# **Chem-Impex International Inc.**

Tel: (630) 766-2112 E-mail: <u>sales@chemimpex.com</u> Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 USA Fax: (630) 766-2218 Web site: <u>www.chemimpex.com</u> Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191 USA

# SAFETY DATA SHEET

## SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	26758
NAME:	4'-Chloroacetophenone
SYNONYMS:	1-Acetyl-4-chlorobenzene <i>p</i> -Chloroacetophenone
24 HOUR EMERGENCY	(800) 535-5053(USA)
TELEPHONE:	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 4), H227 ACUTE TOXICITY, ORAL (CATEGORY 4), H302 ACUTE TOXICITY, INHALATION (CATEGORY 2), H330 SKIN IRRITATION (CATEGORY 2), H315 SERIOUS EYE DAMAGE (CATEGORY 1), H318 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, H335 ACUTE AQUATIC TOXICITY (CATEGORY 3), H402 CHRONIC AQUATIC TOXICITY (CATEGORY 3), H412

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

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD



HAZARD STATEMENT(	8)
H227	COMBUSTIBLE LIQUID.
H302	HARMFUL IF SWALLOWED.
H315	CAUSES SKIN IRRITATION.
H318	CAUSES SERIOUS EYE DAMAGE.
H330	FATAL IF INHALED.
H335	MAY CAUSE RESPIRATORY IRRITATION.
H412	HARMFUL TO AQUATIC LIFE WITH LONG LASTING
11112	EFFECTS.
PRECAUTIONARY STA	
P210	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT
1210	SURFACES NO SMOKING.
P260	DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/
1200	SPRAY.
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS
1270	PRODUCT.
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P273	AVOID RELEASE TO THE ENVIRONMENT.
P280	WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE
	PROTECTION/ FACE PROTECTION.
P284	WEAR RESPIRATORY PROTECTION.
P301 + P312	IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/
	PHYSICIAN IF YOU FEEL UNWELL.
P302 + P352	IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
P304 + P340	IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT
	REST IN A POSITION COMFORTABLE FOR BREATHING.
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL
	MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND
	EASY TO DO. CONTINUE RINSING.
P310	IMMEDIATELY CALL A POISON CENTER OR DOCTOR/
	PHYSICIAN.
P320	SPECIFIC TREATMENT IS URGENT (SEE SUPPLEMENTAL
	FIRST AID INSTRUCTIONS ON THIS LABEL).
P330	RINSE MOUTH.
P332 + P313	IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/
	ATTENTION.
P362	TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE
	REUSE.

HAZARDS NOT	WASTE DISPOSAL PLANT. NONE
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED
P405	STORE LOCKED UP.
P403 + P235	STORE IN A WELL-VENTILATED PLACE. KEEP COOL.
	TIGHTLY CLOSED.
P403 + P233	STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER
	ALCOHOL-RESISTANT FOAM FOR EXTINCTION.
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:	C <sub>8</sub> H <sub>7</sub> ClO
MW:	154.60
CAS-NO.	99-91-2
PURITY:	$\geq$ 99% (GC)

## HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
4"-CHLOROACETO	OPHENONE	
	FLAM. LIQ. 4; ACUTE TOX. 4;	<= 100%
	ACUTE TOX. 2; SKIN IRRIT. 2;	
	EYE DAM. 1; STOT SE 3;	
	AQUATIC ACUTE 3; AQUATIC	
	CHRONIC 3; H227, H302, H315,	
	H318, H330, H335, H412	
FOR THE FULL TEX	T OF THE H-STATEMENTS MENTIO	NED IN THIS SECTION SEE

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	IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

CONSULT A PHYSICIAN.

IN CASE OF SKIN CONTACT	WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT	RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND 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 2.2) 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**

SUITABLE EXTINGUISHING MEDIA	FOR SMALL (INCIPIENT) FIRES, USE MEDIA SUCH AS "ALCOHOL" FOAM, DRY CHEMICAL, OR CARBON DIOXIDE. FOR LARGE FIRES, APPLY WATER FROM AS FAR AS POSSIBLE. USE VERY LARGE QUANTITIES (FLOODING) OF WATER APPLIED AS A MIST OR SPRAY; SOLID STREAMS OF WATER MAY BE INEFFECTIVE. COOL ALL AFFECTED CONTAINERS WITH FLOODING QUANTITIES OF WATER.
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	CARBON OXIDES, HYDROGEN CHLORIDE GAS
ADVICE FOR FIREFIGHTERS	WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.

**FURTHER INFORMATION** USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	WEAR RESPIRATORY PROTECTION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. BEWARE OF VAPOURS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPOURS CAN ACCUMULATE IN LOW AREAS. 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	CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE SECTION 13). KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

# SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	AVOID CONTACT WITH SKIN AND EYES. AVOID INHALATION OF VAPOUR OR MIST. KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.TAKE MEASURES TO PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE.
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 WITHCONTAINS NO SUBSTANCES WITH OCCUPATIONALWORKPLACE CONTROLEXPOSURE LIMIT VALUES.PARAMETERSCONTAINS NO SUBSTANCES WITH OCCUPATIONAL

### **EXPOSURE CONTROLS**

APPROPRIATE	AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
ENGINEERING	WASH HANDS BEFORE BREAKS AND IMMEDIATELY
CONTROLS	AFTER HANDLING THE PRODUCT.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYE/FACE PROTECTION** TIGHTLY FITTING SAFETY GOGGLES. FACESHIELD (8-INCH MINIMUM). 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.

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.

BODY PROTECTIONCOMPLETE SUIT PROTECTING AGAINST CHEMICALS,<br/>THE TYPE OF PROTECTIVE EQUIPMENT MUST BE<br/>SELECTED ACCORDING TO THE CONCENTRATION AND<br/>AMOUNT OF THE DANGEROUS SUBSTANCE AT THE<br/>SPECIFIC WORKPLACE.

<b>RESPIRATORY</b> <b>PROTECTION</b>	WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE 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).
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.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

# **INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Colorless to pale yellow liquid
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	14-18 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT	232 °C
AND BOILING RANGE	
FLASH POINT	90 °C - closed cup
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	1.192 g/mL at 25 °C
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT:	LOG POW: 2.378
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
<b>OTHER SAFETY</b>	NO DATA AVAILABLE
INFORMATION	NO DAIAAVAILADLE

## SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	NO DATA AVAILABLE
CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS	NO DATA AVAILABLE
CONDITIONS TO AVOID	HEAT, FLAMES AND SPARKS.
INCOMPATIBLE MATERIALS	STRONG OXIDIZING AGENTS, STRONG BASES
HAZARDOUS DECOMPOSITION PRODUCTS	OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE IN THE EVENT OF FIRE: SEE SECTION 5

## SECTION 11. TOXICOLOGICAL INFORMATION

## INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	LC50 INHALATION - MOUSE - 15 H - 1,752 MG/M3 DERMAL: NO DATA AVAILABLE
SKIN CORROSION/IRRITATION	NO DATA AVAILABLE
SERIOUS EYE DAMAGE/EYE IRRITATION	NO DATA AVAILABLE
RESPIRATORY OR SKIN SENSITISATION	PROLONGED OR REPEATED EXPOSURE MAY CAUSE ALLERGIC REACTIONS IN CERTAIN SENSITIVE INDIVIDUALS.
GERM CELL MUTAGENICITY	NO DATA AVAILABLE
CARCINOGENICITY 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.

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.
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 IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY OSHA.
NO DATA AVAILABLE
INHALATION - MAY CAUSE RESPIRATORY IRRITATION.
NO DATA AVAILABLE
NO DATA AVAILABLE
RTECS: KM5600000 TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED., HEADACHE, VOMITING

# SECTION 12. ECOLOGICAL INFORMATION

TOXICITY	
TOXICITY TO FISH	LC50 - PIMEPHALES PROMELAS (FATHEAD MINNOW) - 51.6 MG/L - 96 H REMARKS: THE PRECEDING DATA, OR INTERPRETATION OF DATA, WAS DETERMINED USING QUANTITATIVE STRUCTURE ACTIVITY RELATIONSHIP (QSAR) MODELING.
PERSISTENCE AND DEGRADABILITY	NO DATA AVAILABLE
BIOACCUMULATIVE POTENTIAL	NO DATA AVAILABLE
MOBILITY IN SOIL	NO DATA AVAILABLE

# RESULTS OF PBT ANDPBT/VPVB ASSESSMENT NOT AVAILABLE ASVPVB ASSESSMENTCHEMICAL SAFETY ASSESSMENT NOT<br/>REQUIRED/NOT CONDUCTEDOTHER ADVERSE EFFECTSAN ENVIRONMENTAL HAZARD CANNOT BE<br/>EXCLUDED IN THE EVENT OF UNPROFESSIONAL<br/>HANDLING OR DISPOSAL.

HARMFUL TO AQUATIC LIFE.

## SECTION 13. DISPOSAL CONSIDERATIONS

## WASTE TREATMENT METHODS

**PRODUCT**THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A<br/>CHEMICAL INCINERATOR EQUIPPED WITH AN<br/>AFTERBURNER AND SCRUBBER. OFFER SURPLUS AND<br/>NON-RECYCLABLE SOLUTIONS TO A LICENSED<br/>DISPOSAL COMPANY. CONTACT A LICENSED<br/>PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE<br/>OF THIS MATERIAL.

CONTAMINATEDDISPOSE OF AS UNUSED PRODUCT.PACKAGINGDISPOSE OF AS UNUSED PRODUCT.

## SECTION 14. TRANSPORT INFORMATION

<b>DOT (US)</b> PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP: POISON INHALATION HAZARD:	CHLOROACETOPHENONE, LIQUID 3416 6.1 II NO
IMDG PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP: EMS-NO:	CHLOROACETOPHENONE, LIQUID 3416 6.1 II F-A, S-A
<b>IATA</b> PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP:	CHLOROACETOPHENONE, LIQUID 3416 6.1 II

## SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS	NO CHEMICALS IN THIS M THE REPORTING REQUIRE SECTION 302.	
SARA 313 COMPONENTS	COMPONENTS WITH KNOV EXCEED THE THRESHOLD	
SARA 311/312 HAZARDS	FIRE HAZARD, ACUTE HEA	ALTH HAZARD
MASSACHUSETTS RIGHT TO KNOW COMPONENTS	NO COMPONENTS ARE SU MASSACHUSETTS RIGHT T	
PENNSYLVANIA RIGHT TO KNOW COMPONENTS		
4'-Chloroacetophenone	CAS-NO. 99-91-2	REVISION DATE
NEW JERSEY RIGHT TO KNOW COMPONENTS		
	CAS-NO.	REVISION DATE
4'-Chloroacetophenone	99-91-2	
CALIFORNIA PROP. 65 COMPONENTS		CONTAIN ANY CHEMICALS IFORNIA TO CAUSE CANCER, DTHER REPRODUCTIVE

## SECTION 16. OTHER INFORMATION

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

ACUTE TOX.	ACUTE TOXICITY
AQUATIC ACUTE	ACUTE AQUATIC TOXICITY
AQUATIC CHRONIC	CHRONIC AQUATIC TOXICITY
EYE DAM.	SERIOUS EYE DAMAGE
FLAM. LIQ.	FLAMMABLE LIQUIDS
H227	COMBUSTIBLE LIQUID.
H302	HARMFUL IF SWALLOWED.
H315	CAUSES SKIN IRRITATION.
H318	CAUSES SERIOUS EYE DAMAGE.
H330	FATAL IF INHALED.
H335	MAY CAUSE RESPIRATORY IRRITATION.

HARM.

# HMIS RATING

3

CHRONIC HEALTH	
HAZARD:	
FLAMMABILITY:	2
PHYSICAL HAZARD	0

## NFPA RATING

HEALTH HAZARD:	3
FIRE HAZARD:	2
REACTIVITY HAZARD:	0

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 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.