

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

---

Tel: (630) 766-2112  
E-mail: [sales@chemimpex.com](mailto:sales@chemimpex.com)  
**Shipping and Correspondence:**  
935 Dillon Drive  
Wood Dale, IL 60191 USA

Fax: (630) 766-2218  
Web site: [www.chemimpex.com](http://www.chemimpex.com)  
**Manufacturing site:**  
825 Dillon Drive  
Wood Dale, IL 60191 USA

## **SAFETY DATA SHEET**

---

### **SECTION 1. CHEMICAL IDENTIFICATION**

---

|                                 |                                                            |
|---------------------------------|------------------------------------------------------------|
| CATALOG #:                      | 16995                                                      |
| NAME:                           | Tetrahydro-4 <i>H</i> -pyran-4-one                         |
| SYNONYMS:                       | 4-Oxotetrahydropyran<br>Tetrahydro-2 <i>H</i> -pyran-4-one |
| 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                                             |

---

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

---

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

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)**  
FLAMMABLE LIQUIDS (CATEGORY 3), H226

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE  
SECTION 16.

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



SIGNAL WORD                      WARNING

**HAZARD STATEMENT(S)**

H226                                  FLAMMABLE LIQUID AND VAPOUR.

**PRECAUTIONARY STATEMENT(S)**

P210                                  KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. NO SMOKING.  
P233                                  KEEP CONTAINER TIGHTLY CLOSED.  
P240                                  GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.  
P241                                  USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ LIGHTING EQUIPMENT.  
P242                                  USE ONLY NON-SPARKING TOOLS.  
P243                                  TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE.  
P280                                  WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.  
P303 + P361 + P353              IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ SHOWER.  
P370 + P378                        IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-RESISTANT FOAM TO EXTINGUISH.  
P403 + P235                        STORE IN A WELL-VENTILATED PLACE. KEEP COOL.  
P501                                  DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

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

---

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

---

MF:                                  C<sub>5</sub>H<sub>8</sub>O<sub>2</sub>  
MW:                                  100.12  
CAS-NO.                              29943-42-8  
PURITY:                              ≥ 99% (Assay)

**HAZARDOUS COMPONENTS**

| COMPONENT                        | CLASSIFICATION | CONCENTRATION |
|----------------------------------|----------------|---------------|
| <b>Tetrahydro-4H-pyran-4-one</b> |                |               |
|                                  | -              | -             |

---

NO COMPONENTS NEED TO BE DISCLOSED ACCORDING TO THE APPLICABLE REGULATIONS.

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

---

## **SECTION 4. FIRST-AID MEASURES**

---

### **DESCRIPTION OF FIRST AID MEASURES**

|                                                                                   |                                                                                                                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>GENERAL ADVICE</b>                                                             | CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. MOVE OUT OF DANGEROUS AREA.                   |
| <b>IF INHALED</b>                                                                 | IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.             |
| <b>IN CASE OF SKIN CONTACT</b>                                                    | WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.                                                                |
| <b>IN CASE OF EYE CONTACT</b>                                                     | FLUSH EYES WITH WATER AS A PRECAUTION.                                                                                      |
| <b>IF SWALLOWED</b>                                                               | DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN. |
| <b>MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED</b>                | THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11.        |
| <b>INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED</b> | NO DATA AVAILABLE                                                                                                           |

---

## **SECTION 5. FIRE AND EXPLOSION DATA**

---

### **EXTINGUISHING MEDIA**

|                                     |                                                     |
|-------------------------------------|-----------------------------------------------------|
| <b>SUITABLE EXTINGUISHING MEDIA</b> | SUITABLE EXTINGUISHING MEDIA<br>DRY POWDER DRY SAND |
|-------------------------------------|-----------------------------------------------------|

|                                                                      |                                                                           |
|----------------------------------------------------------------------|---------------------------------------------------------------------------|
|                                                                      | UNSUITABLE EXTINGUISHING MEDIA<br>DO NOT USE WATER JET.                   |
| <b>SPECIAL HAZARDS<br/>ARISING FROM THE<br/>SUBSTANCE OR MIXTURE</b> | CARBON OXIDES                                                             |
| <b>ADVICE FOR<br/>FIREFIGHTERS</b>                                   | WEAR SELF CONTAINED BREATHING APPARATUS FOR<br>FIREFIGHTING IF NECESSARY. |
| <b>FURTHER INFORMATION</b>                                           | USE WATER SPRAY TO COOL UNOPENED CONTAINERS.                              |

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

---

|                                                                                                |                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PERSONAL<br/>PRECAUTIONS,<br/>PROTECTIVE<br/>EQUIPMENT AND<br/>EMERGENCY<br/>PROCEDURES</b> | AVOID BREATHING VAPOURS, MIST OR GAS. REMOVE<br>ALL SOURCES OF IGNITION. BEWARE OF VAPOURS<br>ACCUMULATING TO FORM EXPLOSIVE<br>CONCENTRATIONS. VAPOURS CAN ACCUMULATE IN<br>LOW AREAS.<br>FOR PERSONAL PROTECTION SEE SECTION 8.            |
| <b>ENVIRONMENTAL<br/>PRECAUTIONS</b>                                                           | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE<br>TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.                                                                                                                                                    |
| <b>METHODS AND<br/>MATERIALS FOR<br/>CONTAINMENT AND<br/>CLEANING UP</b>                       | CONTAIN SPILLAGE, AND THEN COLLECT WITH NON-<br>COMBUSTIBLE ABSORBENT MATERIAL, (E.G. SAND,<br>EARTH, DIATOMACEOUS EARTH, VERMICULITE) AND<br>PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO<br>LOCAL / NATIONAL REGULATIONS (SEE SECTION 13). |
| <b>REFERENCE TO OTHER<br/>SECTIONS</b>                                                         | FOR DISPOSAL SEE SECTION 13.                                                                                                                                                                                                                 |

---

## **SECTION 7. HANDLING AND STORAGE**

---

|                                                                             |                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRECAUTIONS FOR SAFE<br/>HANDLING</b>                                    | AVOID INHALATION OF VAPOUR OR MIST.<br>KEEP AWAY FROM SOURCES OF IGNITION - NO<br>SMOKING. TAKE MEASURES TO PREVENT THE BUILD<br>UP OF ELECTROSTATIC CHARGE.<br>FOR PRECAUTIONS SEE SECTION 2.2.                |
| <b>CONDITIONS FOR SAFE<br/>STORAGE, INCLUDING<br/>ANY INCOMPATIBILITIES</b> | KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND<br>WELL-VENTILATED PLACE. CONTAINERS WHICH ARE<br>OPENED MUST BE CAREFULLY RESEALED AND KEPT<br>UPRIGHT TO PREVENT LEAKAGE.<br><br>HANDLE AND STORE UNDER INERT GAS. |

Store at 0 - 8 °C

|                            |                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------|
| <b>SPECIFIC END USE(S)</b> | APART FROM THE USES MENTIONED IN SECTION 1.2<br>NO OTHER SPECIFIC USES ARE STIPULATED. |
|----------------------------|----------------------------------------------------------------------------------------|

---

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

---

### **CONTROL PARAMETERS**

#### **COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

### **EXPOSURE CONTROLS**

|                                                 |                                                                                                                                  |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>APPROPRIATE<br/>ENGINEERING<br/>CONTROLS</b> | HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE<br>AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND<br>AT THE END OF WORKDAY. |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

### **PERSONAL PROTECTIVE EQUIPMENT**

|                                |                                                                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EYE/FACE<br/>PROTECTION</b> | FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR<br>EYE PROTECTION TESTED AND APPROVED UNDER<br>APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH<br>(US) OR EN 166(EU). |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

SPLASH CONTACT  
MATERIAL: NITRILE RUBBER  
MINIMUM LAYER THICKNESS: 0.4 MM  
BREAK THROUGH TIME: 30 MIN  
MATERIAL TESTED: CAMATRIL (KCL 730, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES,  
AND UNDER CONDITIONS WHICH DIFFER FROM EN 374,  
CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS  
RECOMMENDATION IS ADVISORY ONLY AND MUST BE  
EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY  
OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF  
ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE  
CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC  
USE SCENARIO.

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BODY PROTECTION</b>                   | IMPERVIOUS CLOTHING, FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING. THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.                                                                                                                                                                                                                       |
| <b>RESPIRATORY PROTECTION</b>            | WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU). |
| <b>CONTROL OF ENVIRONMENTAL EXPOSURE</b> | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.                                                                                                                                                                                                                                                                                                                                                       |

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

---

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

|                                              |                              |
|----------------------------------------------|------------------------------|
| APPEARANCE                                   | Colorless transparent liquid |
| ODOUR                                        | NO DATA AVAILABLE            |
| ODOUR THRESHOLD                              | NO DATA AVAILABLE            |
| PH                                           | NO DATA AVAILABLE            |
| MELTING POINT/FREEZING POINT                 |                              |
| INITIAL BOILING POINT AND BOILING RANGE      | 166 - 167 °C (Lit.)          |
| 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                             | 1.08 (Lit.)                  |
| 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            |

**OTHER SAFETY INFORMATION**  
NO DATA AVAILABLE

---

**SECTION 10. STABILITY AND REACTIVITY**

---

|                                           |                                                                                                                                                                           |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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, STRONG BASES                                                                                                                                     |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS</b>   | HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - CARBON OXIDES<br>OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE<br>IN THE EVENT OF FIRE: SEE SECTION 5 |

---

**SECTION 11. TOXICOLOGICAL INFORMATION**

---

**INFORMATION ON TOXICOLOGICAL EFFECTS**

|                                          |                                                                                                                  |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>ACUTE TOXICITY</b>                    | NO DATA AVAILABLE<br><br>INHALATION: NO DATA AVAILABLE<br><br>DERMAL: NO DATA AVAILABLE<br><br>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<br/>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. |
| 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 ON OSHA S LIST OF REGULATED CARCINOGENS.                                |
| <b>REPRODUCTIVE TOXICITY</b>                                      | NO DATA AVAILABLE                                                                                                                                       |
| <b>SPECIFIC TARGET ORGAN<br/>TOXICITY - SINGLE<br/>EXPOSURE</b>   | NO DATA AVAILABLE                                                                                                                                       |
| <b>SPECIFIC TARGET ORGAN<br/>TOXICITY - REPEATED<br/>EXPOSURE</b> | NO DATA AVAILABLE                                                                                                                                       |
| <b>ASPIRATION HAZARD</b>                                          | NO DATA AVAILABLE                                                                                                                                       |
| <b>ADDITIONAL<br/>INFORMATION</b>                                 | RTECS: NOT AVAILABLE<br><br>TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.   |

---

## SECTION 12. ECOLOGICAL INFORMATION

---

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

**OTHER ADVERSE EFFECTS** NO DATA AVAILABLE

---

**SECTION 13. DISPOSAL CONSIDERATIONS**

---

**WASTE TREATMENT METHODS**

|                               |                                                                                                                                                                                                                            |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRODUCT</b>                | OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY. BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE. |
| <b>CONTAMINATED PACKAGING</b> | DISPOSE OF AS UNUSED PRODUCT.                                                                                                                                                                                              |

---

**SECTION 14. TRANSPORT INFORMATION**

---

**DOT (US)**

|                           |                                                              |
|---------------------------|--------------------------------------------------------------|
| PROPER SHIPPING NAME:     | KETONES, LIQUID, N.O.S. (Tetrahydro-4 <i>H</i> -pyran-4-one) |
| UN NUMBER:                | 1224                                                         |
| CLASS:                    | 3                                                            |
| PACKING GROUP:            | III                                                          |
| REPORTABLE QUANTITY (RQ): |                                                              |
| POISON INHALATION HAZARD: | NO                                                           |

**IMDG**

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| PROPER SHIPPING NAME: | KETONES, LIQUID, N.O.S. (Tetrahydro-4 <i>H</i> -pyran-4-one) |
| UN NUMBER:            | 1224                                                         |
| CLASS:                | 3                                                            |
| PACKING GROUP:        | III                                                          |
| EMS-NO:               | F-E, S-D                                                     |

**IATA**

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| PROPER SHIPPING NAME: | KETONES, LIQUID, N.O.S. (Tetrahydro-4 <i>H</i> -pyran-4-one) |
| UN NUMBER:            | 1224                                                         |
| CLASS:                | 3                                                            |
| PACKING GROUP:        | III                                                          |

---

**SECTION 15. REGULATORY INFORMATION**

---

|                                               |                                                                                                                                                                                   |               |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>SARA 302 COMPONENTS</b>                    | NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.                                                                           |               |
| <b>SARA 313 COMPONENTS</b>                    | 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. |               |
| <b>SARA 311/312 HAZARDS</b>                   | FIRE HAZARD                                                                                                                                                                       |               |
| <b>MASSACHUSETTS RIGHT TO KNOW COMPONENTS</b> | NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.                                                                                                                 |               |
| <b>PENNSYLVANIA RIGHT TO KNOW COMPONENTS</b>  |                                                                                                                                                                                   |               |
|                                               | CAS-NO.                                                                                                                                                                           | REVISION DATE |
| Tetrahydro-4 <i>H</i> -pyran-4-one            | 29943-42-8                                                                                                                                                                        |               |
| <b>NEW JERSEY RIGHT TO KNOW COMPONENTS</b>    |                                                                                                                                                                                   |               |
|                                               | CAS-NO.                                                                                                                                                                           | REVISION DATE |
| Tetrahydro-4 <i>H</i> -pyran-4-one            | 29943-42-8                                                                                                                                                                        |               |

## SECTION 16. OTHER INFORMATION

---

**FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.**  
H226 FLAMMABLE LIQUID AND VAPOUR.

### MSDS LEGEND

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

### IMPORTANT:

*THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. IN NO EVENT SHALL **CII** BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF **CII** HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.*

*VERSION: 3.1.*

*REVISION DATE: 01/27/2017*