

MATERIAL SAFETY DATA SHEET

: According to EC-directive 2001/58/EC

Azodicarbonamide(AC-7000F)

HS Code: 29270000.90

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product label name	Azodicarbonamide Qingdao YLSCH Industry&Trade Co.,Ltd
Supplier	Room 501,2-3 Unit. No.8,Zhengzhou Road, Qingdao,China. TEL: +86 18661665800
Emergency telephone	+86 18661665800
Intended use	Blowing Agent

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Azodicarbonamide
CAS NO.	123-77-3
Chemical description	Pale yellow fine powder
TSCA NO.	none
EINECS NO.	204-650-8
Other information	C ₂ H ₄ N ₄ O ₂

3. HAZARDS IDENTIFICATION

Hazard class and label elements of the product according to GHS(the sixth revised edition):

GHS Hazard Class

Flammable Solids Category 1

Sensitization-Respiratory Category 1

GHS Label Elements

Pictogram



Signal Word

DANGER

Hazard Statements

H228 Flammable solid

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements

Prevention

P210	Keep away from heat,hot surfaces,sparks,open flames and other ignition sources.No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof (electrical/ventilating/lighting) equipment.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
Response	
P304+P340	If inhaled:Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms:Call a poisomcenter/doctor.
Storage	Not applicable
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

4. FIRST AID MEASURES

Description of First Aid Measures

General Advice	Immediate medical attention is required.Show this safety data sheet(SDS) to the doctor in attendance.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin Contact	Take off contaminated clothing and shoes immediately.Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of First-Aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

Most Important Symptoms and Effects, both Acute and Delayed

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically.

Symptoms may be delayed.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Dry chemical, carbon dioxide, water spray, alcohol-resistant foam.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter or spread fire.

Specific Hazards Arising from the Substance or Mixture

Will form explosive mixtures with air.

Detonation may occur from heavy impact or excessive heating.

Flammable solid which burns and propagates flame easily, even when partly wetted with water.

May burn fiercely.

Any source of ignition, i.e. friction, heat, sparks or flame, may cause fire or explosion.

Containers may explode when heated.

Fire exposed containers may vent contents through pressure relief valves.

May expansion or decompose explosively when heated or involved in fire.

Advice for Firefighters

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent)and full protective gear.

Fight fire from a safe distance, with adequate cover.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Remove all sources of ignition.

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Discharge into the environment must be avoided.

Methods and Materials for Containment and Cleaning Up

Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.

Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Remove all sources of ignition. Use spark proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

Precautions for Handling

To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.

Use explosion proof equipment.

Handling is performed in a well ventilated place.

Wear suitable protective equipment.

Avoid contact with skin and eyes.

Keep away from heat/sparks/open flames/ hot surfaces.

Take precautionary measures against static discharges.

Precautions for Storage

Keep containers tightly closed.

Keep containers in a dry, cool and well-ventilated place.

Keep away from heat/sparks/open flames/ hot surfaces.

Store away from incompatible materials and foodstuff containers.

8.EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limit Values

Component	Country/Region	Limit Value - Eight Hours		Limit Value -Short Term	
		ppm	mg/m ³	ppm	mg/m ³
Azodicarbonamide 123-77-3	United Kingdom	-	1	-	3
	Ireland	-	1	-	3

Biological Limit Values

No information available

Monitoring Methods

EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to

chemical and biological agents.

GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air(Series standard).

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Ensure that eyewash stations and safety showers are close to the workstation location.

Use explosion-proof electrical/ventilating/lighting/equipment.

Set up emergency exit and necessary risk- elimination area.

Personal Protection Equipment

Eye Protection

Tightly fitig safety goggles (approved by EN 166(EU) or NIOSH (US)).

Hand Protection

Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.

Respiratory protection

If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-

purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

Skin And Body Protection

Wear fire/flame resistant/retardant clothing and antistatic boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow powder	Odor	/
Odor Threshold	/	pH	/
Melting Point/Freezing Point	225°C	Initial Boiling Point and Boiling Range	/
Flash Point	/	Evaporation Rate	/
Flammability	/	Upper/lower explosive limits	/
Vapor Pressure(MPa)		Relative Vapour Density(Air= 1)	
Relative Density(Water=1)	1.65	Solubility	Insoluble in water
N-Octanol/Water Partition Coefficient	/	Auto-Ignition Temperature	205°C
Decomposition Temperatur	/	Kinematic Viscosity (mm/s)	/
Particle characteristics	/		

10. STABILITY AND REACTIVITY

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical Stability	Stable under proper operation and storage conditions.
Possibility of Hazardous Reactions	No information available.
Conditions to Avoid	Incompatible materials, heat, flame and spark.
Incompatible Materials	No information available.
Hazardous Decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity				
Component	CAS No.	LD₅₀(Oral)	LD₅₀(Dermal)	LC₅₀(Inhalation, 4h)
Azodicarbonamide	123-77-3	> 6400mg/kg(Rat)	> 500mg/kg(Rat)	/
Skin Corrosion/Irritation	No information available.			
Serious Eye Damage/Irritation	No information available.			
Skin Sensitization	No information available.			
Respiratory Sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled (Category1)(Azodicarbonamide)			
Germ Cell Mutagenicity	No information available.			

Carcinogenicity

ID	CAS NO.	Component	IARC	NTP
1	123-77-3	Azodicarbonamide	/	/
Reproductive Toxicity		No information available.		
Reproductive Toxicity (Additional)		No information available.		
STOT-Single Exposure		No information available		
STOT-Repeated Exposure		No information available.		
Aspiration Hazard		No information available.		

12. ECOLOGICAL INFORMATION

Acute Aquatic Toxicity	No information available.
Chronic Aquatic Toxicity	No information available.
Others	
Persistence and Degradability	No information available.
Bioaccumulative Potential	No information available.
Mobility in Soil	No information available.
Results of PBT and vPvB Assessment	No information available.

13. DISPOSAL CONSIDERATIONS

Waste Chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated Packaging Disposal Recommendations	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible. Refer to section 13.1 and 13.2.

14. TRANSPORT INFORMATION

Transporting Label



Marine pollutant

NONE

UN Number

3242

UN Proper Shipping Name

AZODICARBONAMIDE

Transport Hazard Class

4.1

Transport Subsidiary Hazard Class NONE

Packing Group II

15. REGULATORY INFORMATION

International Chemical Inventory

COMPONENT	EIENCS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Azodicarbonamide	✓	✓	✓	✓	✓	✓	✓	✓	✓

[EINECS] European Inventory of Existing Commercial Chemical Substances.

[TSCA] United States Toxic Substances Control Act Inventory.

[DSL] Canadian Domestic Substances List.

[IECSC] China Inventory of Existing Chemical Substances.

[NZIoC] New Zealand Inventory of Chemicals.

[PICCS] Philippines Inventory of Chemicals and Chemical Substances.

[KECI] Existing and Evaluated Chemical Substances.

[AICS] Australia Inventory of Chemical Substances.

[ENCS] Existing And New Chemical Substances.

NOTE

“✓” Indicates that the substance included in the regulations.

“X” That no data or included in the regulations.

16. ADDITIONAL INFORMATION

Creation Date 18,OCT 2019

Revision Date 18,OCT 2019

Reason for Revision

Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 6th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.