

# Safety Data Sheet

## (SDS)

<b>Chemicals name</b>	AD-7100 Fluorinated Engineering Fluid		
<b>SDS NO.</b>	AD/Q-S-003-2021	<b>Version</b>	5.0
<b>Issue Date</b>	12/01/2023	<b>Previous Date</b>	05/08/2023
<b>Editor</b>	Vivian Zhang	<b>Approved by</b>	Julius Chou
<b>Revision information</b>	Product Name Change		

# Safety Data Sheet

Supersedes Date: 05/08/2023

Issue Date: 12/01/2023

## SECTION 1: Chemical and manufacturer information

### 1.1. Product identify

AD-7100 Fluorinated Engineering Fluid

### 1.2. Name, address and telephone number of manufacturer, importer or supplier

**Manufacturer:** Nantong A.D Dawning Materials Co. Ltd.**Address:** No.198 Jiangsu Road,, Qidong Life and Health Industrial Park, Nantong City, Jiangsu Province, China**Telephone:** +86 130 0417 0543 / +86 186 1651 4635

### 1.3. Emergency contact number/fax number/email address

**Emergency contact number:** +86 130 0417 0543 / +86 186 1651 4635**Fax number:** +86 21 58682568**Email address:** julius@megachemistry.cn / vivianzhang@megachemistry.cn

### 1.4. Recommended use and restrictions on use

For Industrial Use Only.

Not Intended for Use in Medical Device or Drug.

Please contact for further information.

## SECTION 2: Hazard identification

### 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### 2.2. Label elements

**Signal word**

Not applicable.

**Symbols**

Not applicable.

**Pictograms**

Not applicable.

## SECTION 3: Composition /information on ingredients

Ingredient	CAS No.	% by Wt.
Methyl Perfluorobutyl Ether	163702-07-6	10-45
Methyl Perfluoroisobutyl Ether	163702-08-7	55-90

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation:**

No need for first aid.

**Skin Contact:**

If exposed, wash with soap and water. If symptoms develop, call medical doctor.

**Eye Contact:**

If exposed, flush eyes with large quantity of water. Remove contact lenses if easy to do. If symptoms develop, call medical doctor.

**If Swallowed:**

Rinse mouth. Do not induce vomiting. If symptoms develop, call medical doctor.

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

No critical symptoms or effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

## SECTION 5: Fire-fighting measures

**5.1. Suitable extinguishing media**

Use a fire fighting agent suitable for the surrounding fire.

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

Exposure to extreme heat can result in thermal decomposition.

**5.3 Hazardous Decomposition or By-Products**

Carbon monoxide, carbon dioxide and hydrogen fluoride are expected to be decomposition products during the combustion under extreme heat.

**5.4. Special protective actions for fire-fighters**

If in case a fire happens, wear full protective clothing, including helmet, positive pressure or pressure demand breathing apparatus, special coat, and pants to cover arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accident release measures

**6.1. Personal precautions, protective equipments and emergency procedures**

Ventilate the area with fresh air. Evacuated if needed.

**6.2. Environmental precautions**

Avoid release to the environment.

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

Working from the edges of the spill inward, cover with commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Place in a closed container approved by appropriate authorities. Dispose of collected material as soon as possible in accordance with applicable regulations.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

For industrial use only. Not for medical, drug and consumer use. Do not breathe thermal decomposition products. Avoid release to the environment. Avoid contact with oxidizing agents. No eating and smoking when handling the product.

**7.2. Conditions for safe storage including any incompatibilities**

Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store in a tightly closed original container.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits**

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Methyl Perfluorobutyl Ether	163702-07-6	AIHA	TWA:750 ppm	-
Methyl Perfluoroisobutyl Ether	163702-08-7	AIHA	TWA:750 ppm	-

AIHA : American Industrial Hygiene Association

TWA: Time-Weighted-Average

**8.2. Exposure controls**

**8.2.1. Engineering controls**

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation to maintain levels of decomposition products under their exposure guidelines.

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**

None required.

**Skin/hand protection**

Chemical protective gloves are not required under normal use conditions. However, when the product is subjected to extreme heat, HF may be formed. For those cases, neoprene gloves and apron are recommended.

**Respiratory protection**

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use a positive pressure supplied-air respirator.

**SECTION 9: Physical and chemical properties**

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

**Appearance**

<b>Physical state</b>	Liquid
<b>Color</b>	Colorless
<b>Specific Physical Form:</b>	Liquid
<b>Odor</b>	Slight Ether Odor
<b>Odor threshold</b>	No Data Available
<b>pH</b>	Not Applicable
<b>Melting point</b>	-135 °C

<b>Boiling Point</b>	61 °C
<b>Flash Point</b>	No flash point
<b>Evaporation rate</b>	No Data available
<b>Vapor Pressure</b>	26 kPa @ 25 °C
<b>Density</b>	1.5 g/ml
<b>Solubility In Water</b>	< 12 ppm
<b>Solubility- non-water</b>	No Data Available
<b>Partition coefficient: n-octanol/ water</b>	3.9 @ 30 °C
<b>Decomposition temperature</b>	Not Applicable
<b>Viscosity</b>	0.6 centipoise @ 25 °C
<b>Flammability</b>	Not flammable
<b>Flammable Limits (LEL)</b>	None detected
<b>Flammable Limits (UEL)</b>	None detected
<b>Percent volatile</b>	100 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with strong acids, strong bases, and strong oxidizers under certain conditions.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong acids

Strong bases

Strong oxidizing agents

### 10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide and hydrogen fluoride are the possible decomposition products during the combustion at elevated temperatures.

## SECTION 11 :Toxicological information

### Inhalation:

No know health effects.

### Skin Contact:

No significant irritation.

### Eye Contact:

No significant irritation.

**Ingestion:**

No known health effects.

**Toxicological Data**

Not classified as hazardous. Please contact the A.D Dawning Materials for detail information.

**SECTION 12: Ecological information****Ecotoxicological information**

**EC50 Water flea (*Daphnia magna*):** > 10 mg/L 48 H

**LC50 Fathead minnow (*Pimephales promelas*):** > 7.9 mg/L 96 H

**IC50 Green algae (*Selenastrum capricornutum*):** > 8.9 mg/L 96 H

**Ecotoxicity:** This product may be harmful to aquatic organisms.

**Environmental Effects:** This product is not expected to be harmful to the environment.

**Persistence and Degradability:** Expected to vaporize rapidly from aerobic

**SECTION 13: Disposal considerations**

Dispose of the product in accordance with the local and national regulations. Consult local authorities and regulations to ensure proper classification. Dispose of waste product in a permitted industrial waste facility. Combustion products will include HF. Facility must be capable of handling HF. Empty and clean product containers may be disposed as non-hazardous waste. Consult your local regulations and service providers to determine available options and requirements.

**SECTION 14: Transport information**

Not regulated per IATA, IMO or US DOT.

**SECTION 15: Regulatory information****Chemical Inventories**

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply.

The components of this product are in compliance with the new substance notification requirements of CEPA in Canada.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply.

The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply.

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

## **SECTION 16: Other information**

### **16.1. Revision date**

2023/11/30

### **16.2. Previous date**

2023/05/08

### **16.3. According to the standard**

UN "Globally Harmonized System of Classification and Labelling of Chemicals" (Rev.9)

### **16.4. Disclaimer**

This Safety Data Sheet (SDS) is revised by Nantong A. D Material Co. Ltd and issued on 12/01/2023. The Previous version was created on 05/08/2023. The information in this Safety Data Sheet (SDS) is prepared as accurate as possible based on our knowledge of the date issued. Users of SDS should judge the applicability of relevant information according to the actual situation.