

## **4,4'-(4,4'-Isopropylidenediphenyl-1,1'-diyldioxy)dianiline 13080-86-9 MSDS**

### **Section 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE**

#### **Product identifiers**

: 4,4'-(4,4'-Isopropylidenediphenyl-1,1'-

Product name

diyldioxy)dianiline

CAS-No. : 13080-86-9

#### **Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Manufacture of substances

### **Section 2. HAZARDS IDENTIFICATION**

#### **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.

#### **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/ fume/ gas/ mist/ vapours/ spray.

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 none

Statements

##### **According to European Directive 67/548/EEC as amended.**

Hazard symbol(s)

R-phrases)

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrases)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

**Other hazards - none**

### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Synonyms : 2,2-Bis[4-(4-aminophenoxy)phenyl]propane

Formula : C<sub>27</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub>

Molecular Weight : 410,51 g/mol

Component Concentration

#### **4,4'-[Isopropylidenebis(4,1-phenyleneoxy)]dianiline**

CAS-No. 13080-86-9 -

EC-No. 235-985-8

### Section 4. FIRST AID MEASURES

#### Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

##### Most important symptoms and effects, both acute and delayed

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes

cyanosis. Onset may be delayed 2 to 4 hours or longer., To the best of our knowledge, the chemical,

physical, and toxicological properties have not been thoroughly investigated.

##### Indication of any immediate medical attention and special treatment needed

no data available

### Section 5. FIREFIGHTING MEASURES

#### Extinguishing media

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

##### Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

no data available

**Section 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.  
Ensure

adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**Section 7. HANDLING AND STORAGE****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

**Specific end use(s)**

no data available

**Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Components with workplace control parameters****Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and  
at the end of workday.

**Personal protective equipment****Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Section 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

- a) Appearance      Form: powder  
Colour: white
- b) Odour      no data available
- c) Odour Threshold      no data available
- d) pH      no data available
- e) Melting point/freezing      Melting point/range: 127 - 130 °C - lit.  
point
- f) Initial boiling point and no data available  
boiling range
- g) Flash point      no data available
- h) Evaporation rate      no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower      no data available  
flammability or  
explosive limits
- k) Vapour pressure      no data available
- l) Vapour density      no data available
- m) Relative density      no data available
- n) Water solubility      no data available
- o) Partition coefficient: n- no data available  
octanol/water
- p) Auto-ignition      no data available  
temperature
- q) Decomposition      no data available  
temperature
- r) Viscosity      no data available
- s) Explosive properties      no data available
- t) Oxidizing properties      no data available

### **Other safety information**

no data available

## Section 10. STABILITY AND REACTIVITY

### Reactivity

no data available

### Chemical stability

no data available

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Humid air Keep away from direct sunlight. Heat.

### Incompatible materials

Strong oxidizing agents Strong oxidizing agents

### Hazardous decomposition products

Other decomposition products - no data available

## Section 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 308 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Tremor. Skin and

Appendages:

Other: Hair.

Inhalation: no data available

#### Skin corrosion/irritation

#### Serious eye damage/eye irritation

Eyes - rabbit -

#### 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

Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** Harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes serious eye irritation.

**Signs and Symptoms of Exposure**

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes

cyanosis. Onset may be delayed 2 to 4 hours or longer., To the best of our knowledge, the chemical,

physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: CY1062500

**Section 12. ECOLOGICAL INFORMATION**

**Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Results of PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

**Section 13. DISPOSAL CONSIDERATIONS**

**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.

**Section 14. TRANSPORT INFORMATION**

**UN number**

ADR/RID: - IMDG: - IATA: -

**UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**Transport hazard class(es)**

ADR/RID: - IMDG: - IATA: -

**Packaging group**

ADR/RID: -      IMDG: -      IATA: -

**Environmental hazards**

ADR/RID: no      IMDG Marine Pollutant: no      IATA: no

**Special precautions for user**

no data available

**Section 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

**Section 16. OTHER INFORMATION****Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be

used only as a guide. The information in this document is based on the present state of our knowledge

and is applicable to the product with regard to appropriate safety precautions. It does not represent any

guarantee of the properties of the product. Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See

and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.