3/85

CHEMICAL: NAPTHA NE

SYNONYM / TRADE NAME: NAPTHALIN, TAR CAMPHOR, WHITE TAR

1263498 - R8 SDMS

SF File Number 22.4

PROPERTIES:

PHYSICAL STATE: WHITE CRYSTALLINE FLAKES,

APPEARANCE/ODOR: COAL TAR ODOR, MOTHBALL ODOR

BOILING POINT: 217.9°C FREEZING POINT: 80.2°C

SPECIFIC GRAVITY: 1.145 VAPOR DENSITY: 4.42

VAPOR PRESSURE: 23 @ 1

EXPLOSIVE/FLAMMABILITY LIMITS: LFL - .9% UFL 5.9%

SOLUBILITY IN WATER: NONE

CHEMICAL FAMILY: AROMATIC HYDROCARBON

REACTIVITY:

INCOMPATIBLE WITH: STRONG OXIDIZERS
CHROMIC ANHYDRIDE

INHIBITOR: NONE FOUND

NEUTRALIZED BY NONE FOUND

HEALTH AND SAFETY:

TLV: 10 PPM STEL: 15 PPM

IDLH: 500 PPM ODOR THRESHOLD: .3 (LOW)

EXPOSURE	SYMPTOMS	TREATMENT
EYES	INTENSE BURNING	FLUSH WITH H_2O FOR 15 MIN
MUCOUS MEMBRANES	BURNING SENSATION	FLUSH WITH H_2O
RESPIRATORY TRACT	HEADACHE, DIZZINESS	FRESH AIR AND O_2
INGESTION	NAUSEA, VOMITING, DIAHRREAH	MILK OR WATER
SKIN	RAPIDLY ABSORBED, BURNING	WASH WITH SOAP AND H_2O TWICE

RESPIRATORY PROTECTION: CANISTER/CARTRIDGE TYPE: O/V CANISTER

ONLY IN SEVERE CONDITIONS

[illegible]	BEST MATERIAL	[illegible]
[illegible] GEAR	NEOPRENE	VITON
[illegible]	CPE	VITON
[illegible]	NEOPRENE	VITON
[illegible]	NEOPRENE	VITON

CONTAINMENT AND CLEAN UP: BEST METHOD: SOLIDIFY AND PACK INTO DRUMS

DECONTAMINATION: SOAP AND WATER

DISPOSAL: CONTROLLED BURNING CAN BE USED

PACKAGING REQUIREMENTS:

HAZARD CLASS: FLAMMABLE SOLID

445919

CHEMICAL: ANTHRACENE $(C_6H_4CH)_2$

SYNONYM / TRADE NAME: ANTHRACINE, PARANAPHTALENE, GREEN OIL TETRA OLIVE N26

PROPERTIES:

PHYSICAL STATE: SOLID

APPEARANCE/ODOR: WHITE TO YELLOW / WEAK AROMATIC ODOR

BOILING POINT: 646.2°F FREEZING POINT: 421.7°F

SPECIFIC GRAVITY: 1.25/20°C VAPOR DENSITY: 6.15

VAPOR PRESSURE: 1 mm/Hg 145°C FLASH POINT 250°F

EXPLOSIVE/FLAMMABILITY LIMITS: Ø.6 %

SOLUBILITY IN WATER: INSOLUABLE

CHEMICAL FAMILY: AROMATIC HYDROCARBON

REACTIVITY:

INCOMPATIBLE WITH: OXIDIZERS, CHROMIC ACID, CALCIUM HYPOCHLORITE

INHIBITOR: NO DATA

NEUTRALIZED BY: ACTIVATED CARBON FOR LIQUID CONTAMINATION

HEALTH AND SAFETY:

TLV: NO DATA STEL: NO DATA

IDLH: NONE ODOR THRESHOLD: NO DATA

EXPOSURE	SYMPTOMS	TREATMENT
EYES	IRRITANT	WASH W/LRG. AM. OF H_2O
MUCOUS MEMBRANES	IRRITANT	FRESH AIR
RESPIRATORY TRACT	ALLERGEN, IRRITANT	FRESH AIR, REST
INGESTION	NAUSEA, DIARRHEA	DRINK WATER OR MILK
SKIN	IRRITANT	WASH WITH SOAP + WATER

RESPIRATORY PROTECTION: CANISTER/CARTRIDGE TYPE: ORGANIC VAPOR CARTRIDGE W/ 2mg/m3 OR <

SCBA REQUIRED: YES W/ 200mg/m3 OR >

[illegible]	GLOVE MATERIAL	[illegible]
SPLASH OF	NEOPRENE	NEOPRENE / PVC
[illegible]	NEOPRENE	NEOPRENE / PVC
[illegible]	BUTYL	BUTYL / BUTL
[illegible]	BUTYL	BUTYL / BUTL

CONTAINMENT AND CLEANUP: BEST METHOD: PROTECT FROM DISOLVEMENT. MECHANICAL CLEANUP, CLAY/BENONITE SWALE

DECONTAMINATION: WASH W/ SOAP + WATER

DISPOSAL: INCINERATION, LANDFILL

PACKAGING REQUIREMENTS: NONE

HAZARD CLASS: N.O.S. ORM-E

CHEMICAL: FLUORANTHENE

SYNONYM / TRADE NAME: BENZOFLUORENE, IDRYL

PROPERTIES:

PHYSICAL STATE: COLORLESS SOLID

APPEARANCE/ODOR: COLORLESS NEEDLES

BOILING POINT: 375° FREEZING POINT:

SPECIFIC GRAVITY: 1.252 AT 32°F VAPOR DENSITY:

VAPOR PRESSURE: .01

EXPLOSIVE/FLAMMABILITY LIMITS: SLIGHTLY COMBUSTIBLE

SOLUBILITY IN WATER: INSOLUBLE

CHEMICAL FAMILY: POLYNUCLEAR AROMATIC HYDROCARBON

REACTIVITY:

INCOMPATIBLE WITH: NONE

INHIBITOR: NONE

NEUTRALIZED BY: NONE

HEALTH AND SAFETY:

TLV: NONE STEL: NONE

IDLH: NONE ODOR THRESHOLD: NONE

EXPOSURE	SYMPTOMS	TREATMENT
EYES		
MUCOUS MEMBRANES		
RESPIRATORY TRACT		MOVE TO FRESH AIR KEEP WARM - REST
INGESTION		
SKIN	ABSORBS THROUGH SKIN	

RESPIRATORY PROTECTION: CANISTER/CARTRIDGE TYPE: HIGH PARTICULANT VAPOR

TYPE REQUIRED:

PROTECTIVE CLOTHING:	RESISTANT MATERIAL	INSULATION
SPLASH GEAR	NEOPRENE / PVC	
FLOTSUIT	N/A	
GLOVES	NEOPRENE / PVC	
BOOTS	NEOPRENE / PVC	

CONTAINMENT AND CLEAN UP: BEST METHOD:

DECONTAMINATION: WASH WITH SOAP + WATER

DISPOSAL: PACK IN DRUMS / INCINERATE

PACKAGING REQUIREMENTS: NOS ORM-E

HAZARD CLASS:

CHEMICAL: Pyrene

SYNONYM / TRADE NAME: Benzo(DEF)PHENANTHRENE, BETA-PYRINE, OHS19950

PROPERTIES:

PHYSICAL STATE: Bright Yellow solid. Odorless

APPEARANCE/ODOR: " " " " Tetracene gives Pyrene its color.

BOILING POINT: 404°. FREEZING POINT: No data

SPECIFIC GRAVITY: 1.271@23°C VAPOR DENSITY: @20°C

VAPOR PRESSURE: @20°C MMHG: MM1 ~~MMHG: 1MM~~

EXPLOSIVE/FLAMMABILITY LIMITS: No data

SOLUBILITY IN WATER: Insol. Sol in Organic solvents

CHEMICAL FAMILY: Polynuclear Aromatic Hydrocarbons

REACTIVITY:

INCOMPATIBLE WITH: Strong oxidizers

INHIBITOR:

NEUTRALIZED BY:

HEALTH AND SAFETY:

TLV: STEL:

IDLH: Immediately dangerous ODOR THRESHOLD:

EXPOSURE	SYMPTOMS	TREATMENT
EYES	Irritation	Wash eyes (Lg amounts of water)
MUCOUS MEMBRANES	Irritation	Move to Fresh air at once
RESPIRATORY TRACT	Irritation	Move to Fresh air at once Keep patient warm & @ rest
INGESTION	Nausea/Vomitting	Drink water - Induce vomitting
SKIN	Irritation	Mild soap/detergent & water

RESPIRATORY PROTECTION: CANNISTER/CARTRIDGE TYPE:

SCBA REQUIRED: Yes

PROTECTIVE CLOTHING:

	BEST MATERIAL	ACCEPTABLE MATERIAL
SPLASH GEAR	Neoprene	Viton
ENCAPSULATED	Neoprene	
GLOVES	Neoprene	Nitrile Viton
BOOTS	Neoprene	

CONTAINMENT AND CLEAN UP: BEST METHOD:

DECONTAMINATION: Destroy by Permanganate Oxidation, High Temp Incineration w/Scrubbing equipt.

DISPOSAL: Physically remove immobilized residues. Contain soil for Im Residues may be packaged for disposal.

PACKAGING REQUIREMENTS: 17H Epoxy lined drums

HAZARD CLASS: A carcinogenic agent. Absorbed by skin. Emits acrid smoke and fumes when heated to decomp.

CHEMICAL: 1, 2, BENZANTHRACENE

SYNONYM / TRADE NAME: BENZO(a)ANTHRACENE, TETRAPHENE, BENZATHRENE
1, 2 - BENZ (A) ANTHRACENE, BENZO(B) PHENANTHRENE

PROPERTIES:

PHYSICAL STATE: SOLID

APPEARANCE/ODOR: COLORLESS LEAFLETS OR PLATES

BOILING POINT: 400° C FREEZING POINT: 400°C

SPECIFIC GRAVITY: NO DATA VAPOR DENSITY: NO DATA

VAPOR PRESSURE: 5E-9

EXPLOSIVE/FLAMMABILITY LIMITS: THERMAL DECOMP. PRODUCTS ARE HAZARDOUS AND/OR TOXIC.

SOLUBILITY IN WATER: INSOLUBLE

CHEMICAL FAMILY: POLY-NUCLEAR AROMATIC HYDROCARBONS

REACTIVITY:

INCOMPATIBLE WITH: DIENES, PEROXIDES, STRONG ACIDS, STRONG ALKALIES, STRONG OXIDIZERS,

INHIBITOR: NO DATA

NEUTRALIZED BY: NO DATA

HEALTH AND SAFETY:

TLV: 0.1 mg/m³ - 10 HRS STEL: NO DATA

IDLH: NO DATA ODOR THRESHOLD: NO DATA

EXPOSURE	SYMPTOMS	TREATMENT
EYES	IRRITATION	FLUSH WITH WATER
MUCOUS MEMBRANES	IRRITATION	REMOVE TO FRESH AIR
RESPIRATORY TRACT	IRRITATION	MOVE TO FRESH AIR KEEP AIR WAY OPEN.
INGESTION	NAUSA, VOMITING	LARGE QUANITIES OF WATER INDUCE VOMITING
SKIN	IRRITATION	MILD SOAP-FLUSH WITH WATER

RESPIRATORY PROTECTION: CARTRIDGE TYPE: OV

SCBA: IF HIGH LEVELS "YES"

PROTECTIVE CLOTHING:

	PERMEATION	DEGRADATION
SPLASH GEAR	NEOPRENE	VITON
ENCAPSULATED	NEOPRENE	
GLOVES	NEOPRENE	NITRILE, VITON
BOOTS	NEOPRENE	

CONTAINMENT AND CLEAN UP:

BEST METHOD: CONSTRUCT CLAY/BENTONITE DIKES SORPTION WITH POWDER ACTIVATED CHARCOL; FILTRATION THROUGH GRANULAR ACTIVATED CHARCOL BED, OR CHEMICAL OXIDATION WITH POTASSIUM PERMANGANATE.

DECONTAMINATION: SOAP AND WATER WASH

DISPOSAL: RESIDUES AND SORBENT MEDIA MAY BE PACKAGED IN 17H EPOXY LINED DRUMS, OR HIGH TEMP. INCINERATION.

PACKAGING REQUIREMENTS: NONE

HAZARD CLASS: LIQUID OR SOLID N.O.S. ORM-E UN 9188

CHEMICAL: FLUORENE

SYNONYM / TRADE NAME: ALPHA-DIPHENYLENEMETHANE

PROPERTIES:

PHYSICAL STATE: SOLID

APPEARANCE/ODOR: SMALL WHITE CRYSTALLINE

BOILING POINT: 295°C FREEZING POINT: NO DATA

SPECIFIC GRAVITY: 1.202 VAPOR DENSITY: NO DATA

VAPOR PRESSURE: .001 TO .01

EXPLOSIVE/FLAMMABILITY LIMITS: NO DATA

SOLUBILITY IN WATER: NO / SINKS

CHEMICAL FAMILY: HYDROCARBON (POLYNUCLEAR AROMATIC) COMBUSTIBLE

REACTIVITY:

INCOMPATIBLE WITH: OXIDANTS & OXIDES OF SULFUR

INHIBITOR:

NEUTRALIZED BY: POTASSIUM PERMANGANATE (FOR FLUORENE IN WATER)

HEALTH AND SAFETY:

TLV: .1 PPM FOR 10 HOURS STEL: NO DATA

IDLH: NO DATA ODOR THRESHOLD: NO DATA

EXPOSURE	SYMPTOMS	TREATMENT
EYES	IRRATINT	FLUSH W/WATER
MUCOUS MEMBRANES	↓	↓
RESPIRATORY TRACT		
INGESTION		INDUCE VOMITING
SKIN		FLUSH W/WATER

RESPIRATORY PROTECTION: CANISTER/CARTRIDGE TYPE: OV

USED: IF HIGH LEVELS

PROTECTIVE CLOTHING:	MATERIAL	[illegible]
SPLASH GEAR	NEOPRENE	VITON NITRILE
ENCAPSULATED	↓	↓
GLOVES		
BOOTS		

CONTAINMENT AND CLEAN UP: BEST METHOD: SORPTION W/POWDERED ACTIVATED CHARCOAL, FILTRATION THROUGH GRANULAL ACTIVATED CARBON BED

DECONTAMINATION:

DISPOSAL: RESIDUES & SORBENT MEDIA MAY BE PACKAGED (OVER)

PACKAGING REQUIREMENTS:

HAZARD CLASS:

CHEMICAL: ACENAPHTHENE

DIHYDROACENAPHTHYLENE

UNKNOWN / TRADE NAME: ETHYLENENAPHTHALENE / NAPHTHYLENEETHYLENE

PROPERTIES: PHYSICAL STATE: WHITE CHRYSTALLINE SOLID (NEEDLES)

APPEARANCE/ODOR: WHITE CHRYSTALS.

BOILING POINT: 534°F - 275°C FREEZING POINT: 93.6°C.

SPECIFIC GRAVITY: 1.0242 @ 194°F VAPOR DENSITY: 5.32

VAPOR PRESSURE: 10mm @ 268F - 131.2 C

EXPLOSIVE/FLAMMABILITY LIMITS: 0.6 - ?

SOLUBILITY IN WATER: NO (BUT SOLUBLE IN ALCOHOL)

CHEMICAL FAMILY: POLYNUCLEAR AROMATIC HYDROCARBONS.

REACTIVITY: INCOMPATIBLE WITH: ~~FLUORINE / BROMINE / CHLORINE / OXIDIZERS /~~ STRONG OXIDIZERS / CHROMIUM TRIOXIDE / PERMANGANATES.

INHIBITOR: NO INFO. AVAIL.

NEUTRALIZED BY: NO INFO. AVAIL.

HEALTH AND SAFETY: TLV: NO INFO AVAIL STEL: NO INFO AVAIL.

IDLH: NO INFO AVAIL. ODOR THRESHOLD: 0.02

EXPOSURE	SYMPTOMS	TREATMENT
EYES	IRRITATION	REMOVE FROM AREA, FLUSH W/WATER.
MUCOUS MEMBRANES	IRRITATION	REMOVE FROM AREA, FLUSH W/WATER.
RESPIRATORY TRACT	IRREGULAR BREATHING.	ADMINISTER O_2
INGESTION	VOMITING.	GASTRIC LAVAGE
SKIN	IRRITATION.	REMOVE FROM AREA, WASH W/SOAP & WATER.

RESPIRATORY PROTECTION: CANNISTER/CARTRIDGE TYPE: CHEMICAL CARTRIDGE RESP. W/ ORGANIC VAPOR CARTRIDGE

SCBA REQUIRED: W/ FULL FACE PIECE HELMET OR HOOD

PROTECTIVE CLOTHING:

	BEST MATERIAL	ACCEPTABLE MATERIAL
SPLASH GEAR	NEOPRENE	VITON / BUTYL
ENCAPSULATED	"	"
GLOVES	"	"
BOOTS	"	"

CONTAINMENT AND CLEAN UP: BEST METHOD: LAND SPILL: DIG PIT TO HOLD MATERIAL. WATER SPILL: USE ACTIVATED CARBON @ 10X SPILLED AMT. @ 10PPM OR > CONCENT.

DECONTAMINATION: SOAP & WATER.

DISPOSAL: PACKAGE IN 17H DRUMS W/ EPOXY LINER.

PACKAGING REQUIREMENTS: FIBER DRUMS. / HAZARDOUS SUBSTANCES N.O.S. (UN 9188)

HAZARD CLASS: COMBUSTIBLE