

# *Chem-Impex International Inc.*

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

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### SECTION 1. CHEMICAL IDENTIFICATION

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CATALOG #: 05990

NAME: H-D-Orn(Z)-OH

SYNONYMS: N<sup>d</sup>-Z-D-ornithine

24 HOUR EMERGENCY TELEPHONE: (800) 535-5053(USA)  
352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE: (630) 766-2112

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### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

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CAS #: 16937-91-0

MF: C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>

MW: 266.30

PURITY:

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SECTION 3. HAZARDS IDENTIFICATION

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NOT AVAILABLE.

**POTENTIAL HEALTH EFFECTS**

THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN INVESTIGATED. USE APPROPRIATE PROCEDURES TO PREVENT OPPORTUNITIES FOR DIRECT CONTACT WITH THE SKIN OR EYES AND TO PREVENT INHALATION.

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SECTION 4. FIRST-AID MEASURES

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EYES: NOT AVAILABLE.

SKIN: NOT AVAILABLE.

INHALATION: NOT AVAILABLE.

INGESTION: DO NOT INDUCE VOMITING. IF CONSCIOUS AND ALERT, RINSE MOUTH AND DRINK 2-4 CUPFULS OF MILK OR WATER.

NOTES FOR PHYSICIAN: TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

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SECTION 5. FIRE FIGHTING MEASURES

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FLASH POINT: NOT AVAILABLE

AUTOIGNITION            NOT AVAILABLE  
TEMPERATURE:

FLAMMABLE LIMITS IN AIR, BY % VOLUME  
UPPER: NOT AVAILABLE  
LOWER: NOT AVAILABLE

EXTINGUISHING            NOT AVAILABLE.  
MEDIA:

GENERAL                    AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING  
INFORMATION:            APPARATUS IN PRESSURE-DEMAND, MSHA/NIOSH  
                                 (APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

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USE PROPER PERSONAL PROTECTIVE EQUIPMENT AS INDICATED IN SECTION 8.

SPILLS AND LEAKS:      SWEEP UP, THEN PLACE INTO A SUITABLE CONTAINER FOR  
DISPOSAL.

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## SECTION 7. HANDLING AND STORAGE

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HANDLING                  NOT AVAILABLE.

STORAGE                    KEEP COOL AND DRY

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING              USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION

CONTROLS: TO KEEP AIRBORNE CONCENTRATIONS BELOW THE PERMISSIBLE EXPOSURE LIMITS.

EYES: WEAR SAFETY GLASSES AND CHEMICAL GOGGLES IF SPLASHING IS POSSIBLE.

SKIN AND CLOTHING: WEAR APPROPRIATE PROTECTIVE GLOVES AND CLOTHING TO PREVENT SKIN EXPOSURE.  
WEAR APPROPRIATE PROTECTIVE CLOTHING TO MINIMIZE CONTACT WITH SKIN.

RESPIRATORS: WEAR A NIOSH/MSHA OR EUROPEAN STANDARD EN 149 APPROVED FULL-FACEPIECE AIRLINE RESPIRATOR IN THE POSITIVE PRESSURE MODE WITH EMERGENCY ESCAPE PROVISIONS.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE:

pH: NOT AVAILABLE

VAPOR PRESSURE: NEGLIGIBLE.

VISCOSITY: NOT AVAILABLE

BOILING POINT:

FREEZING / MELTING  
POINT

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SECTION 10. STABILITY AND REACTIVITY

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|---------------------------------------|--|
| CHEMICAL STABILITY:                   | STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.          |
| CONDITIONS TO AVOID                   | INCOMPATIBLE MATERIALS.                                  |
| INCOMPATIBILITY WITH OTHER MATERIALS: | OXIDIZING AGENTS, REDUCING AGENTS, BASES, ALKALI METALS. |
| HAZARDOUS DECOMPOSITION PRODUCTS:     | CARBON MONOXIDE, CARBON DIOXIDE.                         |
| HAZARDOUS POLYMERIZATION:             | HAS NOT BEEN REPORTED.                                   |

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SECTION 11. TOXICOLOGICAL INFORMATION

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RTECS#:

CAS# 16937-91-0

LD50/LC50:

CAS# 16937-91-0 :  
NOT AVAILABLE.

CARCINOGENICITY:

CAS# 16937-91-0 : NOT LISTED BY ACGIH, IARC, NIOSH, NTP, OR OSHA. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

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SECTION 12. ECOLOGICAL INFORMATION

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DATA NOT YET AVAILABLE.

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SECTION 13. DISPOSAL CONSIDERATIONS

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DISPOSE OF IN A MANNER CONSISTENT WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

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SECTION 14. TRANSPORT INFORMATION

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NO INFORMATION AVAILABLE.

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SECTION 15. REGULATORY INFORMATION

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**U.S. FEDERAL REGULATIONS:**

**TSCA:**

CAS# 16937-91-0 IS LISTED ON THE TSCA INVENTORY.

**EUROPEAN/INTERNATIONAL REGULATIONS**

**EUROPEAN LABELING IN ACCORDANCE WITH EC DIRECTIVES**

**HAZARD SYMBOLS:** NOT AVAILABLE.

**RISK PHRASES:**

**SAFETY PHRASES:**

S 24/25 AVOID CONTACT WITH SKIN AND EYES.

**WGK (WATER DANGER/PROTECTION)**

CAS# 16937-91-0 : NO INFORMATION AVAILABLE.

## **UNITED KINGDOM OCCUPATIONAL EXPOSURE LIMITS**

## **UNITED KINGDOM MAXIMUM EXPOSURE LIMITS**

### **CANADA - DSL/NDSL**

CAS# 16937-91-0 IS LISTED ON CANADA'S DSL LIST.

### **CANADIAN INGREDIENT DISCLOSURE LIST**

CAS# 16937-91-0 : IS NOT LISTED ON CANADA'S INGREDIENT DISCLOSURE LIST.

### **EXPOSURE LIMITS**

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## SECTION 16. OTHER INFORMATION

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### MSDS LEGEND:

MW: MOLECULAR WEIGHT  
MF: MOLECULAR FORMULA  
VOC: VOLATILE ORGANIC COMPOUNDS  
ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL  
HYGIENISTS  
CAS: CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER  
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)  
TLV: THRESHOLD LIMIT VALUE (ACGIH)

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