# **Chem-Impex International Inc.**

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# SAFETY DATA SHEET

# SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	42826
NAME:	2,5-Dimethyl-3(2 <i>H</i> )-furanone
SYNONYMS:	
24 HOUR EMERGENCY TELEPHONE:	(800) 535-5053(USA) 352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER 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

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SIGNAL WORD

PICTOGRAM

WARNING

# **HAZARD STATEMENT(S)**

H226 FLAMMABLE LIQUID AND VAPOR **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. USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ P241 LIGHTING EQUIPMENT. P242 USE ONLY NON-SPARKING TOOLS. TAKE PRECAUTIONARY MEASURES AGAINST STATIC P243 DISCHARGE. P280 WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE PROTECTION. IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY P303 + P361 + P353 ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ SHOWER

	SHOWER.
P370 + P378	IN CASE OF FIRE: USE DRY CHEMICAL, DRY SAND OR 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

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

NONE

MF:	$C_6H_8O_2$
MW:	112.13
CAS-NO.	14400-67-0
PURITY:	$\geq$ 98% (GC)

# **HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION
2,5-Dimethyl-3(2 <i>H</i> )-furanone		
	-	-

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**

GENERAL ADVICE	CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.
IF INHALED	REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. GET MEDICAL ADVICE/ATTENTION IF YOU FEEL UNWELL.
IN CASE OF SKIN CONTACT	REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION.
IN CASE OF EYE CONTACT	RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION.
IF SWALLOWED	GET MEDICAL ADVICE/ATTENTION IF YOU FEEL UNWELL. RINSE MOUTH.
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11.
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED	NO DATA AVAILABLE

# SECTION 5. FIRE AND EXPLOSION DATA

#### **EXTINGUISHING MEDIA**

SUITABLESUITABLE EXTINGUISHING MEDIA:EXTINGUISHING MEDIA

DRY CHEMICAL, FOAM, WATER SPRAY, CARBON DIOXIDE.

UNSUITABLE EXTINGUISHING MEDIA: SOLID STREAMS OF WATER

SPECIAL HAZARDSCARBON OXIDESARISING FROM THESUBSTANCE OR MIXTURE

**ADVICE FOR**WEAR SELF-CONTAINED BREATHING APPARATUS IF**FIREFIGHTERS**POSSIBLE.

**FURTHER INFORMATION** CLOSED CONTAINERS MAY EXPLODE FROM HEAT OF A FIRE.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	USE EXTRA PERSONAL PROTECTIVE EQUIPMENT (SELF-CONTAINED BREATHING APPARATUS). KEEP PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK. ENSURE ADEQUATE VENTILATION. ENTRY TO NON- INVOLVED PERSONNEL SHOULD BE CONTROLLED AROUND THE LEAKAGE AREA BY ROPING OFF, ETC.
ENVIRONMENTAL PRECAUTIONS	PREVENT PRODUCT FROM ENTERING DRAINS.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	ABSORB SPILLED MATERIAL IN DRY SAND OR INERT ABSORBENT BEFORE RECOVERING IT INTO AN AIRTIGHT CONTAINER. IN CASE OF LARGE AMOUNT OF SPILLAGE, CONTAIN A SPILL BY BUNDING. ADHERED OR COLLECTED MATERIAL SHOULD BE PROMPTLY DISPOSED OF, IN ACCORDANCE WITH APPROPRIATE LAWS AND REGULATIONS.
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

#### SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE	HANDLING IS PERFORMED IN A WELL VENTILATED
HANDLING	PLACE. WEAR SUITABLE PROTECTIVE EQUIPMENT.
	PREVENT GENERATION OF VAPOUR OR MIST. KEEP
	AWAY FROM HEAT/SPARKS/OPEN FLAME/HOT
	SURFACES NO SMOKING. TAKE MEASURES TO
	PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE.

USE EXPLOSION-PROOF EQUIPMENT. WASH HANDS AND FACE THOROUGHLY AFTER HANDLING. USE A CLOSED SYSTEM IF POSSIBLE. USE A VENTILATION, LOCAL EXHAUST IF VAPOUR OR AEROSOL WILL BE GENERATED. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

CONDITIONS FOR SAFE<br/>STORAGE, INCLUDINGKEEP CONTAINER TIGHTLY CLOSED. STORE IN A COOL,<br/>DARK AND WELL-VENTILATED PLACE.ANY INCOMPATIBILITIESSTORE UNDER INERT GAS.<br/>STORE AWAY FROM INCOMPATIBLE MATERIALS SUCH<br/>AS OXIDIZING AGENTS.<br/>AIR-SENSITIVE

Store at RT

**SPECIFIC END USE(S)** APART FROM THE USES MENTIONED IN SECTION 1.2 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**

APPROPRIATE	FOLLOW SAFE INDUSTRIAL
ENGINEERING	ENGINEERING/LABORATORY PRACTICES WHEN
CONTROLS	HANDLING ANY CHEMICAL. INSTALL A CLOSED
	SYSTEM OR LOCAL EXHAUST. ALSO INSTALL SAFETY
	SHOWER AND EYE BATH.

#### PERSONAL PROTECTIVE EQUIPMENT

- **EYE/FACE PROTECTION** FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).
- SKIN PROTECTIONHANDLE WITH GLOVES. GLOVES MUST BE INSPECTED<br/>PRIOR TO USE. USE PROPER GLOVE REMOVAL<br/>TECHNIQUE (WITHOUT TOUCHING GLOVE"S OUTER<br/>SURFACE) TO AVOID SKIN CONTACT WITH THIS<br/>PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER<br/>USE IN ACCORDANCE WITH APPLICABLE LAWS AND<br/>GOOD LABORATORY PRACTICES. WASH AND DRY<br/>HANDS.

BODY PROTECTION	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.
RESPIRATORY PROTECTION	VAPOR RESPIRATOR. FOLLOW LOCAL AND NATIONAL REGULATIONS.
CONTROL OF ENVIRONMENTAL EXPOSURE	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

INFORMATION ON DASIC I	
APPEARANCE	Colorless to slightly yellow clear liquid
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	
POINT/FREEZING POINT	
INITIAL BOILING POINT	72 °C/13 mmHg
AND BOILING RANGE	
FLASH POINT	52 °C
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID,	NO DATA AVAILABLE
GAS)	
UPPER/LOWER	NO DATA AVAILABLE
FLAMMABILITY OR	
EXPLOSIVE LIMITS	
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	1.05
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT:	NO DATA AVAILABLE
N- OCTANOL/WATER	
AUTO-IGNITION	NO DATA AVAILABLE
TEMPERATURE	
DECOMPOSITION	NO DATA AVAILABLE
TEMPERATURE	
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

REACTIVITY	NO DATA AVAILABLE
CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS	NO SPECIAL REACTIVITY HAS BEEN REPORTED.
CONDITIONS TO AVOID	SPARK, OPEN FLAME, STATIC DISCHARGE
INCOMPATIBLE MATERIALS	OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION PRODUCTS	CARBON DIOXIDE, CARBON MONOXIDE

# SECTION 11. TOXICOLOGICAL INFORMATION

# INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	NO DATA AVAILABLE
	INHALATION: NO DATA AVAILABLE
	DERMAL: NO DATA AVAILABLE
	NO DATA AVAILABLE
SKIN CORROSION/IRRITATION	NO DATA AVAILABLE
SERIOUS EYE DAMAGE/EYE IRRITATION	NO DATA AVAILABLE
RESPIRATORY OR SKIN SENSITISATION	NO DATA AVAILABLE
GERM CELL MUTAGENICITY	NO DATA AVAILABLE
CARCINOGENICITY	

IARC: NTP: OSHA:	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. 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. NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.
REPRODUCTIVE TOXICITY	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL	RTECS: NOT AVAILABLE
INFORMATION	TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

# SECTION 12. ECOLOGICAL INFORMATION

TOXICITY	NO DATA AVAILABLE
PERSISTENCE AND DEGRADABILITY	NO DATA AVAILABLE
BIOACCUMULATIVE POTENTIAL	NO DATA AVAILABLE
MOBILITY IN SOIL	NO DATA AVAILABLE
RESULTS OF PBT AND VPVB ASSESSMENT	NO DATA AVAILABLE
OTHER ADVERSE EFFECTS	NO DATA AVAILABLE

# SECTION 13. DISPOSAL CONSIDERATIONS

#### WASTE TREATMENT METHODS

**PRODUCT**OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS<br/>TO A LICENSED DISPOSAL COMPANY. BURN IN A<br/>CHEMICAL INCINERATOR EQUIPPED WITH AN<br/>AFTERBURNER AND SCRUBBER BUT EXERT EXTRA<br/>CARE IN IGNITING AS THIS MATERIAL IS HIGHLY<br/>FLAMMABLE. CONTACT A LICENSED PROFESSIONAL<br/>WASTE DISPOSAL SERVICE TO DISPOSE OF THIS<br/>MATERIAL.

CONTAMINATEDDISPOSE OF AS UNUSED PRODUCT.PACKAGING

#### SECTION 14. TRANSPORT INFORMATION

<b>DOT (US)</b> PROPER SHIPPING NAME:	FLAMMABLE LIQUID, N.O.S (2,5-Dimethyl-3(2H)-furanone
UN NUMBER:	) 1993
CLASS:	3
PACKING GROUP:	III
IMDG	
PROPER SHIPPING NAME:	FLAMMABLE LIQUID, N.O.S (2,5-Dimethyl-3(2 <i>H</i> )-furanone
UN NUMBER:	1993
CLASS:	3
PACKING GROUP:	III
EMS-NO:	
EM5-NO.	F-E, S-E
IATA	
PROPER SHIPPING NAME:	FLAMMABLE LIQUID, N.O.S (2,5-Dimethyl-3(2H)-furanone
	)
UN NUMBER:	1993
CLASS:	3
PACKING GROUP:	III

# SECTION 15. REGULATORY INFORMATION

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

# **SARA 313 COMPONENTS** 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

2,5-Dimethyl-3(2*H*)-furanone CAS-NO. 14400-67-0 **REVISION DATE** 

#### NEW JERSEY RIGHT TO KNOW COMPONENTS

2,5-Dimethyl-3(2*H*)-furanone CAS-NO. 14400-67-0 **REVISION DATE** 

# SECTION 16. OTHER INFORMATION

H226

MSDS LEGEND		
MW:	MOLECULAR WEIGHT	
MF:	MOLECULAR FORMULA	
VOC:	VOLATILE ORGANIC COMPOUNDS	
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENENTAL	
	INDUSTRIAL HYGINISTS	
CAS:	CHEMICAL ABSTRACTS SERIVE 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		

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

FLAMMABLE LIQUID AND VAPOR

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: 3.2.

**REVISION DATE: 08/23/2021**