

SECTION 1: IDENTIFICATION

DISTRIBUTED BY: YOUNG INNOVATIONS, INC. - DBA [OBTURA]

ADDRESS: 2260 WENDT STREET

CITY, STATE, ZIP: ALGONQUIN, IL 60102 USA

TELEPHONE: (800) 558-6684

PRODUCT ITEM NO.: 822-609, 3069-01A, 823-800

PRODUCT NAME/IDENTIFIER: OBTURA MAINTENANCE KIT, GUTTA PERCHA SOLVENT, OBTURA III MAX

N/A

RECOMMENDED USE OF THE CHEMICAL & RESTRICTIONS ON USE: A SOLVENT DEGREASING AGENT FOR REMOVING TAR, ADHESIVES,

GREASE, OIL AND OTHER RESIDUES FROM METAL AND OTHER HARD

SURFACES.

24 HR EMERGENCY PHONE # INFOTRAC 1-800-535-5053 / OUTSIDE U.S. 1-352-323-3500

SECTION 2: HAZARD(S) IDENTIFICATION

PHYSICAL HAZARDS	FLAMMABLE LIQUIDS	CATEGORY 3
HEALTH HAZARDS	SKIN CORROSION/IRRITATION	CATEGORY 2
	SERIOUS EYE DAMAGE/EYE IRRITATION	CATEGORY 2A
	SENSITIZATION, SKIN	CATEGORY 1
	SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE	CATEGORY 3 NARCOTIC EFFECTS
	ASPIRATION HAZARD	CATEGORY 1
ENVIRONMENTAL HAZARDS	NOT CLASSIFIED.	
OSHA DEFINED HAZARDS	NOT CLASSIFIED.	

LABEL ELEMENTS

COMMON NAME:





SIGNAL WORD: DANGER

HAZARD STATEMENT: FLAMMABLE LIQUID AND VAPOR. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. MAY CAUSE DROWSINESS OR DIZZINESS. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

PRECAUTIONARY STATEMENT

PREVENTION: KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. NO SMOKING. KEEP CONTAINER TIGHTLY CLOSED. GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT. USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHTING EQUIPMENT. USE ONLY NON-SPARKING TOOLS. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. AVOID BREATHING DUST/FUME/GAS/MIST/VAPORS/SPRAY. WASH THOROUGHLY AFTER HANDLING. USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA. CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE. WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.

RESPONSE: IN CASE OF FIRE: USE APPROPRIATE MEDIA TO EXTINGUISH. IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER/DOCTOR. DO NOT INDUCE VOMITING. IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION. SPECIFIC TREATMENT (SEE THIS LABEL). TAKE OFF CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE. IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION. IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING. CALL A POISON CENTER/DOCTOR IF YOU FEEL UNWELL.

STORAGE: KEEP COOL. STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED. STORE LOCKED UP.

DISPOSAL: DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATIONS.

HAZARD(S) NOT OTHERWISE CLASSIFIED (HNOC): NONE KNOWN.

SUPPLEMENTAL INFORMATION: N/A



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURES

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS NUMBER	%	
DISTILLATES PETROLEUM HYDROTREATED LIGHT		64742-47-8	60 - 70	
3-METHOXY-3-METHYL-1-BUTANOL (MMB)		56539-66-3	10 - 20	
D-LIMONENE		5989-27-5	10 - 20	

^{*}ALL CONCENTRATIONS ARE IN PERCENT BY WEIGHT UNLESS INGREDIENT IS A GAS. GAS CONCENTRATIONS ARE IN PERCENT BY VOLUME.

SECTION 4: FIRST AID MEASURES

INHALATION: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. DO NOT USE MOUTH-TO-MOUTH METHOD IF VICTIM INHALED THE SUBSTANCE. INDUCE ARTIFICIAL RESPIRATION WITH THE AID OF A POCKET MASK EQUIPPED WITH A ONE-WAY VALVE OR OTHER PROPER RESPIRATORY MEDICAL DEVICE. CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL.

SKIN: IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS AND PERSISTS.

EYE CONTACT: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF EASY TO DO, REMOVE CONTACT LENSES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS AND PERSISTS.

INGESTION: CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. ONLY INDUCE VOMITING AT THE INSTRUCTION OF MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF VOMITING OCCURS, KEEP HEAD LOW SO THAT STOMACH CONTENT DOESN'T GET INTO THE LUNGS.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED: RRITANT EFFECTS. SYMPTOMS MAY INCLUDE STINGING, TEARING, REDNESS, SWELLING, AND BLURRED VISION. DEFATTING OF THE SKIN. RASH. SYMPTOMS OF OVEREXPOSURE CAN INCLUDE SHORTNESS OF BREATH, DROWSINESS, HEADACHES, CONFUSION, DECREASED COORDINATION, VISUAL DISTURBANCES AND VOMITING, AND ARE REVERSIBLE IF EXPOSURE IS STOPPED

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: PROVIDE GENERAL SUPPORTIVE MEASURES AND TREAT SYMPTOMATICALLY. IN CASE OF SHORTNESS OF BREATH, GIVE OXYGEN. KEEP VICTIM UNDER OBSERVATION. SYMPTOMS MAY BE DELAYED.

GENERAL INFORMATION: IN THE CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE). ENSURE THAT MEDICAL PERSONNEL ARE AWARE OF THE MATERIAL(S) INVOLVED, AND TAKE PRECAUTIONS TO PROTECT THEMSELVES.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: ALCOHOL RESISTANT FOAM. WATER FOG. DRY CHEMICAL POWDER. CARBON DIOXIDE (CO2).

UNSUITABLE EXTINGUISHING MEDIA: DO NOT USE WATER JET AS AN EXTINGUISHER, AS THIS WILL SPREAD THE FIRE.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: BY HEATING AND FIRE, HARMFUL VAPORS/GASES MAY BE FORMED. VAPORS MAY FORM EXPLOSIVE MIXTURES WITH AIR. VAPORS MAY TRAVEL CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: FIREFIGHTERS MUST USE STANDARD PROTECTIVE EQUIPMENT INCLUDING FLAME RETARDANT COAT, HELMET WITH FACE SHIELD, GLOVES, RUBBER BOOTS, AND IN ENCLOSED SPACES, SCBA. STRUCTURAL FIREFIGHTERS PROTECTIVE CLOTHING WILL ONLY PROVIDE LIMITED PROTECTION.

FIRE FIGHTING EQUIPMENT/INSTRUCTIONS: IN CASE OF FIRE AND/OR EXPLOSION DO NOT BREATHE FUMES. USE STANDARD FIREFIGHTING PROCEDURES AND CONSIDER THE HAZARDS OF OTHER INVOLVED MATERIALS. MOVE CONTAINERS FROM FIRE AREA IF YOU CAN DO SO WITHOUT RISK, WATER RUNOFF CAN CAUSE ENVIRONMENTAL DAMAGE.

SPECIFIC METHODS: USE STANDARD FIREFIGHTING PROCEDURES AND CONSIDER THE HAZARDS OF OTHER INVOLVED MATERIALS. MOVE CONTAINER FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. IN THE EVENT OF FIRE AND/OR EXPLOSION DO NOT BREATHE FUMES. **GENERAL FIRE HAZARDS:** FLAMMABLE LIOUID AND VAPOR.



SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

KEEP PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK. KEEP OUT OF LOW AREAS. ELIMINATE ALL IGNITION SOURCES (NO SMOKING, FLARES, SPARKS, OR FLAMES IN IMMEDIATE AREA). WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. DO NOT TOUCH DAMAGED CONTAINERS OR SPILLED MATERIAL UNLESS WEARING APPROPRIATE PROTECTIVE CLOTHING. AVOID INHALATION OF VAPORS OR MISTS. VENTILATE CLOSED SPACES BEFORE ENTERING THEM. LOCAL AUTHORITIES SHOULD BE ADVISED IF SIGNIFICANT SPILLAGES CANNOT BE CONTAINED. USE PERSONAL PROTECTION RECOMMENDED IN SECTION 8 OF THE SDS.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

ELIMINATE ALL IGNITION SOURCES (NO SMOKING, FLARES, SPARKS, OR FLAMES IN IMMEDIATE AREA). TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. USE ONLY NON-SPARKING TOOLS. KEEP COMBUSTIBLES (WOOD, PAPER, OIL, ETC.) AWAY FROM SPILLED MATERIAL. THIS MATERIAL IS CLASSIFIED AS A WATER POLLUTANT UNDER THE CLEAN WATER ACT AND SHOULD BE PREVENTED FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS WHICH LEAD TO WATERWAYS.

LARGE SPILLS: STOP THE FLOW OF MATERIAL, IF THIS IS WITHOUT RISK. DIKE THE SPILLED MATERIAL, WHERE THIS IS POSSIBLE. COVER WITH PLASTIC SHEET TO PREVENT SPREADING. USE A NON-COMBUSTIBLE MATERIAL LIKE VERMICULITE, SAND OR EARTH TO SOAK UP THE PRODUCT AND PLACE INTO A CONTAINER FOR LATER DISPOSAL. USE WATER SPRAY TO REDUCE VAPORS OR DIVERT VAPOR CLOUD DRIFT. FOLLOWING PRODUCT RECOVERY, FLUSH AREA WITH WATER.

<u>SMALL SPILLS:</u> WIPE UP WITH ABSORBENT MATERIAL (E.G. CLOTH, FLEECE). CLEAN SURFACE THOROUGHLY TO REMOVE RESIDUAL CONTAMINATION. NEVER RETURN SPILLS IN ORIGINAL CONTAINERS FOR RE-USE. FOR WASTE DISPOSAL, SEE SECTION 13 OF THE SDS.

ENVIRONMENTAL PRECAUTIONS: AVOID RELEASE TO THE ENVIRONMENT. CONTACT LOCAL AUTHORITIES IN CASE OF SPILLAGE TO DRAIN/AQUATIC ENVIRONMENT. PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. AVOID DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: DO NOT HANDLE, STORE OR OPEN NEAR AN OPEN FLAME, SOURCES OF HEAT OR SOURCES OF IGNITION. PROTECT MATERIAL FROM DIRECT SUNLIGHT. DO NOT SMOKE. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES. ALL EQUIPMENT USED WHEN HANDLING THE PRODUCT MUST BE GROUNDED. USE NON-SPARKING TOOLS AND EXPLOSION-PROOF EQUIPMENT. AVOID BREATHING MIST OR VAPOR. AVOID CONTACT WITH SKIN. AVOID CONTACT WITH EYES. AVOID PROLONGED EXPOSURE. PROVIDE ADEQUATE VENTILATION. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES. WASH HANDS THOROUGHLY AFTER HANDLING. AVOID RELEASE TO THE ENVIRONMENT. DO NOT EMPTY INTO DRAINS.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. KEEP CONTAINER TIGHTLY CLOSED. STORE IN A COOL, DRY PLACE OUT OF DIRECT SUNLIGHT. STORE IN A WELL-VENTILATED PLACE. KEEP IN AN AREA EQUIPPED WITH SPRINKLERS.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS: NO EXPOSURE LIMITS NOTED FOR INGREDIENT(S).

BIOLOGICAL LIMIT VALUES: NO BIOLOGICAL EXPOSURE LIMITS NOTED FOR THE INGREDIENT(S).

APPROPRIATE ENGINEERING CONTROLS: GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES PER HOUR) SHOULD BE USED. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS. IF APPLICABLE, USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO MAINTAIN AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. IF EXPOSURE LIMITS HAVE NOT BEEN ESTABLISHED, MAINTAIN AIRBORNE LEVELS TO AN ACCEPTABLE LEVEL.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES). EYE WASH FOUNTAIN IS RECOMMENDED.

SKIN PROTECTION

HAND PROTECTION: CHEMICAL RESISTANT GLOVES ARE RECOMMENDED.

OTHER: WEAR SUITABLE PROTECTIVE CLOTHING.

RESPIRATORY PROTECTION: NO PERSONAL RESPIRATORY PROTECTIVE EQUIPMENT NORMALLY REQUIRED. USE A POSITIVE-PRESSURE AIR-SUPPLIED RESPIRATOR IF THERE IS ANY POTENTIAL FOR AN UNCONTROLLED RELEASE, EXPOSURE LEVELS ARE NOT KNOWN, OR ANY OTHER CIRCUMSTANCES WHERE AIR-PURIFYING RESPIRATORS MAY NOT PROVIDE ADEQUATE PROTECTION.

THERMAL HAZARDS: N/A



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (CONT.)

GENERAL HYGIENE CONSIDERATIONS: WHEN USING, DO NOT EAT, DRINK OR SMOKE. ALWAYS OBSERVE GOOD PERSONAL HYGIENE MEASURES, SUCH AS WASHING AFTER HANDLING THE MATERIAL AND BEFORE EATING, DRINKING, AND/OR SMOKING. ROUTINELY WASH WORK CLOTHING AND PROTECTIVE EQUIPMENT TO REMOVE CONTAMINANTS.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

PHYSICAL STATE: LIQUID FORM: LIQUID COLOR: CLEAR, OFF-WHITE ODOR: ORANGE ODOR THRESHOLD: NOT ESTABLISHED

PH: N/A

MELTING POINT/FREEZING POINT: NOT ESTABLISHED

INITIAL BOILING POINT AND BOILING RANGE: > 302 °F (> 150 °C)

FLASH POINT: 104.0 °F (40.0 °C) TAG CLOSED CUP

EVAPORATION RATE: > 0.1 BUAC

FLAMMABILITY (SOLID, GAS): NOT AVAILABLE

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS

FLAMMABILITY LIMIT - LOWER (%) 0.7 % FLAMMABILITY LIMIT - UPPER (%) 6 %

EXPLOSIVE LIMIT - LOWER (%) NOT AVAILABLE EXPLOSIVE LIMIT - UPPER (%) NOT AVAILABLE

VAPOR PRESSURE < 5 MM HG @ 20°C **VAPOR DENSITY** > 1 (AIR = 1) **RELATIVE DENSITY** NOT AVAILABLE.

SOLUBILITY(IES) SOLUBILITY (WATER) < 15 %

PARTITION COEFFICIENT (N-OCTANOL/WATER): NOT ESTABLISHED

AUTO-IGNITION TEMPERATURE > 392 °F (> 200 °C) **DECOMPOSITION TEMPERATURE** NOT ESTABLISHED

DECOMITOSITION TEMPERATURE NOT ESTABLE

VISCOSITY < 3 CST @ 25°C

OTHER INFORMATION

HEAT OF COMBUSTION > 30 KJ/G

PERCENT VOLATILE 100 %

SPECIFIC GRAVITY 0.82 - 0.86 @ 20°C

VOC (WEIGHT %) 100 % PER U.S. STATE AND FEDERAL CONSUMER PRODUCT REGULATIONS CARB

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: THE PRODUCT IS STABLE AND NON-REACTIVE UNDER NORMAL CONDITIONS OF USE, STORAGE AND TRANSPORT.

CHEMICAL STABILITY: MATERIAL IS STABLE UNDER NORMAL CONDITIONS. RISK OF IGNITION.

POSSIBILITY OF HAZARDOUS REACTIONS: HAZARDOUS POLYMERIZATION DOES NOT OCCUR.

CONDITIONS TO AVOID: HEAT, FLAMES AND SPARKS. AVOID TEMPERATURES EXCEEDING THE FLASH POINT.

INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS. HAZARDOUS DECOMPOSITION PRODUCTS: CARBON OXIDES.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE

INHALATION: MAY CAUSE DROWSINESS AND DIZZINESS.

SKIN CONTACT: CAUSES SKIN IRRITATION. MAY CAUSE SENSITIZATION BY SKIN CONTACT.

EYE CONTACT: CAUSES EYE IRRITATION.

INGESTION: HARMFUL IF SWALLOWED. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.



SECTION 11: TOXICOLOGICAL INFORMATION (CONT.)

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS: IRRITANT EFFECTS. SYMPTOMS MAY INCLUDE STINGING, TEARING, REDNESS, SWELLING, AND BLURRED VISION. DEFATTING OF THE SKIN. VAPORS HAVE A NARCOTIC EFFECT AND MAY CAUSE HEADACHE, FATIGUE, DIZZINESS AND NAUSEA. SYMPTOMS OF OVEREXPOSURE MAY BE HEADACHE, DIZZINESS, TIREDNESS, NAUSEA AND VOMITING.

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: NOT EXPECTED TO BE ACUTELY TOXIC.

COMPONENTS	SPECIES	TEST RESULTS
3-METHOXY-3-METHYL-1-BUTANOL (MMB) (CAS 56539-66-3)		
ACUTE		
DERMAL		
LD50	RAT	> 2000 MG/KG, 24 HOURS
ORAL		
LD50	MOUSE	5830 MG/KG
	RAT	> 2000 MG/KG
DISTILLATES PETROLEUM HYDROTREATED LIGHT (CAS 64742-47-8)		
<u>ACUTE</u>		
DERMAL		
LD50	RABBIT	> 2000 MG/KG
		> 2000 MG/KG, 24 HOURS
INHALATION		
AEROSOL		
LC50	CAT	> 6.4 MG/L, 6 HOURS
	RAT	> 7.5 MG/L, 6 HOURS
		> 4.3 MG/L, 4 HOURS
VAPOR		
LC50	RAT	> 0.1 MG/L, 8 HOURS
ORAL		
LD50	RAT	> 5000 MG/KG
D-LIMONENE (CAS 5989-27-5)		
ACUTE		
ORAL		
LD50	MOUSE	5600 - 6600 MG/KG
SKIN CORPOSION/IDDITATION: CALISES SKIN IDDITATION	RAT	> 2000 MG/KG

SKIN CORROSION/IRRITATION: CAUSES SKIN IRRITATION.

RESPIRATORY OR SKIN SENSITIZATION

RESPIRATORY SENSITIZATION: NOT A RESPIRATORY SENSITIZER. **SKIN SENSITIZATION:** MAY CAUSE SENSITIZATION BY SKIN CONTACT.

GERM CELL MUTAGENICITY:

NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS PRESENT AT GREATER THAN 0.1% ARE

MUTAGENIC OR GENOTOXIC.



SECTION 11: TOXICOLOGICAL INFORMATION (CONT.)

IARC MONOGRAPHS. OVERALL EVALUATION OF CARCINOGENICITY

D-LIMONENE (CAS 5989-27-5: 3 NOT CLASSIFIABLE AS TO CARCINOGENICITY TO HUMANS.

OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050): NOT REGULATED.

US. NATIONAL TOXICOLOGY PROGRAM (NTP) REPORT ON CARCINOGENS: NOT LISTED.

REPRODUCTIVE TOXICITY: THIS PRODUCT IS NOT EXPECTED TO CAUSE REPRODUCTIVE OR DEVELOPMENTAL EFFECTS.

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE: NARCOTIC EFFECTS.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE: NOT CLASSIFIED.

ASPIRATION HAZARD: MAY BE HARMFUL IF SWALLOWED AND ENTERS AIRWAYS. IF ASPIRATED INTO LUNGS DURING SWALLOWING OR VOMITING, MAY CAUSE CHEMICAL PNEUMONIA, PULMONARY INJURY OR DEATH.

CHRONIC EFFECTS: PROLONGED EXPOSURE MAY CAUSE CHRONIC EFFECTS.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

COMPONENTS	SPECIES	TEST RESULTS
DISTILLATES PETROLEUM HYDROTREATED		
LIGHT (CAS 64742-47-8)		
AQUATIC		
FISH LC50	RAINBOW TROUT, DONALDSON TROUT (ONCORHYNCHUS MYKISS)	2.9 MG/L, 96 HOURS
D-LIMONENE (CAS 5989-27-5)		
AQUATIC		
CRUSTACEA EC50	WATER FLEA (DAPHNIA PULEX)	69.6 MG/L, 48 HOURS
FISH LC50	FATHEAD MINNOW (PIMEPHALES PROMELAS)	0.619 - 0.796 MG/L, 96 HOURS

PERSISTENCE AND DEGRADABILITY: NOT INHERENTLY BIODEGRADABLE.

BIOACCUMULATIVE POTENTIAL: NO DATA AVAILABLE.

PARTITION COEFFICIENT N-OCTANOL / WATER (LOG KOW): D-LIMONENE 4.232

MOBILITY IN SOIL: READILY ABSORBED INTO SOIL. OTHER ADVERSE EFFECTS: NONE KNOWN.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL INSTRUCTIONS: COLLECT AND RECLAIM OR DISPOSE IN SEALED CONTAINERS AT LICENSED WASTE DISPOSAL SITE. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE. DO NOT ALLOW THIS MATERIAL TO DRAIN INTO SEWERS/WATER SUPPLIES. DO NOT CONTAMINATE PONDS, WATERWAYS OR DITCHES WITH CHEMICAL OR USED CONTAINER. DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATIONS.

HAZARDOUS WASTE CODE: D001: WASTE FLAMMABLE MATERIAL WITH A FLASH POINT <140° F

WASTE FROM RESIDUES / UNUSED PRODUCTS: DISPOSE OF IN ACCORDANCE WITH LOCAL REGULATIONS. EMPTY CONTAINERS OR LINERS MAY RETAIN SOME PRODUCT RESIDUES. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE MANNER (SEE: DISPOSAL INSTRUCTIONS).

CONTAMINATED PACKAGING: EMPTY CONTAINERS SHOULD BE TAKEN TO AN APPROVED WASTE HANDLING SITE FOR RECYCLING OR DISPOSAL. SINCE EMPTIED CONTAINERS MAY RETAIN PRODUCT RESIDUE, FOLLOW LABEL WARNINGS EVEN AFTER CONTAINER IS EMPTIED.



SECTION 14: TRANSPORT INFORMATION

D.O.T.

UN NO:	UN1993
UN PROPER SHIPPING NAME:	FLAMMABLE LIQUIDS, N.O.S. (D-LIMONENE, NAPTHA)
TRANSPORT HAZARD CLASS(ES): CLASS SUBSIDIARY RISK - LABEL(S)	3 - 3
PACKING GROUP	III

SPECIAL PRECAUTIONS FOR USER: READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING. READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING.

SPECIAL PROVISIONS: B1, B52, IB3, T4, TP1, TP29

PACKAGING EXCEPTIONS: 150
PACKAGING NON BULK: 203
PACKAGING BULK: 242

MAY BE RECLASSIFIED AS COMBUSTIBLE LIQUID FOR DOMESTIC TRANSPORT.

IATA

UN NO:	UN1993
UN PROPER SHIPPING NAME:	FLAMMABLE LIQUIDS, N.O.S. (D-LIMONENE, NAPTHA)
TRANSPORT HAZARD CLASS(ES): CLASS SUBSIDIARY RISK -	3 -
PACKING GROUP	III

ENVIRONMENTAL HAZARDS: YES

ERG CODE: 3L

SPECIAL PRECAUTIONS FOR USER: READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING. READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING.

OTHER INFORMATION

PASSENGER AND CARGO AIRCRAFT: ALLOWED WITH RESTRICTIONS.

CARGO AIRCRAFT ONLY: ALLOWED WITH RESTRICTIONS.

IMDG

UN NO:	UN1993
UN PROPER SHIPPING NAME:	FLAMMABLE LIQUID, N.O.S. (D-LIMONENE, NAPTHA), MARINE POLLUTANT
TRANSPORT HAZARD CLASS(ES): CLASS SUBSIDIARY RISK -	3 -
PACKING GROUP	III

ENVIRONMENTAL HAZARDS:

MARINE POLLUTANT YES

EMS: F-E, S-E



SECTION 14: TRANSPORT INFORMATION (CONT.)

SPECIAL PRECAUTIONS FOR USER: READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING. READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING.

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE: NOT AVAILABLE.

DOT

IATA; IMDG

MARINE POLLUTANT







GENERAL INFORMATION: DOT REGULATED MARINE POLLUTANT. IMDG REGULATED MARINE POLLUTANT.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

TSCA SECTION 12(B) EXPORT NOTIFICATION (40 CFR 707, SUBPT. D): NOT REGULATED.

CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4): NOT LISTED.

SARA 304 EMERGENCY RELEASE NOTIFICATION: NOT REGULATED.

OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050): NOT LISTED.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA)

HAZARD CATEGORIES

IMMEDIATE HAZARD - YES

DELAYED HAZARD - NO

FIRE HAZARD - YES

PRESSURE HAZARD - NO

REACTIVITY HAZARD - NO

SARA 302 EXTREMELY HAZARDOUS SUBSTANCE: NOT LISTED.

SARA 311/312 HAZARDOUS CHEMICAL: YES

SARA 313 (TRI REPORTING): NOT REGULATED

OTHER FEDERAL REGULATIONS

CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPS) LIST: NOT REGULATED

CLEAN AIR ACT (CAA) SECTION 112(R) ACCIDENTAL RELEASE PREVENTION (40 CFR 68.130): NOT REGULATED

SAFE DRINKING WATER ACT(SDWA): NOT REGULATED

US STATE REGULATIONS

US. CALIFORNIA CONTROLLED SUBSTANCES. CA DEPARTMENT OF JUSTICE (CALIFORNIA HEALTH AND SAFETY CODE SECTION

11100): NOT LISTED

US. MASSACHUSETTS RTK - SUBSTANCE LIST: NOT REGULATED

US. NEW JERSEY WORKER AND COMMUNITY RIGHT-TO-KNOW ACT: NOT LISTED

US. PENNSYLVANIA WORKER AND COMMUNITY RIGHT-TO-KNOW LAW: NOT LISTED

US. RHODE ISLAND RTK: NOT REGULATED

US. CALIFORNIA PROPOSITION 65: CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROPOSITION 65): THIS

MATERIAL IS NOT KNOWN TO CONTAIN ANY CHEMICALS CURRENTLY LISTED AS CARCINOGENS OR REPRODUCTIVE TOXINS.



SECTION 15: REGULATORY INFORMATION (CONT.)

INTERNATIONAL INVENTORIES

COUNTRY(S) OR REGION	INVENTORY NAME	ON INVENTORY (Y/N)*
AUSTRALIA	AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS)	YES
CANADA	DOMESTIC SUBSTANCES LIST (DSL)	YES
CANADA	NON-DOMESTIC SUBSTANCES LIST (NDSL)	NO
CHINA	INVENTORY OF EXISTING CHEMICAL SUBSTANCES IN CHINA (IECSC)	YES
EUROPE	EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS)	YES
EUROPE	EUROPEAN LIST OF NOTIFIED CHEMICAL SUBSTANCES (ELINCS)	NO
JAPAN	INVENTORY OF EXISTING AND NEW CHEMICAL SUBSTANCES (ENCS)	NO
KOREA	EXISTING CHEMICALS LIST (ECL)	YES
NEW ZEALAND	NEW ZEALAND INVENTORY	YES
PHILLIPINES	PHILIPPINE INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES (PICCS)	YES
UNITED STATES & PUERTO RICO	TOXIC SUBSTANCES CONTROL ACT (TSCA) INVENTORY	YES

^{*} A "YES" INDICATES THAT ALL COMPONENTS OF THIS PRODUCT COMPLY WITH THE INVENTORY REQUIREMENTS ADMINISTERED BY THE GOVERNING COUNTRY(S)

A "NO" INDICATES THAT ONE OR MORE COMPONENTS OF THE PRODUCT ARE NOT LISTED OR EXEMPT FROM LISTING ON THE INVENTO-RY ADMINISTERED BY THE GOVERNING COUNTRY(S).

SECTION 16: ADDITIONAL INFORMATION

DISCLAIMER: THE INFORMATION PROVIDED IN THIS SAFETY DATA SHEET IS CORRECT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF AT THE DATE OF ITS PUBLICATION. THE INFORMATION GIVEN IS DESIGNED ONLY AS A GUIDANCE FOR SAFE HANDLING, USE, PROCESSING, STORAGE, TRANSPORTATION, DISPOSAL AND RELEASE AND IS NOT TO BE CONSIDERED A WARRANTY OR QUALITY SPECIFICATION. THE INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS, UNLESS SPECIFIED IN THE TEXT.

REVISION INFORMATION:

PRODUCT AND COMPANY IDENTIFICATION: PRODUCT AND COMPANY IDENTIFICATION

<u>COMPOSITION/INFORMATION ON INGREDIENTS:</u> COMPONENT INFORMATION

FIRE-FIGHTING MEASURES: UNSUITABLE EXTINGUISHING MEDIA

<u>ACCIDENTAL RELEASE MEASURES:</u> PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

ACCIDENTAL RELEASE MEASURES: ENVIRONMENTAL PRECAUTIONS

HANDLING AND STORAGE: CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

EXPOSURE CONTROLS/PERSONAL PROTECTION: OTHER

TOXICOLOGICAL INFORMATION: INHALATION

TRANSPORT INFORMATION: MATERIAL TRANSPORTATION INFORMATION

GHS: CLASSIFICATION

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