



# MATERIAL SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME** UNIAROM® SX 165 DA

**SYNONYM** Aromatics Solvent, Wash Oil

**CHEMICAL FAMILY** Petroleum Hydrocarbon

**COMPANY IDENTIFICATION** UniSource Energy, Inc.  
245 W. Roosevelt Road, Building 14, Suite 145  
West Chicago, IL 60185  
Phone: 630-231-7990 Fax: 630-231-8036

**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	84 - 94
91-57-6	2-METHYLNAPHTHALENE	20 - 40
91-12-0	1-METHYLNAPHTHALENE	14 - 23
91-20-3	NAPHTHALENE	< 14
28804-88-8	DIMETHYLNAPHTHALENE	6 - 16
92-52-4	BIPHENYL	1 - 5
939-27-5	2-ETHYLNAPHTHALENE	2 - 6
1127-76-0	ETHYLNAPHTHALENE	1 - 4
N/A	TRIMETHYLNAPHTHALENE	0 - 6

## 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. If irritation occurs, 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, CO<sub>2</sub>), 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 (CO<sub>2</sub>) 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 CO<sub>2</sub>.

**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 <sup>3</sup> ) IDLH: 10,000 ppm
2-METHYLNAPHTHALENE	Not established
1-METHYLNAPHTHALENE	Not established
NAPHTHALENE	<b>OSHA</b> STEL: 15 ppm (75 mg/m <sup>3</sup> ) TWA: 10 ppm (50 mg/m <sup>3</sup> ) <b>ACGIH</b> STEL: 15 ppm (79 mg/m <sup>3</sup> ) TWA: 10 ppm (52 mg/m <sup>3</sup> ) 8 hrs IDLH: 250 ppm
DIMETHYLNAPHTHALENE	Not established
BIPHENYL	TLV: 0.2 ppm (1 mg/m <sup>3</sup> ) 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:** Dark brown/green

**BOILING POINT:** 204°C (400°F)

**SPECIFIC GRAVITY:** 0.95 – 0.98 @ 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	< 14
BIPHENYL	92-52-4	1 - 5

**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	84 - 94
NAPHTHALENE	91-20-3	< 14
BIPHENYL	92-52-4	1 - 5

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: APRIL 2009****UNIAROM® SX 165 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.