

Safety Data Sheet

(SDS)

Chemicals name	AD-40 Fluorinated Engineering Fluid		
SDS NO.	AD/Q-S-001-2022	Version	5.0
Issue Date	2023/12/01	Previous Date	2022/06/30
Editor	Vivian Zhang	Approved by	Julius Chou
Revision information	1.Product Name Change;2.Some content updates		

Safety Data Sheet

Supercedes Date: 06/30/2022

Issue Date: 12/01/2023

SECTION 1: Chemical and manufacturer data

1.1. Product identifier

AD-40 Fluorinated Engineering Fluid

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

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

1.3. Emergency contact number/fax number/email address

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

SECTION 2: Hazards identification

2.1. GHS Hazard Class

Not classified as hazardous.

2.2. GHS Label Elements

Not applicable

2.3. Other Hazards Which Are Not Covered by The GHS

No information available.

SECTION 3: Composition/information on ingredients

Component	Concentration (%)	CAS NO.
PERFLUORO COMPOUNDS, C5-18	100	86508-42-1

SECTION 4: First aid measures

4.1. Description of First Aid Measures

Inhalation:

Move the victim to fresh air and keep airway unobstructed. Keep the victim warm and quiet. Call the medical emergency services. If breathing is difficult, give oxygen. If not breathe, give artificial respiration.

Skin contact:

Remove and insulate contaminated clothing, shoes and socks. Flush the skin with running water at least 20 minutes. If feel unwell, get medical help.

Eye contact:

Flush the eyes with running water at least 20 minutes immediately. If feel unwell, get medical help.

Ingestion:

Rinse mouth. Do not induce vomiting without medical advice. Keep the victim warm and quiet. Call the medical emergency services. If breathing is difficult, give oxygen. If not breathe, give artificial respiration.

Protecting of First aiders:

Ensure that first-aiders are aware of the hazard characteristics of the product. Take precautions to protect themselves and prevent spread of contamination.

4.2. Most Important Symptoms/Effects, Acute and Delayed.

No information available.

4.3. Indication of Immediate Medical Attention and Special Treatment Needed

Reaction from exposure to the substance (including inhalation, ingestion and skin contact) may be delayed.

SECTION 5: Fire-fighting measures**5.1. Extinguishing Media****Suitable extinguishing media:**

Use a fire-fighting agent suitable for the surrounding fire.

5.2. Specific Hazards Arising from the Chemical

It may release irritating and toxic smokes under high temperature or burning conditions. The sealed container may explode if heated.

5.3. Special Protective Equipment and Precautions for Fire-fighters

As in any fire, wear self-contained breathing apparatus (SCBA) and full protective gear. Remove containers containing substance from the scene of the accident when there is no danger. In the event of a major fire, use a remote control fire extinguisher to extinguish the fire. If it fails, evacuate the fire area and let it burn. Evacuate quickly if the safety valve of the container makes a noise or the container changes color. Keep away from tanks that are engulfed by fire.

SECTION 6: Accidental release measures**6.1. Personal Precautions, Protective Equipment and Emergency Procedures**

On the premise of ensuring safety, cut off the source of leakage as much as possible. Evacuate personnel to safe areas quickly. Keep people away from and upwind of spill/leak. Stay away from low-lying areas. Use personal protective equipment and avoid breathing vapor, smoke, gas or dust. Ensure adequate ventilation. Remove all sources of ignition.

6.2. Environmental Precautions

Collect the leakage. Do not let the product release into the drain. Avoid discharging to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

If small amount of leakage, absorb spilled material in dry sand or inert absorbent. If large amount of leakage, it is necessary to construct a dam in front of the leakage for subsequent treatment.

SECTION 7: Handling and storage**7.1. Precautions for Safe Handling**

Operators should be specially trained and strictly abide by the operating procedures. Operation and disposal should be carried out in a place with local ventilation or comprehensive ventilation facilities. Avoid contacting with eyes and skin. Avoid breathing vapor, mist or dust. See section 8 (Exposure Control/Personal Protection) for personal protection measures. Keep away from fire and heat sources. Smoking is strictly prohibited in the workplace. Avoid contacting with incompatible materials if not for its intended purpose. See section 10 (Stability and Reactivity) for incompatible substances. Hazardous materials may remain in used containers. Load and unload lightly during transportation to prevent the package from breaking. Wash hands and face thoroughly after the operation and prohibit eating or drinking in the workplace.

7.2. Conditions for Safe Storage

Refer to relevant national and local regulations before storage. Store in a dry, cool and ventilated place. It should be stored separately from incompatible materials, food and food containers. See section 10 (Stability and Reactivity) for incompatible substances. Keep the container tightly closed. Keep away from fire, heat sources. Prevent exposure to the sun. The storage area should be equipped with emergency treatment equipment and suitable storage materials. Materials with different fire extinguishing methods should be stored separately.

SECTION 8: Exposure controls/personal protection

8.1. Control Parameters

According to GBZ 2.1-2019 "Occupational exposure limits for hazardous agents in the workplace - Part 1: Chemical hazardous agents"

Limits in The Air of The Workplace: No information available.

Biological Limit Values: No information available.

8.2. Appropriate Engineering Controls

Maintain adequate ventilation, especially in enclosed areas. Provide eyewash and shower facilities near the workplace. Set up emergency evacuation channels. Equipped with corresponding types and quantities of fire-fighting equipment and leakage emergency treatment equipment.

8.3. Individual Protection Measures

Eye and face protection

Wear chemical safety protective glasses or face shield.

Hands protection

Wear chemical protection gloves.

Body protection

Wear flame-retardant, anti-static and anti-seeping protective clothing. Wear anti-static protective boots.

Respiratory protection:

When the concentration in the air exceeds the occupational exposure limit or irritation and other symptoms occur, please use a full-face multifunctional gas mask.

Other protection

Smoking is prohibited in the workplace. Wash thoroughly after work and do not bring work clothes to non-workplaces. The type of protective equipment must be selected according to the concentration and property of hazardous substances in a specific workplace.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Colorless transparent liquid
Odour	No information available.
pH	Not Applicable
Melting Point/Freezing Point (°C)	-57
Boiling Point/ Initial Boiling Point/ Boiling Range (°C)	158 - 173 °C
Flash Point (Closed Cup) (°C)	None
Flammability (solid, gas)	Not flammable.
Flammable Limits (LEL)	None detected
Flammable Limits (UEL)	None detected
Density (g/cm ³)	1.855 (@20°C)
Solubility	Not easily soluble in water.
Lower/Upper Explosion Limit [% (v/v)]	No information available.
Vapor Pressure (Pa)	290
Relative vapor density	No information available.
n-Octanol/Water Partition Coefficient	No information available.
Auto-ignition Temperature (°C)	No information available.
Decomposition Temperature (°C)	No information available.
Kinematic Viscosity (cSt)	2.2
Particle Characteristics	Not applicable.
Percent volatile	100%

SECTION 10: Stability and reactivity

10.1. Reactivity

Contacting with incompatible substances can cause decomposition or other chemical reactions.

10.2. Chemical Stability

Stable under normal conditions of storage and use.

10.3. Possibility of Hazardous Reactions

No information available.

10.4. Conditions to Avoid

Heat, open flame and sparks.

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Acute Toxicity

Please contact manufacturer listed in section 1.

11.2. Skin Corrosion/Irritation

No information available.

11.3. Serious Eye Damage/Irritation

No information available

11.4. Skin Sensitization

No information available.

11.5. Respiratory Sensitization

No information available.

11.6. Germ Cell Mutagenicity

No information available.

11.7. Carcinogenicity

No information available.

11.8. Reproductive Toxicity

No information available.

11.9. STOT-Single Exposure

No information.

11.10. STOT-Repeated Exposure

No information available.

11.11. Aspiration Hazard

No information available.

SECTION 12: Ecological information**12.1. Ecotoxicity**

No information available.

12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulative Potential

No information available.

12.4. Mobility in Soil

No information available.

12.5. Other Adverse Effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste Chemicals**

Disposal should refer to the relevant national and local laws and regulations. Recommend disposing by qualified hazardous waste treatment company.

13.2. Contaminated Packaging

Containers may still present chemical hazard when empty. Return to supplier for recycling if possible or disposal in accordance with national and local regulations.

13.3. Other Disposal Information

For the safety of persons conducting disposal, recycling or reclamation activities, see section 8 (Exposure controls and Personal protection) of the SDS.

SECTION 14: Transport Information

No regulation per IATA, IMO, or U.S. DOT.

For Transport Information, please Contact A.D Dawning Materials for more information.

SECTION 15: Regulatory information

15.1. China Regulations on the Control over Safety of Dangerous Chemicals

1. The regulations applicable to the safety management for the production, storage, use, business and transportation of hazardous chemicals.
2. Whether the product is listed in "China Catalog of Hazardous Chemicals" (2015 Edition): No.
3. Whether the product complies with the "Principles for Definition and Determination of Hazardous Chemicals" in "China Catalogue of Hazardous Chemicals" (2015 Edition): Yes.

15.2. China Provisions on Environmental Administration of New Chemical Substances

1. The provisions applicable to the environmental management of new chemical substances which is used in research, production, import and processing.
2. Whether the product is listed in "China Inventory of Existing Chemical Substances" (2013 Edition): Included.

15.3. 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. Revision Date

11/30/2023

16.2. Previous Date:

06/30/2022

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 06/30/2022. 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.