the mixture  
(1); TDLo(ori, rat): 130gm/kg/78W-C(JEPTDQ 2(2),325,1978)

### ADDITIONAL INFORMATION ;

**NTP :** Not listed  
**IARC :** Not listed  
**OSHA :** Not listed  
**ACGIH :** Not listed

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## SECTION 12: ECOLOGICAL INFORMATION

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**BIODEGRADABILITY :** Not available  
**BIOACCUMULATION POTENTIAL :** Not available  
**AQUATIC TOXICITY :** Not available  
**OTHER INFORMATION :** (2); WGK; 1

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## SECTION 13: DISPOSAL CONSIDERATIONS

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Burn in small portion in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations ( contact country, local or state environmental agency for specific rules ).

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## SECTION 14: TRANSPORT INFORMATION

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**IATA :** Not Restricted.  
**DOT(Department of Transportation) :** Not a Hazardous Material for DOT shipping.

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## SECTION 15: REGULATORY INFORMATION

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### US REGULATIONS :

(1); SARA III/313 Tox. Chem.

EPA : EPCRA section 313 de minimis concentration is 1.0%.

CERCLARQ= Not listed

EPCRA TPQ= Not listed

OSHA :TQ= Not listed

(2); CAA/111 Volat. Org. Comp., Canad. WHMIS IDL 1% conc.

EPA : CERCLA RQ= Not listed

EPCRA TPQ= Not listed

OSHA :TQ= Not listed

### EU REGULATIONS :

SYMBOL : Xn, N

R-phrases : 22-36-40-43-51/53-68

Harmful if swallowed.

Irritating to eyes.

Limited evidence of a carcinogenic effects.

May cause sensitization by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Possible risks of irreversible effects.

S-phrases : 28-36/37-45-60-61

After contact with skin, wash immediately with plenty of water.

Wear suitable protective clothing and gloves.

In case of accident or if you feel unwell, seek medical advice immediately.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/Safety data sheets.

EC index No. : (1); 612-146-00-8

(2); Not listed

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## SECTION 16: OTHER INFORMATION

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No specific notes