

SOCAR CHEMICAL COMPANY INC
2609 RUTHERFORD RD
GREENVILLE SC 29609
864-244-5068

SAFETY DATA SHEET: **TIRE SHINE**
ISSUE DATE: 1-2-14

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: TIRE SHINE
CHEMICAL FAMILY NAME: SILICONE EMULSION
PRODUCT USE: TIRE DRESSING

SUPPLIER/MANUFACTURER'S NAME: SOCAR CHEMICAL COMPANY INC.
ADDRESS: 2609 RUTHERFORD RD, GREENVILLE SC 29609 USA
EMERGENCY PHONE: CHEMTREC 1-800-424-9300 CCN695199
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SECTION 2: HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: THIS IS A DARK BLUE LIQUID WITH A MILD ODOR.

CLASSIFIED HAZARDS

H225 – Flammable liquids -Category 2
H315 – Skin corrosion/irritation – Category 2
H304 – Aspiration hazard – Category 1
H336 – Specific target organ toxicity (single exposure) – Category 3
H373 – Specific target organ toxicity (Repeated exposure) – Category 2
H361F – Reproductive toxicity – Category 2
H411 – Hazardous to the aquatic environment, chronic toxicity – Category 2

OTHER HAZARDS

ELECTROSTATIC CHARG MAY BE GENERATED DURING PUMPING AND OTHER OPERATIONS

OSHA HAZARD CLASSIFICATION

DANGER



PRECAUTIONARY STATEMENTS:

HIGHLY FLAMMABLE LIQUID AND VAPOR
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS
CAUSES SKIN IRRITATION
MAY CAUSE DROWSINESS OR DIZZINESS

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MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE
SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD
TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS

STORE IN WELL VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED; KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. NO SMOKING; TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE; WEAR PROTECTIVE GLOVES/PORTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTIION; IF SWALLOWED: GET MEDICAL ADVICE/ATTENTION; DO OT INDUCE VOMITING; DISPOSE OF CONTENTS/CONTAINER TO APPROVED DISPOSAL FACILITY.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NUMBER	PERCENT BY WEIGHT
HEXANE	110-54-3	<40
POLYDIMETHYL SILOXANE	63148-62-9	<60

SECTION 4: FIRST AID MEASURES

IF INHALED: IMMEDIATELY MOVE VICTIM TO FRESH AIR. IF VICTIM IS NOT BREATHING, IMMEDIATELY BEGIN RESCUE BREATHING. IF HEART HAS STOPPED, IMMEDIATELY BEGIN CARDIOPULMONARY RESUSCITATION. SEEK IMMEDIATE MEDICAL ATTENTION.

IF ON SKIN: REMOVE CONTAMINATED SHOES AND CLOTHING, RINSE SKIN WITH WATER AND SOAP.

IF IN EYES: CHECK FOR AND REMOVE CONTACT LENSES. IF IRRITATION OR REDNESS DEVELOPS FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES.

IF INGESTED: IF VICTIM IS CONSCIOUS, GIVE 2 OR 3 GLASSES OF WATER OR MILK TO DRINK TO DILUTE THE MATERIAL. GET MEDICAL ATTENTION.

MOST IMPORTANT SYMPTOMS AND EFFECTS: HEADACHE, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, DISORIENTATION AND FATIGUE. **DELAYED:** DRY SKIN AND POSSIBLE IRRITATION WITH REPEATED OR PROLONGED EXPOSURE.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY: FLAMMABLE

FLASH POINT: -15 DEG F

SUITABLE EXTINGUISHING MEDIA: USE DRY CHEMICAL, CO₂, OR FOAM IS RECOMMENDED. WATER SPRAY IS RECOMMENDED TO COOL OR PROTECT EXPOSED MATERIALS OR STRUCTURES. CARBON DIOXIDE CAN DISPLACE OXYGEN. USE CAUTION WHEN APPLYING CARBON DIOXIDE IN CONFINED SPACES. SIMULTANEOUS USE OF FOAM AND WATER ON THE SAME SURFACE IS TO BE AVOIDED AS WATER DETROYS THE FOAM. WATER MAY BE INEFFECTIVE FOR EXTINGUISHMENT, UNLESS USED UNDER FAVORABLE CONDITIONS BY EXPERIENCED FIRE FIGHTERS.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

UNUSUAL FIRE AND EXPLOSION HAZARDS: HIGHLY FLAMMABLE. THIS MATERIAL CAN BE IGNITED BY HEAT, SPARKS, FLAMES, OR OTHER SOURCES OF IGNITION (E.G. STATIC ELECTRICITY, PILOT LIGHTS, MECHANICAL/ELECTRICAL EQUIPMENT, AND ELECTRONIC DEVICES SUCH AS CELL PHONES, COMPUTERS, CALCULATORS, AND PAGERS WHICH HAVE NOT BEEN CERTIFIED AS INTRINSICALLY SAFE). VAPORS MAY TRAVEL CONSIDERABLE DISTANCES TO A SOURCE OF IGNITION WHERE THEY CAN IGNITE, FLASH BACK, OR EXPLODE. MAY CREATE VAPOR/AIR EXPLOSION HAZARD INDOORS IN CONFINED SPACES, OUTDOORS, OR IN SEWERS. THIS PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE WATER. VAPORS ARE HEAVIER THAN AIR AND CAN

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ACCUMULATE IN LOW AREAS. IF CONTAINER IS NOT PROPERLY COOLED, IT CAN RUPTURE IN THE HEAT OF A FIRE.

HAZARDOUS COMBUSTION PRODUCTS: COMBUSTION MAY YIELD SMOKE, CARBON MONOXIDE, AND OTHER PRODUCTS OF INCOMPLETE COMBUSTION.

SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS: FOR FIRES BEYOND THE INITIAL STAGE, EMERGENCY RESPONDERS IN THE IMMEDIATE HAZARD AREA SHOULD WEAR PROTECTIVE CLOTHING. WHEN THE POTENTIAL CHEMICAL HAZARD IS UNKNOWN, IN ENCLOSED OR CONFINED SPACES, A SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN. IN ADDITION, WEAR OTHER APPROPRIATE PROTECTIVE EQUIPMENT AS CONDITIONS WARRANT (SEE SECTION 8).

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: HIGHLY FLAMMABLE. SPILLAGES OF LIQUID PRODUCT WILL CREATE A FIRE HAZARD AND MAY FORM AN EXPLOSIVE ATMOSPHERE. KEEP ALL SOURCES OF IGNITION AND HOT METAL SURFACES AWAY FROM SPILL/RELEASE IF SAFE TO DO SO. THE USE OF EXPLOSION-PROOF ELECTRICAL EQUIPMENT IS RECOMMENDED. STAY UPWIND AND AWAY FROM SPILL/RELEASE. AVOID DIRECT CONTACT WITH MATERIAL. FOR LARGE SPILLAGES, NOTIFY PERSONS DOWN WIND OF THE SPILL/RELEASE ISOLATE IMMEDIATE HAZARD AREA AND KEEP UNAUTHORIZED PERSONNEL OUT. WEAR APPROPRIATE PROTECTIVE EQUIPMENT, INCLUDING RESPIRATORY PROTECTION, AS CONDITIONS WARRANT (SEE SECTION 8).

ENVIRONMENTAL PRECAUTIONS: STOP SPILL/RELEASE IF IT CAN BE DONE SAFELY. PREVENT SPILLED MATERIAL FROM ENTERING DRAINS, SEWERS OR WATERWAYS. USE FOAM ON SPILLS TO MINIMIZE VAPORS. USE WATER SPARINGLY TO MINIMIZE ENVIRONMENTAL CONTAMINATION AND REDUCE DISPOSAL REQUIREMENTS. IF SPILL OCCURS ON WATER NOTIFY APPROPRIATE AUTHORITIES AND ADVISE SHIPPING OF ANY HAZARD. SPILLS INTO OR UPON NAVIGABLE WATERS, THE CONTIGUOUS ZONE, OR ADJOINING SHORELINES THAT CAUSE A SHEEN OR DISCOLORATION ON THE SURFACE OF WATER, MAY REQUIRE NOTIFICATION OF THE NATIONAL RESPONSE CENTER (PHONE NUMBER 800-424-8802)

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: NOTIFY RELEVANT AUTHORITIES IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. IMMEDIATE CLEANUP OF ANY SPILL IS RECOMMENDED. DIKE FAR AHEAD OF SPILL FOR LATER RECOVERY OR DISPOSAL. ABSORB SPILL WITH INERT MATERIAL SUCH AS SAND OR VERMICULITE, AND PLACE IN SUITABLE CONTAINER FOR DISPOSAL. IF SPILLED ON WATER REMOVE WITH APPROPRIATE METHODS (E.G. SKIMMING, BOOMS, OR ABSORBENTS). IN CASE OF SOIL CONTAMINATION, REMOVE CONTAMINATED SOIL FOR REMEDIATION OR DISPOSAL IN ACCORDANCE WITH LOCAL REGULATIONS. RECOMMENDED MEASURES ARE BASED ON THE MOST LIKELY SPILLAGE SCENARIOS FOR THIS MATERIAL; HOWEVER LOCAL CONDITIONS AND REGULATIONS MAY INFLUENCE OR LIMIT THE CHOICE OF APPROPRIATE ACTIONS TO BE TAKEN.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: KEEP AWAY FROM IGNITION SOURCES SUCH AS HEAT/SPARKS/ OPEN FLAME-NO SMOKING. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE NONSPARKING TOOLS SHOULD BE USED. WEAR PROTECTIVE GLOVES/CLOTHING AND EYE FACE PROTECTION. DO NOT BREATHE VAPORS OR MISTS. WASH THOROUGHLY AFTER HANDLING USE GOOD PERSONAL HYGIENE PRACTICES AND WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8) HIGHLY FLAMMABLE. MAY VAPORIZE EASILY AT AMBIENT TEMPERATURES. THE LOW LYING AREAS. OPEN CONTAINER SLOWLY TO RELIEVE ANY PRESSURE. THE USE OF EXPLOSION PROOF ELECTRICAL EQUIPMENT IS RECOMMENDED AND MAY BE REQUIRED (SEE

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APPROPRIATE FIRE CODES) REFER TO NFPA 70 AND OR API RP 2003 FOR SPECIFIC BONDING/GROUNDING REQUIREMENTS. DO NOT ENTER CONFINED SPACES SUCH AS TANKS OR PITS WITHOUT FOLLOWING PROPER ENTRY PROCEDURES SUCH AS ASTM D-4276 AND 29CFR 1910.146. DO NOT WEAR CONTAMINATED CLOTHING OR SHOES. KEEP CONTAMINATED CLOTHING AWAY FROM SOURCES OF IGNITION SUCH AS SPARKS OR OPEN FLAMES.

STATIC ACCUMULATION HAZARD: ELECTROSTATIC CHARGE MAY ACCUMULATE AND CREATE A HAZARDOUS CONDITION WHEN HANDLING THIS MATERIAL. TO MINIMIZE THIS HAZARD BONDING AND GROUNDING OF TANKS, TRANSFER PIPING, AND STORAGE TANK LEVEL ARE NECESSARY BUT MAY NOT, BY THEMSELVES, BE SUFFICIENT. REVIEW ALL OPERATIONS WHICH HAVE THE POTENTIAL OF GENERATING AND ACCUMULATING AN ELECTROSTATIC CHARGE AND OR A FLAMMABLE ATMOSPHERE (INCLUDING TANK AND CONTAINER FILLING, SPLASH FILLING, TANK CLEANING, SAMPLING, GAUGING, SWITCH LOADING, FILTERING, MIXING, AGITATION, AND VACUUM TRUCK OPERATIONS) AND USE APPROPRIATE MITIGATING PROCEDURES.

CONDITIONS FOR SAFE STORAGE: KEEP CONTAINER TIGHTLY CLOSED AND PROPERLY LABELED. USE AND STORE THIS MATERIAL IN COOL DRY WELL VENTILATED AREAS AWAY FROM HEAT, DIRECT SUNLIGHT, HOT METAL SURFACES, AND ALL SOURCES OF IGNITION. STORE ONLY IN APPROVED CONTAINERS. POST AREA "NO SMOKING OR OPEN FLAME." KEEP AWAY FROM ANY INCOMPATIBLE MATERIALS (SEE SECTION 10) PROTECT CONTAINERS AGAINST PHYSICAL DAMAGE. OUTDOOR OR DETACHED STORAGE IS PREFERRED. INDOOR STORAGE SHOULD MEET OSHA STANDARDS AND APPROPRIATE FIRE CODES.

EMPTY CONTAINERS RETAIN AND MAY BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY SHIPPED TO THE SUPPLIER OR A DRUM RECONDITIONER. ALL CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS. BEFORE WORKING ON OR IN TANKS WHICH CONTAIN OR HAVE CONTAINED THIS MATERIAL, REFER TO OSHA REGULATIONS, ANSI Z49.1, AND OTHER REFERENCES PERTAINING TO CLEANING, REPAIRING, WELDING, OR OTHER CONTEMPLATED OPERATIONS.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME	ACGIH	OSHA	OTHER
HEXANE	TWA 50ppm SKIN	TWA 500ppm mg/m ³	TWA 1800 -----

NOTE: STATE, LOCAL, OR OTHER AGENCIES OR ADVISORY GROUPS MAY HAVE ESTABLISHED MORE STRINGENT LIMITS. CONSULT AN INDUSTRIAL HYGIENIST OR SIMILAR PROFESSIONAL OR YOUR LOCAL AGENCIES FOR FURTHER INFORMATION.

ENGINEERING CONTROLS: IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE ESTABLISHED EXPOSURE LIMITS ADDITIONAL ENGINEERING CONTROLS MAY BE REQUIRED.

EYE CONTACT: THE USE OF EYE PROTECTION THAT MEETS OR EXCEEDS ANSI Z 87.1 IS RECOMMENDED TO PROTECT AGAINST POTENTIAL EYE CONTACT, IRRITATION, OR INJURY. DEPENDING ON CONDITIONS OF USE, A FACE SHIELD MAY BE NECESSARY.

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RESPIRATORY: WHERE THERE IS POTENTIAL FOR AIRBORNE EXPOSURE ABOVE THE EXPOSURE LIMIT A NIOSH CERTIFIED AIR PURIFYING RESPIRATOR EQUIPPED WITH ORGANIC VAPOR CARTRIDGES/CANISTERS MAY BE USED.

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OR IS EQUIVALENT TO OSHA 29 CFR 1910.134 AND ANSI Z88.2 SHOULD BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. AIR PURIFYING RESPIRATORS PROVIDE LIMITED PROTECTION AND CANNOT BE USED IN ATMOSPHERES THAT EXCEED THE MAXIMUM USE CONCENTRATION AS DIRECTED BY REGULATION OR THE MANUFACTURERS INSTRUCTIONS. IN OXYGEN DEFICIENT LESS THAN 19.5 PERCENT OXYGEN SITUATIONS, OR UNDER CONDITIONS THAT ARE IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).

SKIN PROTECTION: THE USE OF GLOVES IMPERVIOUS TO THE SPECIFIC MATERIAL HANDLED IS ADVISED TO PREVENT SKIN CONTACT. USERS SHOULD CHECK WITH MANUFACTURERS TO CONFIRM THE BREAKTHROUGH PERFORMANCE OF THEIR PRODUCTS. DEPENDING ON EXPOSURE AND USE CONDITIONS ADDITIONAL PROTECTION MAY BE NECESSARY TO PREVENT SKIN CONTACT INCLUDING USE OF ITEMS SUCH AS CHEMICAL RESISTANT BOOTS, APRONS, ARM COVERS, HOODS, COVERALLS, OR ENCAPSULATED SUITS. SUGGESTED PROTECTIVE MATERIALS: NITRIL.

OTHER PROTECTIVE EQUIPMENT: EYE WASH AND QUICK DRENCH SHOWER FACILITIES SHOULD BE AVAILABLE IN THE IN THE WORK AREA. THOROUGHLY CLEAN SHOES AND WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: BLUE LIQUID

ODOR: MILD

ODOR THRESHOLD (PPM): NO DATA

PH: NOT APPLICABLE

FREEZING POINT: NOT APPLICABLE

BOILING POINT: 145-156 DEG F

FLASHPOINT: -15 DEG F

EVAPORATION RATE: 8.10

FLAMMABILITY: NOT APPLICABLE

EXPLOSIVE LIMITS (mmHg): NOT APPLICABLE

VAPOR PRESSURE: 5.6 PSIA (REID VP)@100 DEG F

RELATIVE DENSITY: NOT APPLICABLE

SOLUBILITY: NEGLIGIBLE

PARTITION COEFFICIENT: N-OCTANOL/WATER: 3.9

AUTO-IGNITION TEMPERATURE: 496 DEG F

DECOMPOSITION TEMPERATURE: NO DATA

VISCOSITY: NOT DETERMINED

SPECIFIC GRAVITY (WATER=1): 0.677 @60 DEG F

SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE UNDER NORMAL AMBIENT AND ANTICIPATED CONDITIONS OF USE.

REACTIVITY: NON-REACTIVE.

CONDITIONS TO AVOID: AVOID HIGH TEMPERATURES AND ALL SOURCES OF IGNITION. PREVENT VAPOR ACCUMULATION.

INCOMPATIBLE MATERIALS: AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND STRONG REDUCING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: NOT ANTICIPATED UNDER NORMAL CONDITIONS OF USE.

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POSSIBILITY OF HAZARDOUS REACTIONS: NONE KNOWN

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	HAZARD	ADDITIONAL INFO	LC50/LD50 DATA
INHALATION	Expected to have a low Degree of toxicity by inhalation		>20 Mg/L (vapor est.)
DERMAL	Low degree of toxicity by skin contact		>2 g/kg (est.)
ORAL	Unlikely to be harmful		>5 g/kg (est.)

EFFECTS OF EXPOSURE: NOT EXPECTED TO BE HAZARDOUS UNDER TYPICAL USE CONDITIONS.

ASPIRATION HAZARD: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

SERIOUS EYE DAMAGE/IRRITATION: CAUSES MILD EYE IRRITATION

SKIN CORROSION/IRRITATION: CAUSES SKIN IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.

SYMPTOMS OF OVEREXPOSURE: EFFECTS OF OVEREXPOSURE MAY INCLUDE IRRITATIONS OF THE DIGESTIVE TRACT, IRRITATION OF THE RESPIRATORY TRACT, HEADACHES, NAUSEA, AND SIGNS OF NERVOUS SYSTEM DEPRESSION (E.G. HEADACHE, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, DISORIENTATION AND FATIGUE).

SENSITATION OF SKIN AND RESPIRATORY: NO INFORMATION AVAILABLE

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): MAY CAUSE DROWSINESS AND DIZZINESS

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

CARCINOGENICITY: INADEQUATE INFORMATION AVAILABLE

GERM CELL MUTAGENICITY: INADEQUATE INFORMATION AVAILABLE

REPRODUCTIVE TOXICITY: SUSPECTED OF DAMAGING FERTILITY

OTHER COMMENTS: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS AND PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE (SOMETIMES REFERRED TO AS A SOLVENT OR PAINTERS SYNDROME). INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THIS MATERIAL MAY BE HARMFUL OR FATAL.

INFORMATION OF TOXICOLOGICAL EFFECTS OF COMPONENTS:

HEXANE

TARGET ORGANS: EXCESSIVE EXPOSURE TO N-HEXANE CAN RESULT IN PERIPHERAL NEUROPATHIES. THE INITIAL SYMPTOMS ARE SYMMETRICAL SENSORY NUMBNESS AND PARESTHESIAS OF DISTAL PORTIONS OF THE EXTREMITIES. MOTOR WEAKNESS IS TYPICALLY OBSERVED IN MUSCLES OF THE TOES AND FINGERS BUT MAY ALSO INVOLVE MUSCLES OF THE ARMS, THIGHS, AND FOREARMS. THE ONSET OF THESE SYMPTOMS MAY BE DELAYED FOR SEVERAL MONTHS TO A YEAR AFTER THE BEGINNING OF EXPOSURE. THE NEUROTOXIC PROPERTIES OF N-HEXANE ARE POTENTIATED BY EXPOSURE TO METHYL ETHYL KETONE AND METHYL ISOBUTYL KETONE.

REPRODUCTIVE TOXICITY: PROLONGED EXPOSURE TO HIGH CONCENTRATIONS OF N-HEXANE (>1000ppm) RESULTED IN DECREASED SPERM COUNT AND DEGENERATIVE CHANGES IN THE TESTES OF RATS BUT NOT THOSE OF MICE.

OTHER HEXANES TARGET ORGANS: A MIXTURE OF HEXANE ISOMERS, FREE OF N-HEXANE, DID NOT PRODUCE NEUROTOXIC EFFECTS IN RATS EXPOSED TO 500 ppm FOR SIX MONTHS

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SECTION 12: ECOLOGICAL INFORMATION

AQUATIC TOXICITY: EXPERIMENTAL STUDIES INVOLVING N-HEXANE SHOW THAT ACUTE AQUATIC TOXICITY VALUES ARE 2.1 mg/L AND GREATER THAN 1000 mg/L N-HEXANE IS CLASSIFIED AS TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS UNDER GLOBALLY HARMONIZED SYSTEM (GHS) CRITERIAL

PERSISTENCE AND DEGRADABILITY: VOLATILIZATION FROM SOIL SURFACES IS EXPECTED TO BE AN IMPORTANT FATE PROCESS. N-HEXANE WILL BE DEGRADED IN THE ATMOSPHERE BY REACTION WITH HYDROXYL RADICALS; THE HALF LIFE FOR THIS REACTION IN AIR IS ESTIMATED TO BE 3 DAYS. SCREENING STUDIES SUGGEST THAT N-HEXANE WILL UNDERGO BIODEGRADATION IN SOIL AND WATER SURFACES, BUT VOLATILIZATION IS EXPECTED TO BE THE PREDOMINANT FATE PROCESS IN THE ENVIRONMENTAL FATE,

MOBILITY: N-HEXANE IS HIGHLY VOLATILE AND WILL PARTITION RAPIDLY TO AIR. WHEN RELEASED INTO WATER, N-HEXANE WILL BE LOST BY VOLATILIZATION AND POSSIBLE BIODEGRADATION. N-HEXANE IS EXPECTED TO HAVE HIGH MOBILITY INTO SOILS/SEDIMENTS BASED ON A KOC OF 150. VOLATILIZATION FROM MOIST SOIL SURFACES IS EXPECTED TO BE AN IMPORTANT FATE PROCESS BASED UPON HENRY'S LAW CONSTANT OF 1.83 atm-m³/mole. N-HEXANE MAY VOLATILIZE FROM DRY SOIL SURFACES BASED UPON ITS VAPOR PRESSURE.

BIOACCUMULATION: AN ESTIMATED BIOCONCENTRATION FACTOR (BCF) OF 200 AND LOG KOW OF 3.9 FOR N-HEXANE SUGGEST THE POTENTIAL FOR BIOCONCENTRATION IN AQUATIC ORGANISMS IS HIGH. METABOLITES MAY PARTIALLY BIOACCUMULATE IN THE LIPID BILAYER OF FISH TISSUES.

SECTION 13: DISPOSAL CONSIDERATIONS

THE GENERATOR OF A WASTE IS ALWAYS RESPONSIBLE FOR MAKING PROPER HAZARDOUS WASTE DETERMINATIONS AND NEED TO CONSIDER STATE AND LOCAL REQUIREMENTS IN ADDITION TO FEDERAL REGULATIONS.

THIS MATERIAL IF DISCARDED AS PRODUCED WOULD NOT BE A FEDERALLY REGULATED RCRA "LISTED" HAZARDOUS WASTE. HOWEVER, IT WOULD LIKELY BE IDENTIFIED AS A FEDERALLY REGULATED RCRA HAZARDOUS WASTE FOR THE FOLLOWING CHARACTERISTICS SHOWN BELOW. SEE SECTION 7 AND 8 FOR INFORMATION ON HANDLING STORAGE AND PERSONAL PROTECTION AND SECTION 9 FOR PHYSICAL/CHEMICAL PROPERTIES. IT IS POSSIBLE THAT THE MATERIAL AS PRODUCED CONTAINS CONSTITUENTS WHICH ARE NOT REQUIRED TO BE LISTED IN THE MSDS BUT COULD AFFECT THE HAZARDOUS WASTE DETERMINATION. ADDITIONALLY USE WHICH RESULTS IN CHEMICAL OR PHYSICAL CHANGE OF THIS MATERIAL COULD SUBJECT IT TO REGULATION AS A HAZARDOUS WASTE.

CONTAINER CONTENTS SHOULD BE COMPLETELY USED AND CONTAINERS SHOULD BE EMPTIED PRIOR TO DISCARD. CONTAINER RESIDUES AND RINSEATES COULD BE CONSIDERED TO BE HAZARDOUS.

SECTION 14: TRANSPORT INFORMATION

US (DOT)/ CANADIAN TDG:

SHIPPING DESCRIPTIONS:

NON BULK PACKAGE MARKING:

NON BULK PACKAGE LABELING:

UN1208, HEXANES, 3, II

HEXANES, UN1208

FLAMMABLE LIQUID

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BULK PACKAGE/PLACARD MARKING: FLAMMABLE/1208
PACKAGING-REFERENCES: 49CFR 173.150; 173.202; 173.242
(EXCEPTIONS; NON-BULK; BULK)
HAZARDOUS SUBSTNCE: SEE SECTION 15 FOR RQ'S
EMERGENCY RESPONSE GUIDE: 128
NOTE: CONTAINERS GREATER THAN 5 LITERS (LIQUIDS) OR 5 KILOGRAMS (SOLIDS)
SHIPPED BY WATER MODE AND ALL BULK SHIPMENTS MAY REQUIRE THE SHIPPING
DESCRIPTION TO CONTAIN THE "MARINE POLLUTANT" NOTATION (49CFR 172.203) AND
THE CONTAINERS TO DISPLAY THE (MARINE POLLUTANT MARK) (49CFR 172.322)

IMO/IDMG:
SHIPPING DESCRIPTIONS: UN1208, HEXANES, 3, II (-26 DEG C)
NON BULK PACKAGE MARKING: HEXANES, UN1208
LABELS: FLAMMABLE LIQUID
PLACARD/MARKINGS (BULK): FLAMMABLE/1208
PACKAGING-NON BULK: P001
EMS: F-E,S-D

NOTE: CONTAINERS GREATER THAN 5 LITERS (LIQUIDS) OR 5 KILOGRAMS (SOLIDS)
SHIPMENT MAY REQUIRE THE SHIPPING DESCRIPTION TO CONTAIN THE "MARINE
POLLUTANT" DESCRIPTION (IMDG 5.41.4.3.5) AND THE CONTAINER TO DIPLAY THE
MARINE POLLUTANT MARK (IDMG 5.2.1.6) US DOT COMPLIANCE REQUIREMENTS MAY
APPLY. SEE 49CFR 171.22, 23 & 25.

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

ICAO/IATA:
UN/ID3: UN1208
PROPER SHIPPING NAME: HEXANES
HAZARD CLASS DIVISION: 3
SUBSIDIARY RISK: NONE
PACKING GROUP: II
NON BULK PACKAGE MARKING: HEXANES, UN1208, (ENVIRONMENTALLY
HAZARDOUS SUBSTANCE MARK) IF >5L
CONTAINER)
LABELS: FLAMMABLE LIQUID
ERG CODE: 3H

SECTION 15: REGULATORY INFORMATION

**CERCLA/SARA – SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES AND TPQS (IN
POUNDS):**

THIS MATERIAL DOES NOT CONTAIN ANY CHEMICALS TO THE REPORTING
REQUIREMENTS OF SARA 302 AND 40 CFR372.

CERCLA/SARA – SECTION 311/312 (TITLE III HAZARD CATEGORIES):

ACUTE HEALTH: YES
CHRONIC HEALTH: YES
FIRE HAZARD: YES
PRESSURE HAZARD: NO
REACTIVE HAZARD: NO

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CERCLA/SARA SECTION 313 AND 40 CFR 372:

THIS MATERIAL CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III AND 40 CFR 372:

CHEMICAL NAME	CONCENTRATION	DE MINIMIS
HEXANE	>60	1.0%

EPA CERCLA REPORTABLE QUANTITIES (IN POUNDS):

EPA'S PETROLEUM EXCLUSION APPLIES TO THIS MATERIAL (CERCLA 101(14))

CALIFORNIA PROPOSITION 65:

THIS MATERIAL DOES NOT CONTAIN ANY CHEMICALS WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM AT CONCENTRATIONS THAT TRIGGER THE WARNING REQUIREMENTS OF CALIFORNIA PROPOSITION 65.

INTERNATIONAL HAZARD CLASSIFICATION:

CANADA:

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE SDS CONTAINS ALL THE INFORMATION REQUIRED BY THE REGULATIONS.

WHMIS HAZARD CLASS:

B2-FLAMMABLE LIQUID

D2A, D2B

NATIONAL CHEMICAL INVENTORIES:

ALL COMPONENTS ARE EITHER LISTED ON THE US TSCA INVENTORY OR ARE NOT REGULATED UNDER TSCA.

ALL COMPONENTS ARE EITHER ON THE DSL, OR ARE EXEMPT FROM DSL LISTING REQUIREMENTS.

US EXPORT CONTROL CLASSIFICATION NUMBER: EAR99

SECTION 16: OTHER INFORMATION

HMIS RATING: HEALTH: 2

FLAMMABILITY: 2

REACTIVITY: 0

PERSONAL PROTECTION: X

PREPARED BY: DAWN STYLES, SOCAR CHEMICAL

DATE OF PREPARATION: OCTOBER 2013

DATE OF LAST REVISION: JANUARY 2014

DISCLAIMER: TO THE BEST OF SOCAR CHEMICAL'S KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS RELIABLE AND ACCURATE AS OF THIS DATE; HOWEVER, ACCURACY, SUITABILITY OR COMPLETENESS IS NOT GUARANTEED AND NO WARRANTIES OF ANY TYPE EITHER EXPRESS OR IMPLIED ARE PROVIDED. THE INFORMATION CONTAINED HEREIN RELATES ONLY TO THIS SPECIFIC PRODUCT.