

# AS-90E

## Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 11/20/2017

Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : AS-90E  
 Product form : Mixture  
 Other means of identification : Blend of Substituted Aromatic Hydrocarbons

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Dielectric fluid for use in capacitors

#### 1.3. Details of the supplier of the safety data sheet

JX NIPPON CHEMICAL TEXAS INC.  
 10500 Bay Area Blvd.  
 Pasadena, Texas 77507  
[MRoot@jxncti.com](mailto:MRoot@jxncti.com)

#### 1.4. Emergency telephone number

Emergency number : 1-703-527-3887 (CHEMTREC)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin Irrit. 2 H315  
 Skin Sens. 1 H317  
 Asp. Tox. 1 H304  
 Aquatic Acute 1 H400  
 Aquatic Chronic 1 H410

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

GHS09

Signal word (GHS-US) :

**Danger**

Hazard statements (GHS-US) :

H304 - May be fatal if swallowed and enters airways  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

P261 - Avoid breathing mist, spray, vapours  
 P264 - Wash hands, forearms and face thoroughly after handling  
 P272 - Contaminated work clothing must not be allowed out of the workplace  
 P273 - Avoid release to the environment  
 P280 - Wear eye protection, protective clothing, protective gloves  
 P301+P310 - IF SWALLOWED: Immediately call a doctor, a poison center  
 P302+P352 - If on skin: Wash with plenty of soap and water  
 P321 - Specific treatment (see first aid instructions on this label)  
 P331 - Do NOT induce vomiting  
 P332+P313 - If skin irritation occurs: Get medical advice/attention  
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P362+P364 - Take off contaminated clothing and wash it before reuse  
 P363 - Wash contaminated clothing before reuse  
 P391 - Collect spillage  
 P405 - Store locked up  
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

#### 2.3. Other hazards

No additional information available

# AS-90E

## Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 2.4. Unknown acute toxicity (GHS US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%
Benzene, ethylenated, residues, heavy ends	(CAS No) 212210-96-3	≤ 100*
Benzene, ethylenated, residues	(CAS No) 68987-42-8	≤ 4*

\*In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes skin irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Direct contact with eyes is likely to be irritating.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry chemical. Water fog.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Heating may cause a fire.
- Explosion hazard : Product is not explosive.
- Reactivity : No dangerous reactions known under normal conditions of use.

### 5.3. Advice for firefighters

- Precautionary measures fire : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

# AS-90E

## Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams

Methods for cleaning up : Ventilate area. Wear suitable respiratory protective equipment. This material and its container must be disposed of in a safe way, and as per local legislation.

### 6.4. Reference to other sections

See Sections 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep the container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Benzene, ethylenated, residues, heavy ends (212210-96-3)	
Remark (ACGIH)	OELs not established.
Remark (OSHA)	OELs not established.
Benzene, ethylenated, residues (68987-42-8)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established

### 8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Safety glasses. Protective clothing.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection : Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Color : Slight Pale Yellow  
Odor : Aromatic.  
Odor Threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : No data available

# AS-90E

## Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Melting point	: < -50 °C ( -58 °F)
Freezing point	: < -50 °C ( -58 °F)
Boiling point	: 270 - 330 °C (518 - 626 °F)
Flash point	: ~140 °C (284 °F) PMCC
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0.02 mm Hg @ 20 °C (68 °F)
Relative vapour density at 20 °C	: 7.2 (Air = 1)
Relative density	: 0.99 (Water = 1)
Solubility	: Water: 4 ppm @ 20 °C (68 °F)
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Strong oxidizing materials may ignite this material.

### 10.4. Conditions to avoid

Avoid contact with : Incompatible materials.

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

Carbon monoxide. Asphyxiants.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Direct contact with eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

# AS-90E

## Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

##### AS-90E

Persistence and degradability	No information available.
-------------------------------	---------------------------

#### 12.3. Bioaccumulative potential

##### AS-90E

Bioaccumulative potential	No information available.
---------------------------	---------------------------

#### 12.4. Mobility in soil

##### AS-90E

Ecology - soil	No information available.
----------------	---------------------------

#### 12.5. Other adverse effects

Other adverse effects : No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

### SECTION 14: Transport information

#### In accordance with DOT

Not hazardous for transport

#### Transport by sea

Transport document description : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Contains: Benzene, ethylenated residues), 9, III, MP

UN-No. (IMDG) : 3082

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: Benzene, ethylenated residues)

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

Hazard labels (IMDG)



Packing group (IMDG) : III - substances presenting low danger

#### Air transport

Transport document description : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Contains: Benzene, ethylenated residues), 9, III, MP

UN-No.(IATA) : 3082

Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: Benzene, ethylenated residues)

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Hazard labels (IATA)



Packing group (IATA) : III - Minor Danger

Other information : Per IATA special provision A197, UN3082 substances may be shipped as "not restricted" provided that the net quantity in any receptacle does not exceed 5 kg or 5L and the packaging used meets defined standards.

# AS-90E

## Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### AS-90E

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory or are exempt.

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
-------------------------------------	---------------------------------

#### 15.2. International regulations

No additional information available.

#### 15.3. US State regulations

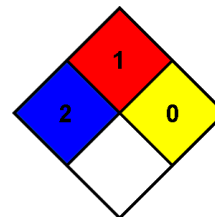
##### California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

### SECTION 16: Other information

Indication of changes	: Revision 1.0
Revision date	: 11/20/2017
Other information	: Author: NMR.

NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 1 - Must be preheated before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



#### HMIS III Rating

Health	: 2
Flammability	: 1
Physical	: 0
Personal protection	:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product