



MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME UNIAROM® SX 180H DA

SYNONYM Low Aromatic Solvent, Low Sulfur Wash Oil

CHEMICAL FAMILY Petroleum Hydrocarbon

COMPANY IDENTIFICATION UniSource Energy, Inc.
40 Shuman Blvd, Suite 290
Naperville, IL 60563
Phone: 630-470-6030 Fax: 630-470-6031

EMERGENCY TELEPHONE NUMBERS UniSource Energy, Inc. CHEMTREC
1-800-444-5510 1-800-424-9300

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number	Material or Component	% By Weight
64742-94-5	HEAVY AROMATIC PETROLEUM NAPHTHA	100

Hazardous Constituents(s) Contained in Complex Substance (s)

CAS Number	Material or Component	% By Weight
92-52-4	BIPHENYL	0 - 4
91-20-3	NAPHTHALENE	0 - 4
91-57-6	2-METHYLNAPHTHALENE	6 - 26
90-12-0	1-METHYLNAPHTHALENE	4 - 12
939-27-5	2-ETHYLNAPHTHALENE	0 - 6
1589-81-5	1-METHYLTETRALIN	0 - 4
28804-88-8	DIMETHYLNAPHTHALENE	5 - 20
28652-77-9	TRIMETHYLNAPHTHALENE	2 - 10
3877-19-8	2-METHYLTETRALIN	0 - 4
2809-64-5	5-METHYLTETRALIN	2 - 8
22824-29-9	DIMETHYLTETRALIN	3 - 14
81598-29-0 629-50-5	ETHYLTETRALIN + TRIDECANE	0 - 4
N/A	HEXAHYDROACENAPHTHYLENE	0 - 4
28652-72-4	METHYLBIPHENYL	0 - 4
119-64-2	TETRAHYDRONAPHTHALENE	0 - 4

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

COMBUSTIBLE LIQUID – KEEP AWAY FROM IGNITION SOURCES.
MAY BE HARMFUL IF INHALED.
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
MAY BE HARMFUL IF SWALLOWED.
ASPIRATION HAZARD IF SWALLOWED – CAN ENTER LUNGS AND CAUSE DAMAGE.

ROUTES OF ENTRY: Absorbed through dermal contact, eye contact, inhalation, ingestion.

POTENTIAL ACUTE HEALTH EFFECTS

Eyes: May cause eye irritation with tearing, redness, stinging, blurred vision.
Skin: May cause skin irritation with inflammation, reddening, itching, scaling or blistering.
Inhalation: Breathing high concentrations can cause respiratory tract irritation, nausea, headaches, excitation, euphoria, drowsiness, dizziness, light-headedness, blurred vision, fatigue, incoordination,



tremors, convulsions, coma, respiratory arrest and other central nervous system effects.

Ingestion: May cause irritation of mouth, throat and gastrointestinal tract. If swallowed, aspiration into lungs may result in chemical pneumonitis and severe pulmonary injury.

POTENTIAL CHRONIC HEALTH EFFECTS

Carcinogenic Effects

NTP studies TR-410 & TR-500 show evidence of increased tumor growth in rodents based upon exposure to Naphthalene.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE

Repeated exposure to a highly toxic material may produce deterioration of health by an accumulation in one or many human organs.

OVEREXPOSURE/SIGNS/SYMPTOMS

Prolonged or repeated exposure to this product can cause central nervous system effects and irritation to the eyes, skin and respiratory tract. Frequent skin contact can remove skin oils, resulting in dermatitis.

(See Toxicological Information – Section 11)

SECTION 4 FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water while holding eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT: Wash contact areas immediately with soap and water. Remove contaminated clothing and place in closed container for storage until laundered or discarded. Thoroughly clean contaminated clothing before reuse.

INHALATION: Allow the victim to rest in a well-ventilated area. Seek immediate medical attention.

INGESTION: DO NOT induce vomiting; aspiration into lungs may cause chemical pneumonia and severe lung damage. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Seek immediate medical attention.

NOTES TO PHYSICIAN: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

SECTION 5 FIRE FIGHTING MEASURES

FLAMMABILITY CLASS: IIIA Combustible

FLASH POINT: > 65.56°C (> 150°F) (PMCC)

AUTO-IGNITION TEMPERATURE: Not available

FLAMMABLE LIMITS: LOWER: 1.9% UPPER: 6.8%

PRODUCTS OF COMBUSTION: May produce incomplete combustion products (CO, CO₂), toxic fumes.

FIRE HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES

Combustible in presence of open flames, sparks and heat. Vapors are flammable and may travel across the ground reaching remote ignition sources causing a flashback fire danger.

EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES

Possible risk of explosion of the product in presence of static discharge or extreme heat

EXTINGUISHING MEDIA

Use water fog or spray, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

FIRE FIGHTING INSTRUCTIONS

Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply. Use water spray to cool fire exposed surfaces and to protect personnel.

Small Fire: Use DRY chemical powder, halon and CO₂.

Large Fire: Use water spray, fog or foam. DO NOT use water jet.

PROTECTIVE CLOTHING (FIRE)

Wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear (Bunker gear).

NFPA HAZARD ID

Health: 2 Fire Hazard: 2 Reactivity: 1 Special Notice: None

HMIS HAZARD ID

Health: 2 Flammability: 2 Physical Hazard: 1 Personal Protection: B

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. Report



spills to local authorities and/or the National Response Center at (800) 424-8802 as appropriate or required.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding area. Eliminate all (potential) sources of ignition in the vicinity of the spill or released vapor. Handling equipment must be grounded to prevent sparking.

SPILL MANAGEMENT

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if it can be done without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Water Spill: Stop leak if it can be done without risk. Confine the spill immediately with booms. Warn other vessels. Remove from the surface by skimming or with suitable absorbents. Report spills as required to appropriate authorities. Seek the advice of a specialist before using dispersants.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Contain spill and safely stop the flow, warning personnel to stay away. Eliminate all sources of ignition and ventilate. Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas. Water spray may reduce vapor, but may not prevent ignition in closed spaces. Recover with appropriate pumping equipment or with suitable absorbent.

Small Spills: Absorb with an inert material such as clay or sand. Place in appropriate non-leaking container. Seal tightly for proper disposal.

Note: Local regulations may prescribe or limit action to be taken.

SECTION 7

HANDLING AND STORAGE

HANDLING

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material.

Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Use non-sparking tools. Keep away from incompatibles such as oxidizing agents.

DO NOT ingest. Do not breathe gas, fumes, vapor or spray. Do not eat, drink or smoke in areas of use or storage. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately, showing them the container or the label. Avoid contact with skin and eyes.

Use good personal hygiene practices. Wash thoroughly after handling this product.

STORAGE

Combustible materials should be stored in a separate labeled safety storage cabinet or room. Keep away from heat and all possible sources of ignition. Keep container tightly closed and dry. Keep in a cool and well-ventilated area. Ground all equipment containing material. Empty containers may contain material residue; do not reuse without adequate precautions. Do not eat, drink or smoke in areas of use or storage. All efforts should be made to prevent any leaks or spills. Storage tanks containing this product should be engineered to prevent contact with water resources, as this material could contaminate the water resources. Surface spills can reach groundwater through porous soil or cracked surfaces. The storage tanks should be monitored regularly for leaks. Where spills or leaks are possible, a comprehensive response plan should be developed and implemented.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

PERSONAL PROTECTION

Eyes: Safety glasses with side shields

Body: Flame retardant clothing covering the entire body

Respiratory: Use a MSHA/NIOSH approved respirator or equivalent at high concentrations.

Hands: Chemical resistant gloves if contact is possible

Feet: Safety slip-proof shoes in areas where spills or leaks can occur

PROTECTIVE CLOTHING

Splash goggles, Full suit, Vapor respirator, Boots, Gloves

A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

THRESHOLD LIMIT VALUE

The best practice is to maintain concentrations of all atmospheric contaminants as low as practical using engineering controls and work rules. Appropriate personal protective equipment may be used for additional protection of the worker from exposure. For application of TLV's or PEL's consult an industrial hygienist.



Material or Component	Exposure Limits
HEAVY AROMATIC PETROLEUM SOLVENT NAPHTHA	TLV: 500 ppm (2000 mg/m ³) IDLH: 10,000 ppm
2-METHYLNAPHTHALENE	Not established
1-METHYLNAPHTHALENE	Not established
NAPHTHALENE	OSHA STEL: 15 ppm (75 mg/m ³) TWA: 10 ppm (50 mg/m ³) ACGIH STEL: 15 ppm (79 mg/m ³) TWA: 10 ppm (52 mg/m ³) 8 hrs IDLH: 250 ppm
DIMETHYLNAPHTHALENE	Not established
BIPHENYL	TLV: 0.2 ppm (1 mg/m ³) IDLH: 47.6 ppm
2-ETHYLNAPHTHALENE	Not established
ETHYLNAPHTHALENE	Not established
TRIMETHYLNAPHTHALENE	Not established

Consult local authorities for acceptable exposure limits.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE AND APPEARANCE: Liquid

ODOR: Aromatic

COLOR: Water white to yellow

BOILING POINT: 218°C (425°F)

SPECIFIC GRAVITY: 0.95 – 0.99 @ 15.6°C (60°F)

VISCOSITY: 2 cst @ 100°F

FREEZING POINT: -37.2°C (-35°F)

VAPOR PRESSURE: < 1 @ 37.8°C (100°F)

VAPOR DENSITY: 4.9 (Air=1)

EVAPORATION RATE: < 1 compared to Butyl acetate

SOLUBILITY IN WATER: Negligible

SECTION 10 STABILITY AND REACTIVITY

STABILITY AND REACTIVITY: The product is stable under normal conditions.

CONDITIONS TO AVOID: Open flames and high energy ignition sources.

INCOMPATIBILITY WITH VARIOUS SUBSTANCES: Extremely reactive/ incompatible with oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: May produce incomplete combustion products (COx)

HAZARDOUS POLYMERIZATION: No

SECTION 11 TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation, ingestion, skin, eye contact

CHRONIC EFFECTS ON HUMANS

Carcinogenic Effects

NTP studies TR-410 & TR-500 show evidence of increased tumor growth in rodents based upon exposure to Naphthalene.

OTHER TOXIC EFFECTS ON HUMANS

May be irritating to eyes, skin and respiratory system. Aspiration hazard if swallowed. Can enter lungs and cause damage.

**TOXICOLOGICAL DATA**

NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia and cataracts. Additional information is available upon request.

(See Section 3 – Hazards Identification)

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.

MOBILITY: Constituents are expected to partition between air, water, and soil.

SPECIAL REMARKS ON THE PRODUCTS OF BIODEGRADATION: Constituents are expected to biodegrade.

SECTION 13 DISPOSAL CONSIDERATIONS**WASTE DISPOSAL**

Waste material should be disposed of consistent with federal, state, and local regulations.

This product, as supplied, does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA 40 CFR 261), since it does not have the characteristics of Subpart C, nor is listed under Subpart D. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete. This material, when discarded or disposed of, may be a hazardous waste according to RCRA 40 CFR 261; it is the responsibility of the user of the material to characterize and determine, at the time of disposal, whether the material is a hazardous waste subject. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authorities.

Consult your local or regional authorities.

SECTION 14 TRANSPORT INFORMATION**U.S. DOT CLASSIFICATION FOR BULK SHIPMENTS**

Proper Shipping Name: Combustible liquid, n.o.s. (contains Naphthalene, Biphenyl)

Hazard Class & Division: Combustible liquid

UN/NA Number: 1993

Packing Group: III

USCG PROPER SHIPPING NAME: Naphtha: Aromatic

MARINE POLLUTANT: Not listed

HAZARDOUS SUBSTANCES REPORTABLE QUANTITY: Naphthalene: 100 lbs., Biphenyl: 100 lbs.

SECTION 15 REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS**

TSCA: All components are listed or exempted.

OSHA HAZARD COMMUNICATION STANDARD

This product contains ingredients that are considered to be hazardous as defined by 29 CFR 1910.1200 and 29 CFR 1910.1000 Table Z-1, Z-2, Z-3.

(See Sections 2 & 8 for listing of individual components)

SARA 301/302/303

No chemicals in this product are listed as extremely hazardous substances in 40 CFR 355, Emergency Planning and Notification (Appendix A to Part 355).

SARA 304

The following chemicals in this product require reporting under the requirements of 40 CFR 117.302, Emergency Planning and Notification (SARA Extremely Hazardous



Substances listed in Appendix A to Part 355 or CERCLA Hazardous Substances listed in Table 302.4 of 40 CFR Part 302):

NAPHTHALENE; BIPHENYL

SARA 311/312

The following chemicals in this product require reporting under the requirements of 40 CFR 370, Hazardous Chemical Reporting: Community Right-To-Know. The hazard category for each chemical is also listed.

Chemical Name	Immediate Hazard	Delayed Hazard	Fire Hazard	Pressure Hazard	Reactivity Hazard
NAPHTHALENE	X	-	X	-	-

Under SARA 311/312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the Threshold Planning Quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA 313 SUPPLIER NOTIFICATION

This product contains the following EPCRA Section 313 chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372 – Table 372.65):

Product Name	CAS Number	Concentration (%)
NAPHTHALENE	91-20-3	< 4
BIPHENYL	92-52-4	0 - 4

CLEAN AIR ACT (CAA) 112

“Hazardous Air Pollutant “ (HAP): NAPHTHALENE & BIPHENYL

CLEAN WATER ACT (CWA) 307 & 311: NAPHTHALENE

RESOURCE CONSERVATION & RECOVERY ACT (RCRA)

40 CFR 261 Subpart C & D: NAPHTHALENE (Hazardous Waste Code U165)

INTERNATIONAL REGULATIONS

Canada WHMIS: Class B-3: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).

Class D-2A: Material causing other toxic effects (Very toxic).

The following substances are listed on the Ingredients Disclosure List:

Product Name	CAS Number	Concentration (%)
HEAVY AROMATIC PETROLEUM NAPHTHA	64742-94-5	100
NAPHTHALENE	91-20-3	< 4
BIPHENYL	92-52-4	0 - 4

All known major components of this material are listed on the Canadian Environmental Protection Act (CEPA) DSL and NPRI or are exempt.

Additional information may be available upon request.

STATE REGULATIONS

California Prop. 65 (no significant risk level): This product contains a chemical or chemicals which may be present as an impurity or residue known to the state of California to cause cancer, birth defects or other reproductive harm.



The following components are disclosed for compliance with state right to know laws:
NAPHTHALENE; BIPHENYL; METHYLNAPHTHALENES

Please consult with local state agencies for regulatory compliance.

Additional information is available upon request.

SECTION 16**OTHER INFORMATION****LABEL REQUIREMENTS**

COMBUSTIBLE LIQUID – KEEP AWAY FROM IGNITION SOURCES.
MAY BE HARMFUL IF INHALED.
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
MAY BE HARMFUL IF SWALLOWED.
ASPIRATION HAZARD IF SWALLOWED – CAN ENTER LUNGS AND CAUSE DAMAGE.

REVISIONS

This Material Safety Data Sheet (MSDS) has been created to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998).

DATE PREPARED: JULY 2011**UNIAROM® SX 180H DA**

The information presented herein has been compiled from sources considered to be dependable and is accurate as of the date of preparation of this Material Safety Data Sheet. However, Seller does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. In addition, no responsibility can be assumed by the Seller for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the material. Seller assumes no responsibility for injury to Buyer or to third persons or any damage to any property. Buyer assumes all such risks.