



Safety Data Sheet

SILKSCREEN WASH SOLVENT

SECTION 1. MATERIAL AND COMPANY IDENTIFICATION

PRODUCT NAME: SILKSCREEN WASH SOLVENT
VERSION: FEBRUARY 2016
MANUFACTURER: PACIFIC FUNCTIONAL FLUIDS, LLC
2244 PORT OF TACOMA ROAD
TACOMA, WA 98421-3607
CUSTOMER SERVICE: 253-284-4302 / 888-586-7295
EMERGENCY HEALTH AND SAFETY NUMBER: CHEMTREC: 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.



DANGER

APPEARANCE: CLEAR LIQUID, SLIGHT PLEASANT PETROLEUM ODOR

HAZARD STATEMENTS

- H226:** FLAMMABLE LIQUID AND VAPOR
- H304:** MAY BE FATAL IF SWALLOWED AND ENTERS LUNGS
MAY BE HARMFUL IF SWALLOWED
- H311:** TOXIC IN CONTACT WITH SKIN
- H315:** CAUSES SKIN IRRITATION
- H319:** CAUSES SERIOUS EYE IRRITATION
- H332:** HARMFUL IF INHALED
- H335:** MAY CAUSE RESPIRATORY IRRITATION
- H336:** MAY CAUSE DROWSINESS OR DIZZINESS
- H351:** SUSPECTED OF CAUSING CANCER

PRECAUTIONARY STATEMENTS

- P202:** DO NOT HANDLE UNTILL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD
- P210:** KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES: **NO SMOKING**
- P233:** KEEP CONTAINER TIGHTLY CLOSED
- P240:** GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT
- P241:** USE EXPLOSION PROOF ELECTRICAL, VENTILATING AND LIGHTING EQUIPMENT
- P242:** USE ONLY NON-SPARKING TOOLS
- P243:** TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE

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P261: AVOID BREATHING DUST/FUMES/GAS/MIST/VAPORS/SPRAY

P271: USE ONLY OUTDOORS OR IN A WELL VENTILATED AREA

P273: AVOID RELEASE TO THE ENVIRONMENT

P280: WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION
DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: CAUTION! COMBUSTIBLE LIQUID AND VAPOR. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. MAY CAUSE EYE AND SKIN IRRITATION OR INJURY.

POTENTIAL HEALTH EFFECTS

EYES: LIQUID OR VAPOR MAY CAUSE EYE IRRITATION. IF IN EYES, RINSE CAREFULLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACTS AND FLUSH WITH WATER AGAIN. IF IRRITATION PERSISTS OR STARTS, GET MEDICAL ATTENTION.

SKIN: P303, P361, P353. IF ON SKIN, TAKE OFF ALL CONTAMINATED CLOTHING. RINSE WITH WATER/SHOWER. WASH COMPLETELY AFTER HANDLING.

INGESTION: P301, P310: IF SWALLOWED, IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. RINSE MOUTH. **P331:** DO NOT INDUCE VOMITING. **P312:** CALL A POISON CENTER IF YOU DO NOT FEEL WELL WHEN HANDLING THIS PRODUCT.

INHALATION (BREATHING): P304, P340: IF INHALED, MOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING.

MEDICAL CONDITIONS AGGRAVATED: PRE-EXISTING LUNG OR SKIN CONDITIONS MAY BE AGGRAVATED BY REPEATED EXPOSURE. MAY ATTACK RESPIRATORY TRACT.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS. NUMBER</u>	<u>CHEMICAL NAME</u>	<u>PERCENT</u>
67472-95-6	SOLVENT NAPHTHA, LIGHT AROMATIC	<90 %
108-94-1	CYCLOHEXANONE	>20 %

HAZARDOUS CONSTITUENTS CONTAINED IN COMPLEX SUBSTANCES (AROMATIC 100) REQUIRED FOR DISCLOSURE

98-82-8	CUMENE	<1.0 %
95-63-6	PSEUDOCUMENE	<32 %
1330-20-7	XYLENES	<2.0 %

SECTION 4. FIRST AID MEASURES

INHALATION (BREATHING): MOVE VICTIM TO FRESH AIR. IF OXYGEN IS NEEDED, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSON. SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST.

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EYES: CHECK FOR CONTACTS AND REMOVE BEFORE FLUSHING WITH CLEAN WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN: REMOVE CONTAMINATED CLOTHING. WASH SKIN WITH SOAP AND WATER. IF THERE IS IRRITATION OR REDNESS OCCURS, SEEK MEDICAL ATTENTION.

INGESTION (SWALLOWING): DO NOT INDUCE VOMITING. VOMITING MIGHT RESULT IN ASPIRATION OF THE LUNGS. SEEK MEDICAL ATTENTION IMMEDIATELY.

SECTION 5. FIREFIGHTING MEASURES

NFPA RATING: HEALTH: 2 FIRE: 2 REACTIVITY: 1
HAZARD SCALE: 0 = MINIMAL; 1 = SLIGHT; 2 = MODERATE; 3 = SERIOUS; 4 = SEVERE;

EXTINGUISHING MEDIA: DRY CHEMICAL, CO₂, ALCOHOL FOAM AND WATER FOG. FIREFIGHTERS MUST WEAR SELF-CONTAINED BREATHING APPARATUS (SCBA).

HAZARDOUS COMBUSTION PRODUCTS: CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

EXPLOSION HAZARDS: WHEN HEATED ABOVE FLASH POINT, THIS MATERIAL EMITS FLAMMABLE VAPORS WHICH, WHEN MIXED WITH AIR, CAN BURN OR BE EXPLOSIVE. FINE MISTS OR SPRAYS MAY BE FLAMMABLE AT TEMPERATURES BELOW THE FLASH POINT.

FIRE FIGHTING PROCEDURES: WEAR SCBA. CLEAR FIRE AREA OF ALL NON-EMERGENCY PERSONNEL. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE, NIOSH APPROVED, SELF CONTAINED BREATHING APPARATUS. CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER TO PREVENT WEAKENING OF CONTAINER STRUCTURE WHICH COULD RESULT IN CONTAINER RUPTURE/FAILURE.

SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS: THE USE OF SCBA IS RECOMMENDED FOR FIREFIGHTERS. WATER SPRAY MAY BE USED TO COOL CONTAINERS EXPOSED TO HEAT OR FLAMES.

SECTION 6. ACCIDENTAL RELEASE MEASURES

REMOVE ALL IGNITION SOURCES. STOP SPILL/RELEASE IF CAN BE DONE SAFELY. PREVENT SPILLED MATERIAL FROM ENTERING SEWERS, STORM DRAINS, OTHER UNAUTHORIZED DRAINAGE SYSTEMS, AND NATURAL WATERWAYS. CONTAIN SPILL AS A LIQUID FOR POSSIBLE RECOVERY, OR USE COMPATIBLE SORBENT MATERIAL AND SHOVEL WITH A SPARK PROOF TOOL INTO A SEALABLE CONTAINER. USE WATER SPARINGLY TO MINIMIZE ENVIRONMENTAL CONTAMINATION AND REDUCE DISPOSAL REQUIREMENTS. IF SPILL OCCURS ON WATER NOTIFY APPROPRIATE AUTHORITIES. ANY SPILLS OCCURRING ON NAVIGABLE WATERWAY OR SHORELINE THAT CAUSE A SHEEN OR DISCOLORATION ON THE SURFACE NOTIFY LOCAL AND /OR FEDERAL AUTHORITIES. IN CASE OF SOIL CONTAMINATION, REMOVE CONTAMINATED SOIL AND DISPOSE ACCORDING TO LOCAL REGULATIONS.

SECTION 7. HANDLING AND STORAGE

GENERAL PROCEDURES: KEEP AWAY FROM HEAT, SPARKS AND FLAME. SURFACES THAT ARE HOT MAY IGNITE LIQUID PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. EXINGUISH PILOT LIGHTS, CIGARETTES,

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AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPORS ARE GONE. DO NOT SMOKE. DO NOT BREATHE VAPORS. GROUND/BOND ALL CONTAINERS AND TRANSFER EQUIPMENT BEFORE TRANSFER OF PRODUCT. STATIC ELECTRICITY WILL OCCUR.

SHIPPING AND STORAGE: KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE AND DURING TRANSPORT. STORE CONTAINERS IN COOL, DRY AREAS AWAY FROM HEAT SOURCES. DO NOT PRESSURIZE, CUT, GRIND, WELD, DRILL, BRAZE, SOLDER OR PUNCTURE CONTAINERS. EMPTY PRODUCT CONTAINERS MAY CONTAIN PRODUCT RESIDUE AND CAN BE DANGEROUS OR EXPLOSIVE.

COMMENTS: KEEP OUT OF REACH OF CHILDREN! EMPTY CONTAINERS RETAIN PRODUCT RESIDUE (LIQUID AND/OR VAPOR) CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE CONTAINERS TO HEAT, FLAMES, SPARKS OR STATIC ELECTRICITY.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

PROVIDE GENERAL VENTILATION NEEDED TO MAINTAIN AIRBORNE CONCENTRATION BELOW ESTABLISHED EXPOSURE LIMITS. WHEN GENERAL VENTILATION IS UNAVOIDABLE, ADDITIONAL ENGINEERING CONTROLS MAY BE REQUIRED.

RESPIRATORY:

WHERE THERE IS POTENTIAL FOR AIRBORNE EXPOSURE ABOVE THE EXPOSURE LIMITS SET, USE OF A NIOSH CERTIFIED PARTICULATE FILTER AND ORGANIC VAPOR CARTRIDGE IS RECOMMENDED. SELECTION AND USE OF RESPIRATORY PROTECTIVE EQUIPMENT SHOULD BE IN ACCORDANCE WITH OSHA 29 CFR 1910.134. CONSULT A QUALIFIED INDUSTRIAL HYGIENIST, SAFETY PROFESSIONAL OR ENGINEERING PROFESSIONAL FOR SPECIFIC SELECTION GUIDELINES.

EYES/FACE:

GOOD INDUSTRIAL HYGIENE PRACTICE SUGGESTS THE USE OF SAFETY GLASSES/FACE SHIELD WHENEVER WORKING WITH CHEMICALS AND SPLASHING IS POSSIBLE. USE OF CONTACTS NOT RECOMMENDED.

SKIN/HAND:

GOOD INDUSTRIAL HYGIENE PRACTICE SUGGESTS THE USE OF CHEMICAL IMPERVIOUS GLOVES OR OTHER APPROPRIATE SKIN PROTECTION WHEN WORKING WITH CHEMICALS. NITRILE IS SUGGESTED PROTECTIVE MATERIAL. TO AVOID PROLONGED OR REPEATED CONTACT WEAR APPROPRIATE CHEMICAL RESISTANT FACE SHIELD, BOOTS, APRON, WHOLE BODY SUITS OR OTHER PROTECTIVE CLOTHING.

PERSONAL HYGIENE:

USE GOOD PERSONAL HYGIENE. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING PRODUCT AND BEFORE EATING, DRINKING OR USING TOBACCO PRODUCTS. CLEAN CONTAMINATED CLOTHING, SHOES AND PROTECTIVE EQUIPMENT BEFORE REUSING. DISCARD LEATHER ARTICLES SATURATED WITH PRODUCT.

AROMATIC SOLVENT 100:

EXPOSURE LIMITS:

SOLVENT NAPHTHA, LIGHT AROMATIC	100 PPM ACGIH	100 PPM OSHA
CUMENE	50 PPM ACGIH	50 PPM OSHA
PSEUDOCUMENE	25 PPM ACGIH	NO OSHA DATA
XYLENE	100 PPM ACGIH	150 PPM OSHA

CYCLOHEXANONE:

EXPOSURE LIMITS:

20 PPM ACGIH TLV	50 PPM ACGIH STEL
25 PPM OSHA PEL	50 PPM OSHA STEL

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: CLEAR, SLIGHT PALE COLOR
PHYSICAL STATE: LIQUID
SPECIFIC GRAVITY: 0.912
VISCOSITY: NO DATA
FREEZING POINT: NO DATA
BOILING POINT: 308° F - 335° F
FLASH POINT: 111° F
AUTO IGNITION TEMP: > 800°F

ODOR: SLIGHT PLEASANT PETROLEUM
EVAPORATION RATE: < ETHER
VAPOR PRESSURE: 3 @ 60° F
VAPOR DENSITY (AIR=1): 4.15
MISCIBILITY W/WATER: IMMISCIBLE
PH: NO DATA
FLAMMABILITY: MAY IGNITE
MELTING POINT: NO DATA

SECTION 10. STABILITY AND REACTIVITY

STABILITY: STABLE UNDER NORMAL TEMPERATURES AND ANTICIPATED CONDITIONS OF USE. AVOID SPARKS OR FLAMES.

POLYMERIZATION: WILL NOT OCCUR.

INCOMPATIBILITY: INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, CHLORINE AND NITRIC ACID.

CONDITIONS TO AVOID: AVOID HEAT, SPARKS, FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS; CARBON DIOXIDE, CARBON MONOXIDE, VARIOUS HYDROCARBONS.

SECTION 11. TOXICOLOGICAL INFORMATION

COMPONENTS

AROMATIC 100:

CHEMICAL NAME: SOLVENT NAPHTHA, LIGHT AROMATIC

ORAL:	LD50 > 3000 MG/KG
DERMAL:	LD50 > 3160 MG/KG
ACUTE INHALATION:	NO DATA AVAILABLE

SKIN: CONTACT CAN CAUSE REDNESS, IRRITATION AND DRYING. SEVERITY DEPENDS ON THE AMOUNT AND DURATION OF EXPOSURE.

EYES: VAPORS MAY BE IRRITATING TO THE EYES. LIQUID CONTACT WILL CAUSE STINGING AND TEARING.

INHALATION: EXCESSIVE INHALATION OF HIGH CONCENTRATIONS MAY BE HARMFUL. MIST OR VAPOR CAN IRRITATE THE LUNGS. BREATHING THIS MATERIAL MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

COMPONENTS

CYCLOHEXANONE:

CHEMICAL NAME: CYCLOHEXANONE

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ACUTE TOXICITY:	DERMAL:	LD50 (RABBIT)	948 MG/KG
	ORAL:	LD50 (RAT)	1,890 MG/KG
	INHALATION:	LD50 (RAT)	15 MG/L
	DERMAL:	LD50 (RABBIT)	946 MG/KG

SKIN: TOXIC AFTER SINGLE CONTACT WITH SKIN. WASH SKIN THOROUGHLY AFTER CONTACT. CONTACT CAN CAUSE REDNESS, IRRITATION AND DRYING. SEVERITY DEPENDS ON THE AMOUNT AND DURATION OF EXPOSURE.

ORAL: MODERATELY TOXIC AFTER SINGLE INGESTION. WILL CAUSE STOMACH ACHE, HEADACHE, DIZZINESS, DROWSINESS AND INTOXICATION. SEEK MEDICAL ATTENTION.

INHALATION: MODERATELY TOXIC AFTER SHORT TERM INHALATION. EXCESSIVE INHALATION OF HIGH CONCENTRATIONS MAY BE HARMFUL, CAUSING HEADACHE, DIZZINESS, DROWSINESS AND INTOXICATION. MIST OR VAPOR CAN IRRITATE THE LUNGS. BREATHING THIS MATERIAL MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

EYES: LIQUID SEVERELY IRRITATING AND COULD CAUSE PERMANENT DAMAGE. VAPORS MAY BE IRRITATING TO THE EYES. VAPOR CONTACT WILL CAUSE STINGING AND TEARING.

AS WITH ALL CHEMICALS, USE OF PROPER PPE IS ADVISED TO PROTECT AGAINST ACCIDENTAL EXPOSURE.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: EXPECTED TO BE TOXIC TO AQUATIC ORGANISMS. MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT. AVOID UNCONTROLLED RELEASES OF THIS MATERIAL. WHERE SPILLS ARE POSSIBLE, A COMPREHENSIVE SPILL RESPONSE PLAN SHOULD BE DEVELOPED AND IMPLEMENTED.

BIOACCUMULATION/ACCUMULATION: BIOACCUMULATION IS UNLIKELY. PRODUCT IS READILY BIODEGRADABLE.

DISTRIBUTION: MOBILITY; FLOATS ON WATER. MODERATELY MOBILE IN SOIL AND LIKELY TO VOLATIZE FROM SOIL SURFACE.

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSE IN ACCORDANCE WITH FEDERAL, STATE, PROVINCIAL AND LOCAL REGULATIONS. THE GENERATOR OF A WASTE IS ALWAYS RESPONSIBLE FOR MAKING PROPER HAZARDOUS WASTE DETERMINATIONS. REGULATIONS MAY ALSO APPLY TO EMPTY CONTAINERS.

EMPTY CONTAINERS: KEEP OUT OF REACH OF CHILDREN! EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND CAN BE DANGEROUS. CONTAMINATED PACKAGING SHOULD BE EMPTIED AS FAR AS POSSIBLE. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION.

RCRA/EPA WASTE INFORMATION: CHEMICAL WASTE GENERATORS MUST DETERMINE WHETHER A DISCARDED CHEMICAL IS CLASSIFIED AS A HAZARDOUS WASTE. US EPA GUIDELINES FOR THE CLASSIFICATION DETERMINATION ARE LISTED IN 40 CFR. ADDITIONALLY, WASTE GENERATORS MUST

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CONSULT STATE AND LOCAL HAZARDOUS WASTE REGULATIONS TO ENSURE COMPLETE AND ACURATE CLASSIFICATION.

SECTION 14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: NA 1993, COMBUSTIBLE LIQUID, N.O.S, 3, PGIII

TECHNICAL NAME: NAPTHA SOLVENT, CYCLOXEXANONE

PRIMARY HAZARD CLASS/DIVISION: COMBUSTIBLE LIQUID

UN/NA NUMBER: NA 1993

PACKING GROUP: III

ERG: 128

SECTION 15. REGULATORY INFORMATION

SARA TITLE III

SECTION 311/312:	ACUTE =	YES
	CHRONIC =	YES
	FIRE HAZARD =	YES
	PRESSURE HAZARD =	NO
	REACTIVE HAZARD =	NO

SARA TITLE III SECTION 313 & 40 CFR 372:

THIS MATERIAL CONTAINS CYCLOHEXANONE (CAS# 108-94-1) RQ=5,000 LBS., WHICH IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III AND 40 CFR PART 373.

302/304 EMERGENCY PLANNING:

EMERGENCY PLAN: TO THE BEST OF OUR KNOWLEDGE THIS PRODUCT IS NOT LISTED AS AN EXTREMELY HAZARDOUS SUBSTANCE.

TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON OR ARE EXEMPTED FROM THE REQUIREMENTS TO BE LISTED ON THE TSCA INVENTORY.

SECTION 16. OTHER INFORMATION

USER ASSUMES ALL RISKS INCIDENT TO THE USE OF THIS PRODUCT. TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE. HOWEVER, PACIFIC FLUIDS LLC ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ARE MADE WITH RESPECT TO INFORMATION OR PRODUCT TO WHICH INFORMATION REFERS. THE DATA CONTAINED ON THIS SHEET SPECIFIC TO THE PRODUCT SUPPLIED TO THE USER.