

Arichem, LLC  
MATERIAL SAFETY DATA SHEET  
DIPHENYL SULFONE

Print Date: October 10, 2001

1. MATERIAL IDENTIFICATION

Specification number: 56

Manufacturer: Arichem, LLC  
187 Sloss Industries Rd.  
Ariton, AL 36311

Phone numbers: Product Information: 334/762-2314  
8:00 AM to 4:30 PM Monday thru Friday  
24Hr contact: 333/762-2314  
Transport Emergencies:  
Call CHEMTREC: 1/800/424-9300

DOT number: not established

Product name: Diphenyl Sulfone

Chemical name: 1,1'-Sulfonylbisbenzene

CAS number: 127-63-0

Formula: C12 H10 O2S

NFPA rating: Health 0; Flammability 1; Reactivity 0

HMIS rating: Health 0; Flammability 1; Reactivity 0  
Personal Protection I

Synonyms: phenyl sulfone and DPS

2. COMPONENTS

Material	CAS#	% by wt.
Diphenyl Sulfone	127-63-9	80-100

All components of this material are listed on the TSCA Inventory.  
See Sections 3, 8, and 11 for exposure information.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

An odorless tan to white crystalline solid. This material presents no significant fire, explosion or health hazards.

4. FIRST AID

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Eyes or skin contact:  
In the event of contact with the eyes or skin immediately

4. FIRST AID (cont.)

Eyes and skin contact:(cont.)  
begin flushing with water. Continue for at least 20 minutes.  
Ingestion:  
Affects unknown. Get trained medical help immediately.

Inhalation: (cont.)

In the event of exposure to concentrated dust, immediately move the exposed person to fresh air. If they are not breathing give artificial respiration. If breathing appears difficult give oxygen. Call for trained medical help immediately.

IN ALL CASES GET TRAINED MEDICAL HELP IMMEDIATELY

5. FIRE AND EXPLOSION DATA

This material does not present a significant fire or explosion hazard.

Flash point: >230oF (>110oC)

Flammable limits (air % by vol.):

a. Lower explosive limit: not established

b. Upper explosive limit: not established

Autoignition: not established

Extinguishing media:

Dry chemical, carbon dioxide, water fog, and regular foam.

Fire and Explosion:

Decomposes @ 750oF (400oC) - Decomposition products may contain SOx vapors

Fire Fighting Instructions:

1. Avoid combustion vapors.
2. Use self-contained positive pressure breathing apparatus and full protective fire fighting clothing.
3. Approach from upwind.

6. ACCIDENTAL RELEASE MEASURES

1. Large and Small Spills: Take up with clean, dry shovel and place in a suitable container for later disposal or recycle. See section 13.
2. Wear proper personal protective equipment while working with spill. See section 8.

This material does not have any CERCLA reportable quantities.

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7. HANDLING AND STORAGE

Handling:

1. Handle in a well ventilated area.
2. Where adequate ventilation is not possible, use a NIOSH/MSHA approved dust/mist respirator. See Section 8.
3. Use proper protective equipment.

Storage:

1. Store in a cool, well-ventilated location.
2. Store separate from combustibles and other reactive materials.
3. Do not puncture containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

The PEL for nuisance dust is 15 mg/m<sup>3</sup> and 5 mg/m<sup>3</sup> for the

1. respirator fraction. Ventilation capable of maintaining dust levels below this limit is recommended.
2. Where adequate ventilation is not possible use a NIOSH/MSHA

approved air purifying respirator or airline supplies depending upon concentrations.

3. Wear eye protection and rubber gloves while working with this material.

Exposure Limits:

OSHA:PEL 15 mg/m3 Total dust  
5 mg/m3 Respirable fraction

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Tan to white crystalline solid

Odor: Odorless

Physical state: Solid

pH: not established

Vapor pressure (mmHg): not established

Vapor density (air=1): not established

Boiling point: 714.2oF (379oC)

Melting point: 260.6oF (127-129oC)

Solubility in water: not established (NIL)

Bulk Density 3.8 lbs/gal

#### 10. STABILITY AND REACTIVITY

a. Stability: Stable

b. Hazardous Polymerization: Will not occur

c. Incompatibility: None known under normal conditions

d. Decomposition Products: Vapors of the SOx type

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#### 11. TOXICOLOGICAL INFORMATION

Oral rat: LD50 >2g/Kg

Exposure Limits:

OSHA:PEL 15mg/m3 Total dust

5mg/m3 Respirable dust

#### 12. ECOLOGICAL INFORMATION

Environmental hazard. Keep out of waterways.

#### 13. DISPOSAL INFORMATION

This material has no CERCLA reportable quantities or RCRA hazardous waste codes. Recycle or dispose of in accordance with Federal, State, and Local regulations. Please note that this information is for Diphenyl Sulfone in its original form. Any alteration of this material can void this information.

#### 14. TRANSPORTATION INFORMATION

Proper shipping name: Not a DOT regulated material

Hazard class: none

UN no.: not applicable

DOT/IMO label: not required

Special provisions: not applicable

Packaging:

a. Group: not established

b. authorization: not established

c: exceptions: not established

Quantity limitations: not established

a. passenger, aircraft or rail: not established

b. cargo only, aircraft: not established

Stowage provisions: not established

15. REGULATORY INFORMATION

TSCA STATUS:		On TSCA Inventory
CERCLA RQ:	None	
SARA TITLE III:		
Section 302 TPQ:		No
Section 304 EHS:		No
Section 311/312:		No
Section 313:		No
RCRA WASTE NUMBER:		None

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California Proposition 65:	No
WHIMS:	No

16. OTHER INFORMATION

Section(s) revised: All revised to new format and to include most up to date information.  
MSDS date: 4/94  
Supersedes date: 8/93

The data of this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material. While the data contained herein is based on technical data that Arichem, LLC believes to be reliable, it is intended for use by persons having technical skill and at their own discretion and risk.

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