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 #:	38715
NAME:	Ethynylestradiol
SYNONYMS:	17α-Ethynyl-1,3,5(10)-estratriene-3,17β-diol 19-Nor-1,3,5(10),17α-pregnatrien-20-yne-3,17-diol
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) ACUTE TOXICITY, ORAL (CATEGORY 4), H302 CARCINOGENICITY (CATEGORY 1B), H350 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 1), H410 FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM	IS, INCLUDING PRECAUTIONARY STATEMENTS
SIGNAL WORD	DANGER
HAZARD STATEMENT	(S)
H302	HARMFUL IF SWALLOWED.
H350	MAY CAUSE CANCER.
H410	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
PRECAUTIONARY STA	TEMENT(S)
P201	OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
P202	DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE
	BEEN READ AND UNDERSTOOD.
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS
	PRODUCT.
P273	AVOID RELEASE TO THE ENVIRONMENT.
P281	USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED.
P301 + P312	IF SWALLOWED: CALL A POISON CENTER/DOCTOR IF YOU
	FEEL UNWELL.
P308 + P313	IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/
	ATTENTION.
P330	RINSE MOUTH.
P391	COLLECT SPILLAGE.
P405	STORE LOCKED UP.
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED
	WASTE DISPOSAL PLANT.
HAZARDS NOT OTHERWISE CLASSIELED (HNOC)	NONE

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:	$C_{20}H_{24}O_2$	
MW:	296.41	
CAS-NO.	57-63-6	
PURITY:	\geq 98% (Assay by titration , HPLC)	
HAZARDOUS COMPONENTS		

COMPONENT	CLASSIFICATION	CONCENTRATION
Ethynylestradiol		
	ACUTE TOX. 4; CARC. 1B; AQUATIC CHRONIC 1; H302, H350, H410	<= 100 %

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. CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT	FLUSH EYES WITH WATER AS A PRECAUTION.
IF SWALLOWED	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	USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.
SPECIAL HAZARDS ARISING FROM THE	CARBON OXIDES
SUBSTANCE OR MIXTURE	
ADVICE FOR FIREFIGHTERS	WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	USE PERSONAL PROTECTIVE EQUIPMENT. AVOID DUST FORMATION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST. 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	PICK UP AND ARRANGE DISPOSAL WITHOUT CREATING DUST. SWEEP UP AND SHOVEL. 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 FORMATION OF DUST AND AEROSOLS. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED.NORMAL MEASURES FOR PREVENTIVE FIRE PROTECTION. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.

ANY INCOMPATIBILITIES LIGHT 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	HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL
ENGINEERING	HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE
CONTROLS	BREAKS AND AT THE END OF WORKDAY.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE	SAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TO
PROTECTION	EN166 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
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** COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.
- RESPIRATORYWHERE RISK ASSESSMENT SHOWS AIR-PURIFYING
RESPIRATORS ARE APPROPRIATE USE A FULLFACE
PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143)
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 OFPREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DOENVIRONMENTALSO. DO NOT LET PRODUCT ENTER DRAINS.EXPOSUREDISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES		
APPEARANCE	White to light yellow crystalline powder	
ODOUR	NO DATA AVAILABLE	
ODOUR THRESHOLD	NO DATA AVAILABLE	
PH	NO DATA AVAILABLE	
MELTING	181 - 185 °C	
POINT/FREEZING POINT		
INITIAL BOILING POINT		
AND BOILING RANGE		
FLASH POINT		
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		
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	NO DATA AVAILABLE	
INFORMATION		

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	NO DATA AVAILABLE
INCOMPATIBLE MATERIALS	STRONG OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION PRODUCTS	HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS CARBON OXIDES OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	LD50 ORAL - RAT - 960 MG/KG
	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	

THERE IS SUFFICIENT EVIDENCE FOR THE CARCINOGENICITY OF ETHINYLESTRADIOL IN EXPERIMENTAL ANIMALS. IN THE ABSENCE OF ADEQUATE DATA IN HUMANS, IT IS REASONABLE, FOR PRACTICAL PURPOSES TO REGARD ETHINYLESTRADIOL AS IF IT PRESENTED A CARCINOGENIC RISK TO HUMANS. STUDIES IN HUMANS STRONGLY SUGGEST THAT THE ADMINISTRATION OF ESTROGENS IS CAUSALLY RELATED TO AN INCREASED INCIDENCE OF ENDOMETRIAL CARCINOMA; THERE IS NO EVIDENCE THAT ETHINYLESTRADIOL IS DIFFERENT FROM OTHER ESTROGENS IN THIS RESPECT. POSSIBLE HUMAN CARCINOGEN

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. KNOWN - KNOWN TO BE HUMAN CARCINOGEN NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.
LABORATORY EXPERIMENTS HAVE SHOWN TERATOGENIC EFFECTS. OVEREXPOSURE MAY CAUSE REPRODUCTIVE DISORDER(S) BASED ON TESTS WITH LABORATORY ANIMALS.
NO DATA AVAILABLE
NO DATA AVAILABLE
NO DATA AVAILABLE
RTECS: RC8925000 TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

ΤΟΧΙCITY	NO DATA AVAILABLE
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 NOTREQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL. VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCTOFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS
TO A LICENSED DISPOSAL COMPANY. CONTACT A
LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE
TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE
MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN
IN A CHEMICAL INCINERATOR EQUIPPED WITH AN
AFTERBURNER AND SCRUBBER.

CONTAMINATED DISPOSE OF AS UNUSED PRODUCT. PACKAGING

SECTION 14. TRANSPORT INFORMATION

DOT (US)	NOT DANGEROUS GOODS
IMDG	
PROPER SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	SOLID, N.O.S. (Ethynylestradiol)
UN NUMBER:	3077
CLASS:	9
PACKING GROUP:	III
EMS-NO:	F-A, S-F
MARINE POLLUTANT:	YES
IATA	
PROPER SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	SOLID, N.O.S. (Ethynylestradiol)
UN NUMBER:	3077
CLASS:	9
PACKING GROUP:	III

FURTHER INFORMATION

EHS-MARK REQUIRED (IMDG CODE 2.10.3) FOR SINGLE PACKAGINGS AND COMBINATION PACKAGINGS CONTAINING INNER PACKAGINGS WITH DANGEROUS GOODS > 5L FOR LIQUIDS OR > 5KG FOR SOLIDS.

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS		IATERIAL ARE SUBJECT TO EMENTS OF SARA TITLE III,
SARA 313 COMPONENTS	COMPONENTS WITH KNO' EXCEED THE THRESHOLD	T CONTAIN ANY CHEMICAL WN CAS NUMBERS THAT (DE MINIMIS) REPORTING SARA TITLE III, SECTION 313.
SARA 311/312 HAZARDS	ACUTE HEALTH HAZARD,	CHRONIC HEALTH HAZARD
MASSACHUSETTS RIGHT TO KNOW COMPONENTS		
	CAS-NO.	REVISION DATE
Ethynylestradiol	57-63-6	04-24-1993
PENNSYLVANIA RIGHT TO KNOW COMPONENTS		
	CAS-NO.	REVISION DATE
Ethynylestradiol	57-63-6	04-24-1993
NEW JERSEY RIGHT TO KNOW COMPONENTS		
	CAS-NO.	REVISION DATE
Ethynylestradiol	57-63-6	04-24-1993
CALIFORNIA PROP. 65 COMPONENTS WARNING! THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.		
	CAS-NO	REVISION DATE
Ethynylestradiol	57-63-6	09-28-2007
Luiynyiosuuuloi	57 05-0	07 20 2007

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.	
H302	HARMFUL IF SWALLOWED.
H350	MAY CAUSE CANCER.
H410	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING
	EFFECTS.

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.

VERSION: 3.2.

REVISION DATE: 07/01/2020