

**PRODUCT** 

# EC6231A PARAF/ASPH CHEM.

EMERGENCY TELEPHONE NUMBER(S)
(800) 424-9300 (24 Hours) CHEMTREC

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EC6231A PARAF/ASPH CHEM.

APPLICATION: PARAFFIN AND/OR ASPHALTENE CHEMICAL

COMPANY IDENTIFICATION : Nalco Company

1601 W. Diehl Road Naperville, Illinois 60563-1198

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NFPA 704M/HMIS RATING

HEALTH:  $2/2^*$  FLAMMABILITY: 3/3 INSTABILITY: 0/0 OTHER: 0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme \* = Chronic Health Hazard

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. One or more of the substances are being claimed as trade secrets. Consult Section 15 for the nature of the hazard(s).

 Hazardous Substance(s)
 CAS NO
 % (w/w)

 Xylene
 1330-20-7
 30.0 - 60.0

 Alkyl Phenol
 Proprietary
 1.0 - 5.0

 Heavy Catalytic Reformed Naphtha
 64741-68-0
 60.0 - 100.0

 Ethylbenzene
 100-41-4
 0.1 - 1.0

# 3. HAZARDS IDENTIFICATION

# \*\*EMERGENCY OVERVIEW\*\*

#### **DANGER**

Flammable. Irritating to skin. Harmful by inhalation and in contact with skin. This product contains ethylbenzene. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and determined it to be possibly carcinogenic to humans (Group 2B, based on sufficient evidence in experimental animals and inadequate evidence in humans).

Keep away from heat. Keep away from sources of ignition - No smoking. Keep container tightly closed. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Use a mild soap if available.

Wear suitable protective clothing, gloves and eye/face protection.

Flammable Liquid; may release vapors that form flammable mixtures at or above the flash point. Vapors can travel to a source of ignition and flash back. Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, or expose containers to flame or other sources of ignition. May evolve oxides of carbon (COx) under fire conditions.



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#### PRIMARY ROUTES OF EXPOSURE:

Eye, Skin, Inhalation

#### **HUMAN HEALTH HAZARDS - ACUTE:**

### **EYE CONTACT:**

May cause irritation with prolonged contact.

#### SKIN CONTACT:

Can cause moderate irritation. Harmful in contact with skin.

### INGESTION:

Not a likely route of exposure. May cause nausea and vomiting. Can cause chemical pneumonia if aspirated into lungs following ingestion. Can cause central nervous system depression.

#### INHALATION:

Repeated or prolonged exposure may irritate the respiratory tract. Product mist or vapors may cause headache, nausea, vomiting, drowsiness, stupor or unconsciousness. Can cause central nervous system depression. Harmful by inhalation.

### AGGRAVATION OF EXISTING CONDITIONS:

Skin contact may aggravate an existing dermatitis condition.

#### **HUMAN HEALTH HAZARDS - CHRONIC:**

This product contains ethylbenzene. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and determined it to be possibly carcinogenic to humans (Group 2B, based on sufficient evidence in experimental animals and inadequate evidence in humans).

Xylene causes fetotoxicity and postnatal developmental toxicity in animals in the absence of maternal toxicity. An ingredient in this product has been shown to be mutagenic, in vitro. Chronic inhalation of an ingredient in the product has been shown to cause hearing loss in laboratory animals.

# 4. FIRST AID MEASURES

### **EYE CONTACT:**

Immediately flush with plenty of water for at least 15 minutes. If symptoms develop, seek medical advice.

#### SKIN CONTACT:

Flush with large amounts of water. Use soap if available. If symptoms develop, seek medical advice.

# INGESTION:

Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. If conscious, washout mouth and give water to drink. Get medical attention.

#### **INHALATION:**

Remove to fresh air, treat symptomatically. Get medical attention.

# NOTE TO PHYSICIAN:

Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.



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# 5. FIRE FIGHTING MEASURES

FLASH POINT: 95 °F / 35 °C ( PMCC )

# **EXTINGUISHING MEDIA:**

Alcohol foam, Carbon dioxide, Foam, Dry powder, Other extinguishing agent suitable for Class B fires, For large fires, use water spray or fog, thoroughly drenching the burning material.

Water mist may be used to cool closed containers.

#### UNSUITABLE EXTINGUISHING MEDIA:

Do not use water unless flooding amounts are available.

### FIRE AND EXPLOSION HAZARD:

Flammable Liquid; may release vapors that form flammable mixtures at or above the flash point. Vapors can travel to a source of ignition and flash back. Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, or expose containers to flame or other sources of ignition. May evolve oxides of carbon (COx) under fire conditions.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING:

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

# 6. ACCIDENTAL RELEASE MEASURES

#### PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Keep people away from and upwind of spill/leak. Ventilate spill area if possible. Remove sources of ignition. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities.

### METHODS FOR CLEANING UP:

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Clean contaminated surfaces with water or aqueous cleaning agents. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

#### **ENVIRONMENTAL PRECAUTIONS:**

Prevent material from entering sewers or waterways.

# 7. HANDLING AND STORAGE

#### **HANDLING:**

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks,



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etc.) readily available. Ensure all containers are labeled. Do not use, store, spill or pour near heat, sparks or open flame.

#### STORAGE CONDITIONS:

Store in suitable labeled containers. Store the containers tightly closed. Store away from heat and sources of ignition. Have appropriate fire extinguishers available in and near the storage area. Connections must be grounded to avoid electrical charges. Store separately from oxidizers.

#### SUITABLE CONSTRUCTION MATERIAL:

Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### OCCUPATIONAL EXPOSURE LIMITS:

Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

| Substance(s) | Category:   | ppm | mg/m3 | Non-Standard<br>Unit |
|--------------|-------------|-----|-------|----------------------|
| Xylene       | ACGIH/TWA   | 100 |       |                      |
|              | ACGIH/STEL  | 150 |       |                      |
|              | OSHA Z1/PEL | 100 | 435   |                      |
| Ethylbenzene | ACGIH/TWA   | 100 |       |                      |
|              | ACGIH/STEL  | 125 |       |                      |
|              | OSHA Z1/PEL | 100 | 435   |                      |

### **ENGINEERING MEASURES:**

General ventilation is recommended. The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces.

#### **RESPIRATORY PROTECTION:**

Where concentrations in air may exceed the limits given in this section or when significant mists, vapors or aerosols are generated, an approved air purifying respirator equipped with suitable filter cartridges is recommended. Consult the respirator / cartridge manufacturer data to verify the suitability of specific devices. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

#### HAND PROTECTION:

When handling this product, the use of chemical gloves is recommended. The choice of work glove depends on work conditions and what chemicals are handled. Please contact the PPE manufacturer for advice on what type of glove material may be suitable. Gloves should be replaced immediately if signs of degradation are observed.

# SKIN PROTECTION:

Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots. A full slicker suit is recommended if gross exposure is possible.



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#### **EYE PROTECTION:**

Wear a face shield with chemical splash goggles.

#### **HYGIENE RECOMMENDATIONS:**

Use good work and personal hygiene practices to avoid exposure. Eye wash station and safety shower are necessary. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE Liquid

APPEARANCE Brown

ODOR Hydrocarbon

SPECIFIC GRAVITY 0.88
SOLUBILITY IN WATER Insoluble

VISCOSITY < 10 cst @ 100 °F / 38 °C

FREEZING POINT < -40 °F / -40 °C

Note: These physical properties are typical values for this product and are subject to change.

# 10. STABILITY AND REACTIVITY

# STABILITY:

Stable under normal conditions.

#### HAZARDOUS POLYMERIZATION:

Hazardous polymerization will not occur.

### **CONDITIONS TO AVOID:**

Heat and sources of ignition including static discharges.

#### MATERIALS TO AVOID:

Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

# HAZARDOUS DECOMPOSITION PRODUCTS: Under fire conditions: Oxides of carbon

# 11. TOXICOLOGICAL INFORMATION

No toxicity studies have been conducted on this product.

ACUTE ORAL TOXICITY: Species: Rat



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LD50: 3,523 mg/kg
Test Descriptor: Xylene

Species: Rat

LD50: 4.82 g/kg

Test Descriptor: Heavy Catalytic Reformed Naphtha

ACUTE DERMAL TOXICITY:
Species: Rabbit
LD50: >21.3 g/kg
Test Descriptor: Xylene

**ACUTE INHALATION TOXICITY:** 

Species: Rat

LD50: 6350 ppm (4 hrs)

Test Descriptor: Xylene

**SENSITIZATION:** 

This product is not expected to be a sensitizer.

#### CARCINOGENICITY:

This product contains ethylbenzene. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and determined it to be possibly carcinogenic to humans (Group 2B, based on sufficient evidence in experimental animals and inadequate evidence in humans).

### **HUMAN HAZARD CHARACTERIZATION:**

Based on our hazard characterization, the potential human hazard is: High

# 12. | ECOLOGICAL INFORMATION

# **ECOTOXICOLOGICAL EFFECTS:**

No toxicity studies have been conducted on this product.

#### **MOBILITY:**

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

| Air      | Water    | Soil/Sediment |
|----------|----------|---------------|
| 10 - 30% | 50 - 70% | 10 - 30%      |



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The portion in water is expected to float on the surface.

### **BIOACCUMULATION POTENTIAL**

Component substances have a potential to bioaccumulate.

### ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

Based on our hazard characterization, the potential environmental hazard is: Low

If released into the environment, see CERCLA/SUPERFUND in Section 15.

# 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: D001, D018

Hazardous wastes must be transported by a licensed hazardous waste transporter and disposed of or treated in a properly licensed hazardous waste treatment, storage, disposal or recycling facility. Consult local, state, and federal regulations for specific requirements.

# 14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

The presence of an RQ component (Reportable Quantity for U.S. EPA and DOT) in this product causes it to be regulated with an additional description of RQ for road, or as a class 9 for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

#### LAND TRANSPORT:

Proper Shipping Name : FLAMMABLE LIQUID, N.O.S. Technical Name(s) : XYLENE, ETHYLBENZENE

UN/ID No: UN 1993

Hazard Class - Primary : 3
Packing Group : III

Flash Point: 35 °C / 95 °F

DOT Reportable Quantity (per package): 386 lbs
DOT RQ Component: XYLENE

AIR TRANSPORT (ICAO/IATA):

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.



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Technical Name(s): XYLENE, ETHYLBENZENE

UN/ID No: UN 1993

Hazard Class - Primary : 3
Packing Group : III
IATA Cargo Packing Instructions : 310

IATA Cargo Aircraft Limit: 220 L (Max net quantity per package)

MARINE TRANSPORT (IMDG/IMO):

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. Technical Name(s): XYLENE, ETHYLBENZENE

UN/ID No: UN 1993

Hazard Class - Primary : 3
Packing Group : III

# 15. REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive, and should not be relied upon to take the place of an individualized compliance or hazard assessment. Nalco accepts no liability for the use of this information.

### NATIONAL REGULATIONS, USA:

### OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Xylene: Flammable, Irritant Alkyl Phenol: Non-Hazardous

Heavy Catalytic Reformed Naphtha: Irritant, Combustible.

Ethylbenzene: Flammable, Irritant, Cancer suspect agent (refer to Section 3)

# CERCLA/SUPERFUND, 40 CFR 302:

This product contains the following Reportable Quantity (RQ) Substance. Also listed is the RQ for the product.

RQ Substance RQ Xvlene 386 lbs

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313 :

# SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355) :

This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

# SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

Our hazard evaluation has found this product to be hazardous. The product should be reported under the following indicated EPA hazard categories:

X Immediate (Acute) Health Hazard



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X Delayed (Chronic) Health Hazard

X Fire Hazard

Sudden Release of Pressure Hazard

- Reactive Hazard

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

# SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product contains the following substance(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals

| Hazardous Substance(s) | CAS NO    | <u>% (w/w)</u> |
|------------------------|-----------|----------------|
| Xylene                 | 1330-20-7 | 30.0 - 60.0    |

# TOXIC SUBSTANCES CONTROL ACT (TSCA):

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311 :

This product contains the following substances listed in the regulation. Additional components may be unintentionally present at trace levels.

| Su | bstance(s)   | Citations          |
|----|--------------|--------------------|
| •  | Xylene       | Sec. 311           |
| •  | Ethylbenzene | Sec. 307, Sec. 311 |

CLEAN AIR ACT, Sec. 112 (Hazardous Air Pollutants, as amended by 40 CFR 63), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances):

This product contains the following substances listed in the regulation. Additional components may be unintentionally present at trace levels.

| Substance(s)                                  | Citations |
|---|-----------|
| <ul><li>Xylene</li><li>Ethylbenzene</li></ul> | Sec. 112  |
|   |           |

#### CALIFORNIA PROPOSITION 65:

This product contains the following substances which require warning under California Proposition 65. Additional components may be unintentionally present at trace levels.

| Su | ibstance(s)  | Concentration | EFFECTS       |
|----|--------------|---------------|---------------|
| •  | Ethylbenzene | < 1 %         | Causes Cancer |



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#### MICHIGAN CRITICAL MATERIALS:

This product contains the following substances listed in the regulation. Additional components may be unintentionally present at trace levels.

**Xylene** 

# STATE RIGHT TO KNOW LAWS:

The following substances are disclosed for compliance with State Right to Know Laws:

Xylene 1330-20-7 Ethylbenzene 100-41-4

#### NATIONAL REGULATIONS, CANADA:

### WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

#### WHMIS CLASSIFICATION:

B2 - Flammable Liquids, D2A - Materials Causing Other Toxic Effects - Very Toxic Material, D2B - Materials Causing Other Toxic Effects - Toxic Material

### CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

# 16. OTHER INFORMATION

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

### **REFERENCES**

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH., (Ariel Insight™ CD-ROM Version), Ariel Research Corp., Bethesda. MD.

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (TOMES CPS™ CD-ROM Version),

Micromedex, Inc., Englewood, CO.



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Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA), (Ariel Insight™ CD-ROM Version), Ariel Research Corp., Bethesda, MD.

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, OH.

(TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Ariel Insight<sup>™</sup> (An integrated guide to industrial chemicals covered under major regulatory and advisory programs), North American Module, Western European Module, Chemical Inventories Module and the Generics Module (Ariel Insight<sup>™</sup> CD-ROM Version), Ariel Research Corp., Bethesda, MD.

The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By: Product Safety Department

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