M A T E R I A L  S A F E T Y  D A T A  S H E E T  

SECTION 1. - - - - - - - CHEMICAL IDENTIFICATION - - - - - - -
CATALOG #:
NAME: L4261
(D-PHE2,6,PRO3)-LUTEINIZING HORMONE
RELEASING HORMONE

SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - - - -
CAS #: 64789-67-9
MF: C59H80N14O13
SYNONYMS
(D-PHE(SUP 2)-PRO(SUP 3)-D-PHE(SUP 6))-LHRH *

SECTION 3. - - - - - - - HAZARDS IDENTIFICATION - - - - - - -
LABEL PRECAUTIONARY STATEMENTS
TOXIC
MAY IMPAIR FERTILITY.
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.
DO NOT BREATHE DUST.

SECTION 4. - - - - - - - FIRST-AID MEASURES - - - - - - -
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.
IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.
IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

SECTION 5. - - - - - - - FIRE FIGHTING MEASURES - - - - - - -
EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.
WATER SPRAY.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

SECTION 6. - - - - - - - ACCIDENTAL RELEASE MEASURES - - - - - - -
WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY CLOTHING.
CONTINUED ON NEXT PAGE
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RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
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 - - - - -

NIOSH/MSHA-APPROVED RESPIRATOR.
MECHANICAL EXHAUST.
COMPATIBLE CHEMICAL-RESISTANT GLOVES.
CHEMICAL SAFETY GOGGLES.
STORE WITH DESICCANT.

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

APPEARANCE AND ODOR
SOLID.

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

STABILITY
STABLE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE
NITROGEN OXIDES

HAZARDOUS POLYMERIZATION
WILL NOT OCCUR.

SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - - - - -

ACUTE EFFECTS
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
MAY CAUSE REPRODUCTIVE DISORDERS.
MAY HAVE ACTIONS SIMILAR TO LUTEINIZING HORMONE RELEASING HORMONE (LH-RH) AND GONADOTROPIN RELEASING HORMONE (GN-RH) WHICH ARE THE KEY MEDIATORS IN THE NEUROREGULATION OF THE SECRETION OF GONADOTROPINS, LUTEINIZING HORMONE (LH) AND FOLLICLE STIMULATING HORMONE (FSH). LH-RH CAN MODIFY SEXUAL BEHAVIOR BY REGULATING PLASMA GONADOTROPIN AND SEX STEROID LEVELS.
BIOACTIVE PEPTIDE.
THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

ADDITIONAL INFORMATION
*VALE, W.W., ET AL., PEPTIDES, STRUCTURE AND BIOLOGICAL FUNCTION,
CONTINUED ON NEXT PAGE
CATALOG #: L4261
NAME: (D-PHE2,6,PRO3)-LUTEINIZING HORMONE
RELEASING HORMONE

PROCEEDINGS OF THE SIXTH AMERICAN PEPTIDE SYMPOSIUM, GROSS, E. AND 
MIEHNER, M., EDs., 781 (1979).

RTECS #: OK6675000
LUTEINIZING HORMONE-RELEASING FACTOR(PIG),
2-D-PHENYLALANINE-3-L-PROLINE-6-D-PHENYLALANINE

TARGET ORGAN DATA
EFFECTS ON FERTILITY (OTHER MEASURES OF FERTILITY)
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 - - - - - -
EUROPEAN INFORMATION
CAUTION: SUBSTANCE NOT YET FULLY TESTED.
TOXIC
R 60
MAY IMPAIR FERTILITY.
S 45
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
S 36/37/39
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.
S 22
DO NOT BREATHE DUST.

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 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.

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CONTINUED ON NEXT PAGE

7138
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MATERIAL SAFETY DATA SHEET PAGE 4

CATALOG #: L4261
NAME: (D-PHE2,6,PRO3)-LUTEINIZING HORMONE RELEASING HORMONE

P.O. BOX 355
MILWAUKEE, WISCONSIN 53201, USA

MATERIAL WAS SHIPPED TO THIS ADDRESS:
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WHITewater WI 53190