

# *Chem-Impex International Inc.*

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825 Dillon Drive  
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## SAFETY DATA SHEET

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### SECTION 1. CHEMICAL IDENTIFICATION

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CATALOG #: 42397

NAME: 3,4-Benzopyrene (purified by sublimation)

SYNONYMS: Benzo[a]pyrene (purified by sublimation)

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

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#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

SKIN SENSITISATION (CATEGORY 1), H317

GERM CELL MUTAGENICITY (CATEGORY 1B), H340

CARCINOGENICITY (CATEGORY 1B), H350

REPRODUCTIVE TOXICITY (CATEGORY 1B), H360

SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 1), H400

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



SIGNAL WORD

DANGER

HAZARD STATEMENT(S)

H317 MAY CAUSE AN ALLERGIC SKIN REACTION.  
H340 MAY CAUSE GENETIC DEFECTS.  
H350 MAY CAUSE CANCER.  
H360 MAY DAMAGE FERTILITY OR THE UNBORN CHILD.  
H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

PRECAUTIONARY STATEMENT(S)

P201 OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.  
P202 DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.  
P261 AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPORS/ SPRAY.  
P272 CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE.  
P273 AVOID RELEASE TO THE ENVIRONMENT.  
P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.  
P302 + P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.  
P308 + P313 IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ ATTENTION.  
P333 + P313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ ATTENTION.  
P363 WASH CONTAMINATED CLOTHING BEFORE REUSE.  
P391 COLLECT SPILLAGE.  
P405 STORE LOCKED UP.  
P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

**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>12</sub>

MW: 252.32

CAS-NO. 50-32-8  
PURITY: ≥ 99% (GC)

#### HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
<b>3,4-Benzopyrene (purified by sublimation)</b>		
	SKIN SENS. 1; MUTA. 1B; CARC. 1B; REPR. 1B; AQUATIC ACUTE 1; AQUATIC CHRONIC 1; H317, H340, H350, H360, H400, H410 CONCENTRATION LIMITS: >= 0.01 %: CARC. 1B, H350; M-FACTOR - AQUATIC ACUTE: 10	<= 100%

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

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## SECTION 4. FIRST-AID MEASURES

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### DESCRIPTION OF FIRST AID MEASURES

<b>GENERAL ADVICE</b>	SHOW THIS MATERIAL SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.
<b>IF INHALED</b>	AFTER INHALATION: FRESH AIR. CALL IN PHYSICIAN.
<b>IN CASE OF SKIN CONTACT</b>	IN CASE OF SKIN CONTACT: TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ SHOWER. CONSULT A PHYSICIAN.
<b>IN CASE OF EYE CONTACT</b>	AFTER EYE CONTACT: RINSE OUT WITH PLENTY OF WATER. CALL IN OPHTHALMOLOGIST. REMOVE CONTACT LENSES.
<b>IF SWALLOWED</b>	AFTER SWALLOWING: IMMEDIATELY MAKE VICTIM DRINK WATER (TWO GLASSES AT MOST). 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

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## SECTION 5. FIRE AND EXPLOSION DATA

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### EXTINGUISHING MEDIA

#### SUITABLE EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA  
WATER FOAM CARBON DIOXIDE (CO<sub>2</sub>) DRY POWDER

UNSUITABLE EXTINGUISHING MEDIA  
FOR THIS SUBSTANCE/MIXTURE NO LIMITATIONS OF  
EXTINGUISHING AGENTS ARE GIVEN.

#### SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.  
COMBUSTIBLE.  
DEVELOPMENT OF HAZARDOUS COMBUSTION GASES OR  
VAPOURS POSSIBLE IN THE EVENT OF FIRE.

#### ADVICE FOR FIREFIGHTERS

STAY IN DANGER AREA ONLY WITH SELF-CONTAINED  
BREATHING APPARATUS. PREVENT SKIN CONTACT BY  
KEEPING A SAFE DISTANCE OR BY WEARING SUITABLE  
PROTECTIVE CLOTHING.

#### FURTHER INFORMATION

PREVENT FIRE EXTINGUISHING WATER FROM  
CONTAMINATING SURFACE WATER OR THE GROUND  
WATER SYSTEM.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

ADVICE FOR NON-EMERGENCY PERSONNEL: AVOID  
GENERATION AND INHALATION OF DUSTS IN ALL  
CIRCUMSTANCES. AVOID SUBSTANCE CONTACT. ENSURE  
ADEQUATE VENTILATION. EVACUATE THE DANGER AREA,  
OBSERVE EMERGENCY PROCEDURES, CONSULT AN  
EXPERT.

FOR PERSONAL PROTECTION SEE SECTION 8.

#### ENVIRONMENTAL PRECAUTIONS

DO NOT LET PRODUCT ENTER DRAINS.

#### METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

COVER DRAINS. COLLECT, BIND, AND PUMP OFF SPILLS.  
OBSERVE POSSIBLE MATERIAL RESTRICTIONS (SEE  
SECTIONS 7 AND 10). DISPOSE OF PROPERLY. CLEAN UP  
AFFECTED AREA.

#### REFERENCE TO OTHER SECTIONS

FOR DISPOSAL SEE SECTION 13.

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## SECTION 7. HANDLING AND STORAGE

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<b>PRECAUTIONS FOR SAFE HANDLING</b>	WORK UNDER HOOD. DO NOT INHALE SUBSTANCE/MIXTURE. FOR PRECAUTIONS SEE SECTION 2.2.
<b>CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES</b>	TIGHTLY CLOSED. DRY. KEEP IN A WELL-VENTILATED PLACE. KEEP LOCKED UP OR IN AN AREA ACCESSIBLE ONLY TO QUALIFIED OR AUTHORIZED PERSONS.  Store at $\leq -10\text{ }^{\circ}\text{C}$
<b>SPECIFIC END USE(S)</b>	APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### CONTROL PARAMETERS

#### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

COMPONENT	CAS-NO.	VALUE	CONTROL PARAMETERS	BASIS
	REMARKS	CANCER SUBSTANCES FOR WHICH THERE IS A BIOLOGICAL EXPOSURE INDEX OR INDICES (SEE BEI SECTION), SEE BEI FOR POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) EXPOSURE BY ALL ROUTES SHOULD BE CAREFULLY CONTROLLED TO LEVELS AS LOW AS POSSIBLE. SUSPECTED HUMAN CARCINOGEN		
3,4-Benzopyrene (purified by sublimation)	50-32-8	TWA	0.2 MG/M3	USA. OCCUPATIONAL EXPOSURE LIMITS (OSHA) - TABLE Z-1 LIMITS FOR AIR CONTAMINANTS
		1910.1002 AS USED IN 1910.1000 (TABLE Z-1), COAL TAR PITCH VOLATILES INCLUDE THE FUSED POLYCYCLIC HYDROCARBONS WHICH VOLATILIZE FROM THE DISTILLATION RESIDUES OF COAL, PETROLEUM (EXCLUDING ASPHALT), WOOD, AND OTHER ORGANIC MATTER. ASPHALT (CAS 8052-42-4, AND CAS 64742-93-4) IS NOT COVERED UNDER THE "COAL TAR PITCH VOLATILES" STANDARD OSHA SPECIFICALLY REGULATED CARCINOGEN		

		TWA	0.1 MG/M3	USA. NIOSH RECOMMENDED EXPOSURE LIMITS
		POTENTIAL OCCUPATIONAL CARCINOGEN NIOSH CONSIDERS COAL TAR, COAL TAR PITCH, AND CREOSOTE TO BE COAL TAR PRODUCTS. CYCLOHEXANE-EXTRACTABLE FRACTION SEE APPENDIX C SEE APPENDIX A		
		PEL	0.2 MG/M3	CALIFORNIA PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS
		COAL TAR PITCH VOLATILES (BENZENE OR CYCLOHEXANE- SOLUBLE FRACTION) INCLUDE FUSED POLYCYCLIC HYDROCARBONS (SOME OF WHICH ARE KNOWN CARCINOGENS) WHICH VOLATILIZE FROM THE DISTILLATION RESIDUES OF COAL, PETROLEUM (EXCLUDING ASPHALT), WOOD, AND OTHER ORGANIC MATTER. ASPHALT (CAS 8052-42-4, AND CAS 64742-93-4) IS NOT COVERED UNDER THE "COAL TAR PITCH VOLATILES" STANDARD.		
		PEL	0.2 MG/M3	CALIFORNIA PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS
		COAL TAR PITCH VOLATILES (BENZENE OR CYCLOHEXANE- SOLUBLE FRACTION) INCLUDE FUSED POLYCYCLIC HYDROCARBONS (SOME OF WHICH ARE KNOWN CARCINOGENS) WHICH VOLATILIZE FROM THE DISTILLATION RESIDUES OF COAL, PETROLEUM (EXCLUDING ASPHALT), WOOD, AND OTHER ORGANIC MATTER. ASPHALT (CAS 8052-42-4, AND CAS 64742-93-4) IS NOT COVERED UNDER THE "COAL TAR PITCH VOLATILES" STANDARD.		

#### BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS

COMPONENT	CAS-NO.	PARAMETERS	VALUE	BIOLOGICAL SPECIMEN	BASIS
3,4-Benzopyrene (purified by sublimation)	50-32-8	1- HYDROXYPYRENE	2.5 G/L	URINE	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)
	REMARKS	END OF SHIFT AT END OF WORKWEEK			
		3- HYDROXYBENZO(A)PYRENE		URINE	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)
		END OF SHIFT AT END OF WORKWEEK			

#### EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS AND FACE AFTER WORKING WITH SUBSTANCE.

### **PERSONAL PROTECTIVE EQUIPMENT**

EYE/FACE PROTECTION USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU). SAFETY GLASSES

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.

#### **FULL CONTACT**

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

#### **SPLASH CONTACT**

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE EC 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 PROTECTION PROTECTIVE CLOTHING

RESPIRATORY PROTECTION REQUIRED WHEN DUSTS ARE GENERATED. OUR RECOMMENDATIONS ON FILTERING RESPIRATORY PROTECTION ARE BASED ON THE FOLLOWING STANDARDS: DIN EN 143, DIN 14387 AND OTHER ACCOMPANYING STANDARDS RELATING TO THE USED RESPIRATORY PROTECTION SYSTEM.

CONTROL OF ENVIRONMENTAL EXPOSURE DO NOT LET PRODUCT ENTER DRAINS.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Light yellow, amber or dark green crystalline powder
ODOUR	WEAKLY AROMATIC
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	176 - 180 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT AND BOILING RANGE	496 °C
FLASH POINT	
EVAPOURATION 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

**OTHER SAFETY INFORMATION**

NO DATA AVAILABLE

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**SECTION 10. STABILITY AND REACTIVITY**

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<b>REACTIVITY</b>	THE FOLLOWING APPLIES IN GENERAL TO FLAMMABLE ORGANIC SUBSTANCES AND MIXTURES: IN CORRESPONDINGLY FINE DISTRIBUTION, WHEN WHIRLED UP A DUST EXPLOSION POTENTIAL MAY GENERALLY BE ASSUMED.
<b>CHEMICAL STABILITY</b>	THE PRODUCT IS CHEMICALLY STABLE UNDER STANDARD AMBIENT CONDITIONS
<b>POSSIBILITY OF HAZARDOUS REACTIONS</b>	NO DATA AVAILABLE



<b>CONDITIONS TO AVOID</b>	NO DATA AVAILABLE
<b>INCOMPATIBLE MATERIALS</b>	STRONG OXIDIZING AGENTS
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN. 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  INHALATION: NO DATA AVAILABLE  DERMAL: NO DATA AVAILABLE  NO DATA AVAILABLE
<b>SKIN CORROSION/IRRITATION</b>	SKIN - MOUSE RESULT: MILD SKIN IRRITATION REMARKS: (RTECS)
<b>SERIOUS EYE DAMAGE/EYE IRRITATION</b>	NO DATA AVAILABLE
<b>RESPIRATORY OR SKIN SENSITISATION</b>	MAY CAUSE ALLERGIC SKIN REACTION. CLASSIFIED ACCORDING TO REGULATION (EU) 1272/2008, ANNEX VI (TABLE 3.1/3.2)

**GERM CELL  
MUTAGENICITY**

MAY CAUSE GENETIC DEFECTS.  
AMES TEST  
SALMONELLA TYPHIMURIUM  
RESULT: POSITIVE  
(LIT.)  
MUTAGENICITY (MAMMAL CELL TEST): CHROMOSOME  
ABERRATION.  
CHINESE HAMSTER OVARY CELLS  
RESULT: POSITIVE  
(NATIONAL TOXICOLOGY PROGRAM)  
SISTER CHROMATID EXCHANGE ASSAY  
CHINESE HAMSTER OVARY CELLS  
RESULT: POSITIVE  
(NATIONAL TOXICOLOGY PROGRAM)  
  
MOUSE - MALE - BONE MARROW  
RESULT: POSITIVE  
(NATIONAL TOXICOLOGY PROGRAM)

**CARCINOGENICITY**

PRESUMED TO HAVE CARCINOGENIC POTENTIAL FOR HUMANS  
IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS  
NTP: NO INGREDIENT 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.

**REPRODUCTIVE TOXICITY**

MAY DAMAGE THE UNBORN CHILD.  
MAY DAMAGE FERTILITY.

**SPECIFIC TARGET ORGAN  
TOXICITY - SINGLE  
EXPOSURE**

NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN  
TOXICITY - REPEATED  
EXPOSURE**

NO DATA AVAILABLE

**ASPIRATION HAZARD**

NO DATA AVAILABLE

**ADDITIONAL  
INFORMATION**

RTECS: DJ3675000  
  
BURNING SENSATION, COUGH, WHEEZING, LARYNGITIS,  
SHORTNESS OF BREATH, HEADACHE, NAUSEA, VOMITING  
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL,  
PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT  
BEEN THOROUGHLY INVESTIGATED.

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**SECTION 12. ECOLOGICAL INFORMATION**

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**TOXICITY**

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES  
TOXICITY TO ALGAE

EC50 - DAPHNIA MAGNA (WATER FLEA) - 0.25 MG/L - 48 H  
REMARKS: (ABOVE THE SOLUBILITY LIMIT IN THE TEST MEDIUM) (ECOTOX DATABASE)  
STATIC TEST ERC50 - SCENEDESMUS ACUTUS - 0.005 MG/L - 72 H  
REMARKS: (ECOTOX DATABASE)

**PERSISTENCE AND DEGRADABILITY**

NO DATA AVAILABLE

**BIOACCUMULATIVE POTENTIAL**

BIOACCUMULATION

LEPOMIS MACROCHIRUS (BLUEGILL) - 48 H  
- 0.0005 MG/L

BIOCONCENTRATION FACTOR (BCF): 3,208

**MOBILITY IN SOIL**

NO DATA AVAILABLE

**RESULTS OF PBT AND VPVB ASSESSMENT**

PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED.

**OTHER ADVERSE EFFECTS**

NO DATA AVAILABLE

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**SECTION 13. DISPOSAL CONSIDERATIONS**

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**WASTE TREATMENT METHODS****PRODUCT**

WASTE MATERIAL MUST BE DISPOSED OF IN ACCORDANCE WITH THE NATIONAL AND LOC NO MIXING WITH OTHER WASTE.

**CONTAMINATED PACKAGING**

DISPOSE OF AS UNUSED PRODUCT.

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**SECTION 14. TRANSPORT INFORMATION**

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**DOT (US)**

PROPER SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ( 3,4-Benzopyrene (purified by sublimation) )  
UN NUMBER: 3077  
CLASS: 9

PACKING GROUP: III  
REPORTABLE QUANTITY 1 LBS  
(RQ):  
POISON INHALATION HAZARD: NO

**IMDG**

PROPER SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S. ( 3,4-Benzopyrene (purified by sublimation) )  
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. ( 3,4-Benzopyrene (purified by sublimation) )  
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.

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**SECTION 15. REGULATORY INFORMATION**

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**SARA 302 COMPONENTS** THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS  
WITH A SECTION 302 EHS TPQ.

**SARA 313 COMPONENTS**

THE FOLLOWING COMPONENTS ARE SUBJECT TO REPORTING LEVELS ESTABLISHED  
BY SARA TITLE III, SECTION 313:

	CAS-NO.	REVISION DATE
3,4-Benzopyrene (purified by sublimation)	50-32-8	03-01-2007

**SARA 311/312 HAZARDS** ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS**

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

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**SECTION 16. OTHER INFORMATION**

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

H317 MAY CAUSE AN ALLERGIC SKIN REACTION.  
H340 MAY CAUSE GENETIC DEFECTS.  
H350 MAY CAUSE CANCER.  
H360 MAY DAMAGE FERTILITY OR THE UNBORN CHILD.  
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 GOVERNMENTAL 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:

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