

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: 4,4'-(Ethene-1,2-diyl)dibenzonitrile

CAS Number: 5216-36-4

Catalog Numbers: AK129985

For R&D use only.

Company Identification:

Ark Pharm, Inc.

1840 Industrial Drive, Suite 280

Libertyville, IL 60048 USA

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2. COMPOSITION, INFORMATION ON INGREDIENTS

Molecular Formula: C₁₆H₁₀N₂

Molecular Weight: 230.264g/mol

Component		Concentration
4,4'-(Ethene-1,2-diyl)dibenzonitrile		
CAS Number	5216-36-4	-

3. HAZARDS IDENTIFICATION EMERGENCY OVERVIEW

3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Harmful if swallowed. Irritating to eyes, respiratory system and skin.

3.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]



Pictogram

Signal word

Warning

Hazard statement(s)

H302

Harmful if swallowed.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.


Precautionary statement(s)

P261

Avoid breathing dust.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several

	minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	None
According to European Directive 67/548/EEC as amended	
Hazard symbol(s)	
R-phrases(s)	
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
S-phrases(s)	
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves.
3.3 Other hazards	None

4. FIRST AID MEASURES

Eyes: Flush eyes with plenty of water occasionally lifting the upper and lower lids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Wash mouth out with water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

5. FIRE FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus and full protective gear.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide or chemical foam.

6. ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment.

Spills/Leaks: Vacuum or sweep up material and place into suitable disposal container. Avoid generating dusty conditions.

7. HANDLING AND STORAGE

Handling: Avoid breathing dust, vapor, mist or gas. Avoid contact with eyes, skin.

Storage: Storage temperature: 2 - 4 °C and Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes: Wear chemical safety goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Wear appropriate respirators where necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	445 °C at 760 mmHg
Melting Point	No data available.
Solubility in water	Slightly soluble.
Vapor Pressure	No data available.
Vapor Density	No data available.

10. STABILITY AND REACTIVITY

Chemical Stability: This product is relatively unstable under normal temperature.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous combustion or Decomposition products: Carbon monoxide, carbon dioxide, and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation

No data available.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional Information

RTECS: No data available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: _ IMDG: _ IATA: _

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: _ IMDG: _ IATA: _

14.4 Packaging group

ADR/RID: _ IMDG: _ IATA: _

14.5 Environmental hazards

ADR/RID: No IMDG Marine pollutant: No IATA: No

14.6 Special precautions for user

No data available.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture:

No data available.

Chemical Safety Assessment: No data available.

16. ADDITIONAL INFORMATION

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

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