MATERIAL SAFETY DATA SHEET

CHEMICAL PRODUCTS SAFETY DATE SH

Tradename: PETROCAT GLOBAL	Main Chemical Components	
Chemical common name:	Naphthalene	Synthetic Camphor
Chemical name or code:		Cyclic Hepatanone I.T.T. Bicyclic Trimethyl 2.2.1
Chemical family:	Polysiclic aromatic hydrocarbon	Cyclic Monoterpenes
Sinonim	Naphthalene, tar camhor, balls	Synthetic Camphor
Condensed formula	C10H8	C10H16O

SECTION 2: IDENTIFICATION OF COMPONENTS/INGREDIENTS INFORMATION

% and name of components	Naphthalene	Synthetic Camphor
Hydrogen		10.76%
Carbon		78.73%
Oxygen	0%	10.51%
	Not apply	Not apply

SECTION 3: DANGEROUS IDENTIFICATION

ONU Classification:				
NFPA Classification:	Healty:1	Flammability: 2	Reactivity: 1	Hazard: W

SECTION 4: FIRST AID MEASURES

Acute exposure:	Vapors Inhalation. Long headaches, nausea, sweating, mental confusion.
Accidental swallowing:	Toxic. May provoke headaches, sweating, all over the body general discomfort, dark urine, nausea, vomiting, disorientation, Intravascular hemolysis. Similar symptoms to inhalation. Severe cases can induce a coma state with or without seizures. Can be fatal provoking kidneys insufficiency. Consult a doctor.
Prolongueinhalation:	Dust or vapors inhalation may cause headache, nausea, vomiting, intense sweating and disorientation. Predominant reaction is the intravascular hemolysis with symptoms of anemia, fever, jaundice, and kidney or liver.

Eyes:	All vapors and solids cause irritation, redness and pain. High exposition can damage eyes nerves.
Skin contact:	May irritate the skin and when prolonged contact may provoke skin eruptions and allergies. People with sensible skin may suffer with severe dermatitis.
Cronical exposition:	May not occur.
Chemical substance considered as: Cancer NO Mutagenic NO Teratogenic NO Others _____ Toxicity Training:DL50, CL50, etc.: LD50	

SECTION 5: FIRE FIGHTHING MEASURES

Mainsubstances:	Naphthalene	Synthetic Camphor
Clasification:	Flammable solid class 4	Flammable solid class 4
Identification number U.N.:	1334	2717
Emergency Guide:	133	133
Extinction Medium:	Chemical foam, $C0_2$, Dry chemical powder, halon, sand, ground.	
Emergency response:	Spilled: Remove all sources of ignition, do not smoke, do not use flares, mechanical or electric equipment.	
Small Fire:	Dry chemical, CO_2, Halon, sand, earth, chemical foam.	
Large Fire or Trailer Fire or Container:	Use treated water, chemical fog, foam regular, if there is mass extinction elements, use them, but removed from the sealed-off area and let burn freely. Cool the ashes with water.	
Special precautions in the fight against fire:	Do not use simple water. Fenolicos more than 110°C components can explode. In the event of fire, wear full protective dresses and NIOSH approved self-contained breathing with full face operating in demand pressure or the positive pressure mode. Vapors can flow along surfaces to a distant ignition source and ignite.	
Conditions that lead to other risks:	Avoid high temperatures	
Products that are harmful to health:	Toxic, black and dense smoke, avoid breathing. Secondary products unknown.	
Others:	Flammable, it can ignite with heat, sparkles or flames. Fire can produce irritating or toxic gases.	

REACTIVITY DATE

Components	Naphthalene	Synthetic camphor
Substances	Stable	Stable
Incompability – substances that may be avoid	Strong acids Concentrated alcalis	Strong acids Concentrated álcalis
Dangerous products of decomposition	Unknown	Unknown
Spontaneous Polymerization	Can't occur	Can't occur

SECTION 6: ACCIDENTAL LEAKS PRECAUTIONS

Individual precautions:	Avoid skin, eyes or clothes contact.
Precautions to protect the environment:	Do not allow the leaks to get to the drain. Avoid soil, water and drains pollution.
Cleaning:	Dry clean. Place in residual containers for later elimination according the current norms. Clean the rest with abundant water.
Small amounts:	Sweep and put leftovers inside metallic cans perfectly sealed by pressure.
Big amounts:	Sweep and put leftovers inside metallic drums perfectly sealed. Product can evaporate under normal temperature. Vapors are aromatic but not toxic.

SECCION 7: STORAGING

Keep in a sealed container by pressure. Keep in a dry place well ventilated. Protect against physical harm. Isolate from any heat source or ignition source. Maintain faraway from humidity and oxidants. These material containers may be dangerous when empty due to the residues of the product (dust and solids). Observe all warnings and precautions stated for this product.

SECTION 8: PERSONAL EXPOSURE CONTROLS AND PROTECTION

Personal Protection Equipment:	Neopreno gloves, googles, mask with a filter for organic vapors. Plasticapron.
Exposurelimits:	OSHA exposurelimit (PEL): 10 ppm y 50 mg/m3.
ACGIH Threshold Limit Value (TLV):	TWA = 10 ppm, 52 mg/m3 STEL = 15 ppm y 79 mg/m3
Ventilation:	A local or general ventilation system is recommended for employee's exposure under aerial boundaries exposition. Local extraction is preferable because the emissions can be controlled from the source stopping the spreading out of the working area.
Recommendations:	Keep the container perfectly sealed and if used partially, storage the container far from sun light or excessive heat.

Personal respirator (Approved by NIOSH):	If the limit of exposure is passed, a half face respirator with a cartridge for organic vapors and particles filter is recommended (NIOSH type P95 or filter R95) It can be used up to 10 times of the exposure limits or the maximum concentration specified by the regulatory agency or by the respirator provider. A full face respirator with a cartridge of organic vapors and particles filter (NIOSH P100 or filter R100) can be used when overpass 50 times the limit of exposure or the maximum concentration of use specified by the regulatory agency or the provider of the respirator. Take into consideration that the series N filters are not recommended for this material. For emergencies or cases where the levels of exposure are not known, use a complete equipment of positive pressure with an air respirator. Warning: Air Purifiers respirators do not protect the employees among oxygen deficient atmospheres.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

	Naphthalene	Synthetic Camphor
Boiling temperature °C	218° a 769 mmp	204° a 205°
Fusion temperature °C	80 190°	174° 179°
Inflamation temperature °C	79°	66°
Auto ignition temperature °C	Not apply	Not apply
Relative density	1.175	0.990 – 1.000
Flammability Limitor explosiveness		Inf.0.6% Sup 4.5%
Molecular weight	60 Kcal/Mol	152.24 g/mol
Specific weight	1.2	
Physical State and Color	Colourless prism of narrow	White crystals.
Smell	Carburictar	characteristic aroma
Water solubility	Insoluble	Insoluble
Volumnes volatile @ 21C (70F):	It was not found	It was not found
Vapor density (air=1)	4,4	
Vapor pressure (mm Hg)	1 @ 53°C (127°F)	
Evaporation Tasa (BuAc = 1):	<1	

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable to ambiance temperature when in pressure sealed containers.
Producs with dangerous descomposition:	Carbon dioxide and carbon monoxidecan be formed when heating until descomposition.
Dangerous Polimerization	Itwon'toccur
Incompability:	Strong oxidants, strong basis, strong acids and minerals. Mix of aluminumtrichloride y benzoyl chloride. reacts violently with chromic anhydride. El Naphthalenemelted to attack some of the plastic forms, coverings and rubbers.

Conditions to avoid:	Avoid heat, sparkles, flames and other sources of ignition and non-compatibles.

SECTION 11: TOXICOLOGY INFORMATION

Acute Toxicity:	DL50 (oral, rat): 490 mg/kg CL50 (inhalation, rat): 340 mg/m3, 1 hr LD50 (skin, bunny): > 20 g / kg DL50 (intraperitoneal, mouse): 150 mg/kg DLo (oral, men): 5 g/kg DLo (oral, bunny): 3 g/kg Sensibilization Test(skin, bunnies): 495 mg/72h: leve Irritation Test (eye, bunnies): 100 mg/72 h: leve
Health dangerous effects:	
Dust inhalation:	Respiratorysystemirritations.
En contacto con la piel:	Dermatitis. Skin absortionrisk
Eyes contact:	Irritations, visión problems.
Systemic effects:	Gastro-intestinal trastorns, spams, blood alterations, respiratory stroke. Other dangerous characteristics are not excluded. Observe all the habitual precautions when managing chemical products.

SECTION 12: ECOLOGICAL INFORMATION

Eco toxicity	Test EC50 (mg/l) Bacteries(Photobacteriumphosphoreum) = 0,91 mg/l ; Clasificacion : Extremely toxic. Hydrological organisms = 1 mg/l ; Classification : Extremely toxic. Algas = 33 mg/l ; Classification : Extremely tóxic.
Receiver médium:	Aquatic risk = high Land risk = high
Degradability	Test:ThOD = 2,99 g/g COD = 22% ThOD DBO5 = 0% ThOD
Classification over bioticdegradation :	DBO5/DQO Biodegradability= low, less than 1/10 Observations: low biodegradability product
Other possible efects over the natural médium:	Do not allow its incorporation to the soil neither to the aquifers

SECTION 13:DISPOSITION CONSIDERATIONS

Residual treatment:	Treat according to current legistation
Containers elimitation:	Clean and eliminate according to current legistation

SECTION 14:TRANSPORTATION INFORMATION

Land (ADR):	Technical denomination: REFINED NAPHTALENE ONU: 1334 Class: 4.1 Packaginggroup: III
Maritime (IMDG):	Technical denomination REFINED NAPHTALENE ONU 1334 Class: 4.1 Packaginggroup: III
Air (ICAO-IATA):	Technical denomination REFINED NAPHTALENE ONU 1334 Class: 4.1 Packaging group: III Packaging instructions: CAO 420 PAX 419

SECTION 15: REGULATORY INFORMATION

This safety document complies with the legal normative of:
México: NOM-018-STS-2000
Guatemala: Work code,decrete 1441
Honduras: Executive agreement No. STSS-053-04
Costa Rica: Decrete Nº 28113-S
Panamá: Resolution #124, 20 de Marchof 2001
Colombia: NTC 445 22 of Julyof 1998
Ecuador: NTE INEN 2 266:200

SECTION 16:ADDITIONAL INFORMATION

Precautions that must be taken for managing and storage: After applying the product, perfectly cover and seal the original container, store on a dry and fresh place far away from the sun or hot zones. When applying, always use complete personal security equipment, wash hands after applying it, does not drink food or liquids neither smoke close to the product.