

# ***Chem-Impex International Inc.***

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## **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 #:                      | 29800   |
| NAME:                           | L-Glutathione Oxidized Hexahydrate                  |
| SYNONYMS:                       | GSSG  |
| 24 HOUR EMERGENCY<br>TELEPHONE: | (800) 535-5053(USA)<br>352-323-3500 (INTERNATIONAL) |
| TO REQUEST AN MSDS:             | (800) 869-9290                                      |
| CUSTOMER<br>SERVICE:            | (630) 766-2112                                      |

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### **SECTION 2.   HAZARDS IDENTIFICATION**

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#### **CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**

NOT A HAZARDOUS SUBSTANCE OR MIXTURE.

#### **GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS**

NOT A HAZARDOUS SUBSTANCE OR MIXTURE.

**HAZARDS NOT  
OTHERWISE  
CLASSIFIED (HNOC)  
OR NOT COVERED  
BY GHS**                NONE

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### **SECTION 3.   COMPOSITION/INFORMATION ON INGREDIENTS**

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|     |  |
|-----|--|
| MF: | C <sub>20</sub> H <sub>32</sub> N <sub>6</sub> O <sub>12</sub> S <sub>2</sub> •6H <sub>2</sub> O |
| MW: | 720.72   |

CAS-NO. 121-24-4

PURITY:  $\geq 99\%$  (Assay)

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## SECTION 4. FIRST-AID MEASURES

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### DESCRIPTION OF FIRST AID MEASURES

|  |  |
|--|--|
| GENERAL ADVICE   | IMMEDIATELY REMOVE ANY CLOTHING CONTAMINATED BY THE PRODUCT. MOVE OUT OF DANGEROUS AREA. CONSULT A PHYSICIAN AND SHOW THIS SAFETY DATA SHEET.  |
| IF INHALED   | MOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN AND CONSULT A PHYSICIAN  |
| IN CASE OF SKIN CONTACT  | IMMEDIATELY FLUSH SKIN WITH RUNNING WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. WASH CLOTHING BEFORE REUSE. CONSULT A PHYSICIAN IMMEDIATELY                          |
| IN CASE OF EYE CONTACT   | IMMEDIATELY WASH SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS WITH FINGERS. IF IRRITATION PERSISTS, CONSULT A PHYSICIAN. |
| IF SWALLOWED   | DO NOT INDUCE VOMITING . NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.   |
| MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED                | THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2) AND/OR IN SECTION 11  |
| INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED | NO DATA AVAILABLE  |

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## SECTION 5. FIRE AND EXPLOSION DATA

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### EXTINGUISHING MEDIA

|   |   |
|---|---|
| SUITABLE EXTINGUISHING MEDIA                          | USE WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE OR CHEMICAL FOAM.         |
| SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE | CARBON OXIDES, NITROGEN OXIDES (NOX), SULPHUR OXIDES, POTASSIUM OXIDES  |
| ADVICE FOR FIREFIGHTERS                               | WEAR SELF CONTAINED BREATHING APPARATUS FOR FIRE FIGHTING IF NECESSARY. |
| FURTHER INFORMATION                                   | NO DATA AVAILABLE   |

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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**PERSONAL  
PRECAUTIONS,  
PROTECTIVE  
EQUIPMENT AND  
EMERGENCY  
PROCEDURES**

WEAR PROTECTIVE EQUIPMENT AND KEEP UNPROTECTED PERSONNEL AWAY. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. PREVENT FURTHER LEAK OR SPILL IF SAFE TO DO SO.

FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL  
PRECAUTIONS**

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

**METHODS AND  
MATERIALS FOR  
CONTAINMENT AND  
CLEANING UP**

PREVENT FURTHER LEAK OR SPILL IF SAFE TO DO SO. VACUUM, SWEEP UP, OR ABSORB WITH INERT MATERIAL AND PLACE INTO A SUITABLE DISPOSAL CONTAINER. CONSULT LOCAL REGULATIONS FOR DISPOSAL

**REFERENCE TO OTHER  
SECTIONS**

FOR DISPOSAL SEE SECTION 13.

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**SECTION 7. HANDLING AND STORAGE**

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**PRECAUTIONS FOR SAFE  
HANDLING**

AVOID CONTACT WITH SKIN, EYES, AND PERSONAL CLOTHING. WASH HANDS THOROUGHLY AFTER HANDLING. AVOID BREATHING FUMES. USE ONLY WITH ADEQUATE VENTILATION. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES, AND EYE/FACE PROTECTION. KEEP AWAY FROM SOURCES OF IGNITION. MINIMIZE DUST GENERATION AND ACCUMULATION. KEEP CONTAINER TIGHTLY CLOSED. OPEN AND HANDLE CONTAINER WITH CARE. DO NOT EAT, DRINK, OR SMOKE WHILE HANDLING.

FOR PRECAUTIONS SEE SECTION 2.

**CONDITIONS FOR SAFE  
STORAGE, INCLUDING  
ANY INCOMPATIBILITIES**

STORE IN A TIGHTLY-CLOSED CONTAINER WHEN NOT IN USE. STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM INCOMPATIBLE SUBSTANCES. KEEP AWAY FROM SOURCES OF IGNITION.

**RECOMMENDED  
STORAGE TEMPERATURE**

Store at 2 - 8 °C

**SPECIFIC END USE(S)**

FOR LABORATORY USE ONLY

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**CONTROL PARAMETERS**

**COMPONENTS WITH  
WORKPLACE CONTROL  
PARAMETERS**

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL  
EXPOSURE LIMIT VALUES.

**EXPOSURE CONTROLS****APPROPRIATE  
ENGINEERING  
CONTROLS**

AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. WASH  
HANDS BEFORE BREAKS AND IMMEDIATELY AFTER  
HANDLING THE PRODUCT. FACILITIES STORING OR  
UTILIZING THIS MATERIAL SHOULD BE EQUIPPED WITH AN  
EYEWASH FOUNTAIN. USE ADEQUATE VENTILATION TO  
KEEP AIRBORNE CONCENTRATIONS LOW.

**PERSONAL PROTECTIVE EQUIPMENT****EYE/FACE PROTECTION**

SAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TO  
EN166 USE EQUIPMENT FOR EYE PROTECTION TESTED AND  
APPROVED UNDER APPROPRIATE GOVERNMENT  
STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

**SKIN PROTECTION**

HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED  
PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE  
(WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO  
AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF  
CONTAMINATED GLOVES AFTER USE IN ACCORDANCE  
WITH APPLICABLE LAWS AND GOOD LABORATORY  
PRACTICES. WASH AND DRY HANDS.

**BODY PROTECTION**

IMPERVIOUS CLOTHING, THE TYPE OF PROTECTIVE  
EQUIPMENT MUST BE SELECTED ACCORDING TO THE  
CONCENTRATION AND AMOUNT OF THE DANGEROUS  
SUBSTANCE AT THE SPECIFIC WORKPLACE.

**RESPIRATORY  
PROTECTION**

WHERE RISK ASSESSMENT INDICATES AIR-PURIFYING  
RESPIRATORS ARE REQUIRED USE A DUST MASK TYPE N95  
(US) OR TYPE P1 (EN 143) RESPIRATOR. RESPIRATORS AND  
COMPONENTS MUST TESTED AND APPROVED UNDER  
APPROPRIATE GOVERNMENT STANDARDS - NIOSH (US) OR  
CEN (EU).

**CONTROL OF  
ENVIRONMENTAL  
EXPOSURE**

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO  
SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE  
INTO THE ENVIRONMENT MUST BE AVOIDED.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

|                       |                          |
|-----------------------|--------------------------|
| APPEARANCE            | White crystalline powder |
| ODOUR                 | NO DATA AVAILABLE        |
| ODOUR THRESHOLD       | NO DATA AVAILABLE        |
| PH                    | NO DATA AVAILABLE        |
| MELTING               |                          |
| POINT/FREEZING POINT  |                          |
| INITIAL BOILING POINT |                          |
| AND BOILING RANGE     |                          |
| FLASH POINT           |                          |

|  |                   |
|--|-------------------|
| EVAPORATION RATE                             | NO DATA AVAILABLE |
| FLAMMABILITY (SOLID, GAS)                    | NO DATA AVAILABLE |
| UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS | NO DATA AVAILABLE |
| VAPOUR PRESSURE                              | NO DATA AVAILABLE |
| VAPOUR DENSITY                               | NO DATA AVAILABLE |
| RELATIVE DENSITY                             |                   |
| WATER SOLUBILITY                             | NO DATA AVAILABLE |
| PARTITION COEFFICIENT: N- OCTANOL/WATER      | NO DATA AVAILABLE |
| AUTO-IGNITION TEMPERATURE                    | NO DATA AVAILABLE |
| DECOMPOSITION TEMPERATURE                    | NO DATA AVAILABLE |
| VISCOSITY                                    | NO DATA AVAILABLE |
| EXPLOSIVE PROPERTIES                         | NO DATA AVAILABLE |
| OXIDIZING PROPERTIES                         | NO DATA AVAILABLE |
| <b>OTHER SAFETY INFORMATION</b>              | NO DATA AVAILABLE |

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## SECTION 10. STABILITY AND REACTIVITY

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|   |  |
|---|--|
| <b>REACTIVITY</b>                         | NO DATA AVAILABLE  |
| <b>CHEMICAL STABILITY</b>                 | STABLE UNDER RECOMMENDED STORAGE CONDITIONS.   |
| <b>POSSIBILITY OF HAZARDOUS REACTIONS</b> | NO DATA AVAILABLE  |
| <b>CONDITIONS TO AVOID</b>                | HEAT, FLAMES AND SPARKS  |
| <b>INCOMPATIBLE MATERIALS</b>             | STRONG OXIDIZING AGENTS  |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS</b>   | CARBON MONOXIDE, NITROGEN OXIDES, HYDROGEN CHLORIDE<br>IN THE EVENT OF FIRE: SEE SECTION 5 |

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## SECTION 11. TOXICOLOGICAL INFORMATION

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### INFORMATION ON TOXICOLOGICAL EFFECTS

|  |                   |
|--|-------------------|
| <b>ACUTE TOXICITY</b>                    | NO DATA AVAILABLE |
| <b>SKIN CORROSION/IRRITATION</b>         | NO DATA AVAILABLE |
| <b>SERIOUS EYE DAMAGE/EYE IRRITATION</b> | NO DATA AVAILABLE |

|   |  |
|---|--|
| <b>RESPIRATORY OR SKIN SENSITISATION</b>                  | NO DATA AVAILABLE  |
| <b>GERM CELL MUTAGENICITY</b>                             | NO DATA AVAILABLE  |
| <b>CARCINOGENICITY</b>                                    |  |
| IARC:   | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.            |
| ACGIH:  | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY ACGIH.                       |
| NTP:  | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.                            |
| OSHA:   | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY OSHA.                        |
| <b>REPRODUCTIVE TOXICITY</b>                              | NO DATA AVAILABLE  |
| <b>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</b>   | NO DATA AVAILABLE  |
| <b>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</b> | NO DATA AVAILABLE  |
| <b>ASPIRATION HAZARD</b>                                  | NO DATA AVAILABLE  |
| <b>ADDITIONAL INFORMATION</b>                             | RTECS: NOT AVAILABLE<br>TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL AND TOXICOLOGICAL PROPERTIES OF THIS SUBSTANCE HAVE NOT BEEN THOROUGHLY INVESTIGATED. |

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**SECTION 12. ECOLOGICAL INFORMATION**

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|   |  |
|---|--|
| <b>TOXICITY</b>                           | NO DATA AVAILABLE  |
| <b>PERSISTENCE AND DEGRADABILITY</b>      | NO DATA AVAILABLE  |
| <b>BIOACCUMULATIVE POTENTIAL</b>          | NO DATA AVAILABLE  |
| <b>MOBILITY IN SOIL</b>                   | NO DATA AVAILABLE  |
| <b>RESULTS OF PBT AND VPVB ASSESSMENT</b> | PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED |
| <b>OTHER ADVERSE EFFECTS</b>              | NO DATA AVAILABLE  |

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**SECTION 13. DISPOSAL CONSIDERATIONS**

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**WASTE TREATMENT METHODS**

**PRODUCT** OFFER SURPLUS AND NON-RECYCLABLE CHEMICAL TO A LICENSED DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

**CONTAMINATED PACKAGING** DISPOSE OF AS UNUSED PRODUCT.

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**SECTION 14. TRANSPORT INFORMATION**

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**DOT (US)**  
NOT DANGEROUS GOODS

**IMDG**  
NOT DANGEROUS GOODS

**IATA**  
NOT DANGEROUS GOODS

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**SECTION 15. REGULATORY INFORMATION**

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**SARA 302 COMPONENTS** SARA 302: NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

**SARA 313 COMPONENTS** SARA 313: THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS** NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS**

|                                    | CAS-NO.  | REVISION DATE |
|------------------------------------|----------|---------------|
| L-Glutathione Oxidized Hexahydrate | 121-24-4 |               |

**NEW JERSEY RIGHT TO KNOW COMPONENTS**

|                                    | CAS-NO.  | REVISION DATE |
|------------------------------------|----------|---------------|
| L-Glutathione Oxidized Hexahydrate | 121-24-4 |               |

**CALIFORNIA PROP. 65  
COMPONENTS**

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS  
KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER,  
BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

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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<br>HYGINISTS |
| CAS:   | CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER                  |
| OSHA:  | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION               |
| PEL:   | PERMISSIBLE EXPOSURE LIMIT (OSHA)                           |
| TLV:   | THRESHOLD LIMIT VALUE (ACGIH)                               |

**IMPORTANT:**

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