JADE CHEMICAL S.L.

COMPANY PROFILE

JADE CHEMICAL was founded in Madrid in 2023 and is a company specialized in the development, production and marketing of fine chemicals. The products are mainly used in rubber tires, insulation materials, aerospace composites, carbon fiber composites, electronic communications, optical materials, rubber and plastic modification and pharmaceutical intermediates.

The company currently has an excellent sales and service team warehouse in Europe, which can meet the needs of localized services for customers within Europe. In addition to providing products of excellent quality, the company is also committed to providing integrated logistics and warehousing services to solve customers' worries.

The company was first established in China in 2013 and has one R&D facility and two manufacturing plants in China, with customers all over the world in many industries. As a growing company for the global market, we not only provide standard products to our customers, but also custom product development services according to their needs.

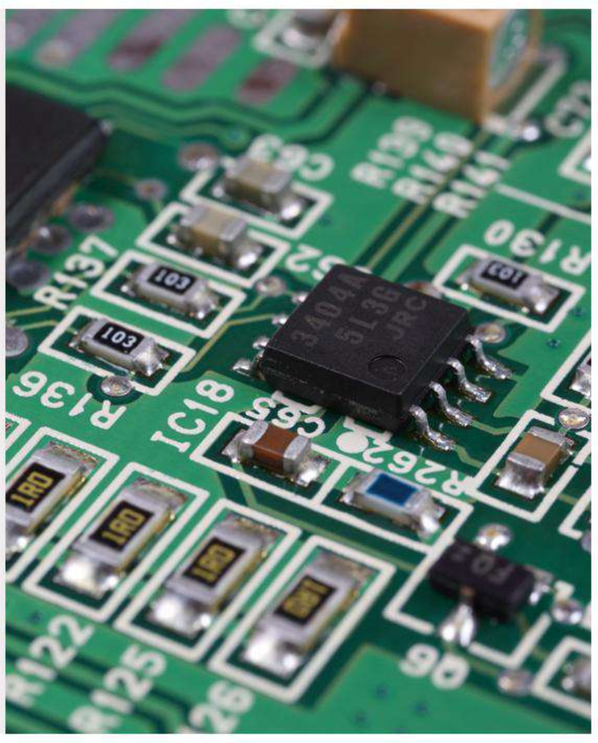
We are committed to creating value for all our customers, shareholders and employees. The pursuit of excellence and continuous innovation is the philosophy we adhere to.

01 Production Control

Strict and prudent working attitude,highly efficient management,and advanced facilities are essential to product safety and quality. Jade Chemical has implemented an advanced production line with automatic control to assure the homogeneity of products.The production and quality control always follows the ISO 9001 regulations and principles strictly.

02 Quality Control

We have established and implemented an integrated quality assurance system.We closely monitor the quality from raw materials to final products by using a variety of advanced analytical instruments such as gas chromatography,infrared analyzer,high performance liquid chromatography,gel instrument,thermal analysis system etc.



03 Research and Development Center

innovation is the engine of the Jade Chemical growth.After years of efforts,our company in such aspects as scientific research development,technology industrialization formed own advantages,not only can we provide high quality products,to undertake a variety of analysis detection,also can under take chemical or entrusted by customers at home and abroad or cooperate new material,new technology,new technology research and development.And a number of patented products.

04 Custom Service

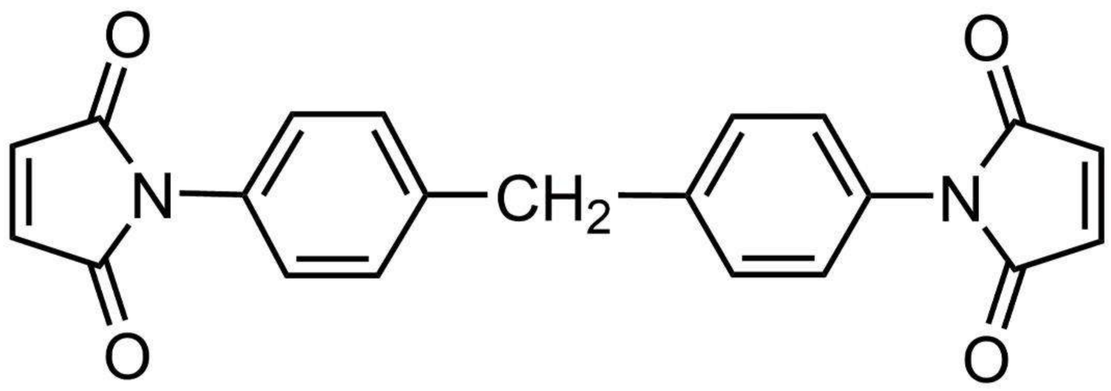
Jade Chemical is engaged in providing highly individualized solutions and innovative to our customers.We discarded traditional “product oriented”way of service in the industry.Based on our powerful R&D,product testing,and application technology platforms,we are able to individualize our products according to our customers 'need and optimize our products 'performance in every respect.We can help our customers derive the economic and competitive advantage over other companies in the industry and maximize their added value.

N, N ′ - 4, 4′- DIPHENYLMETHANE BISMALEIMIDE

Abbreviated: BMI or BDM.(BMI-1000)

CAS No. : 13676-54-5 Molecular weight: 358.37

Formula: $C_{21}H_{14}N_2O_4$ Structural formula:



Technical indicators

Iterms	Unit	Index		
		Method of acetone	Toluene	Masterwork
Appearance		light yellow or yellow solid powder.	Yellow or pale yellow crystalline powder	Yellow crystalline powder.
Melting point	℃	148 ~ 158	150 ~ 158	152 ~ 158
Acid value	mgKOH/g	< 1		
Volatility	%	≤1	≤1	≤0.5
Purity	%	> 98	> 98	> 99.5
200 degrees gel time	Min.	< 5		
Toluene solubility		Soluble or a few in solubles	Transparent solution. Soluble	Clear and transparent solution
Suggested applications		Mica tape products, high temperature resistant insulating varnish	Glass fiber insulating laminated sheet, pipe, parts, diamond sand wheel adhesive, engineering plastics modifier, rubber vulcanization agent.	Advanced composite resin, aerospace structural materials, high-grade printing electronic circuit boards, high-performance mica tape..

Usage: BMI level as manufacturing heat resistant structure material, H or F electrical insulating materials, a kind of ideal resin matrix are widely used in aviation, aerospace, electric power, electronics, computer,communication, automobile, railway, construction and other industries.

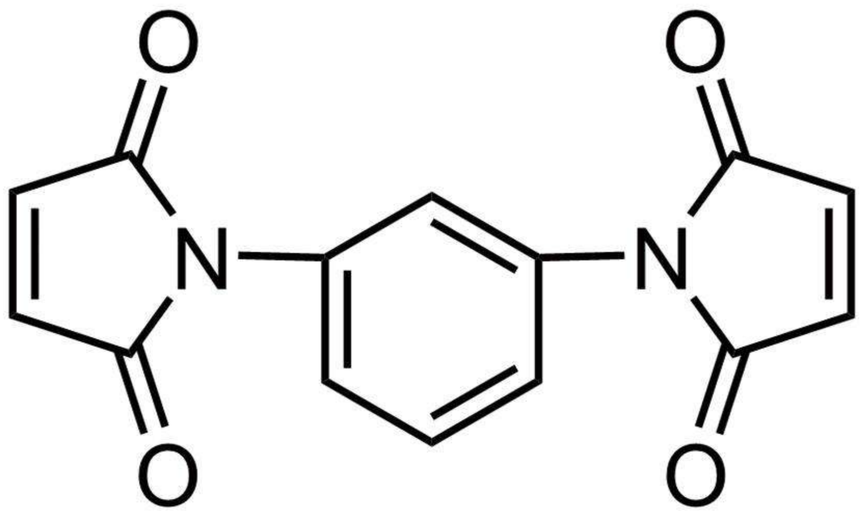
- Motor insulation materials,The high temperature resistant dipping paint (solvent and non solvent), wire coating, laminated board, knitting belt, mica tape, electronic copper clad, molded plastic, epoxy modified F ~ H class powder coating, casting pieces.
- Advanced composite materials, polymer matrix: aerospace, aeronautical structure materials, carbon fiber high temperature resistant structure, high-grade printing circuit board and other functional materials, etc.).
- Engineering plastics such as polypropylene PP, nylon, PBT, PA, ABS, APC, PVC, EPDM, PMMA material such as the enhancement of modifying agent (such as: glass fiber reinforced polypropylene to join < 1% of BMI, can make the mechanical strength and Martin heat resistant double effect), can also be us-ed in new type rubber vulcanizing agent, etc. 4. Wear resistant material, diamond wheel, heavy duty grinding wheel, brake pads, high temperature resistant bearing binder, magnetic materials, etc.

N,N' - M - PHENYLENE BISMALEIMIDE

Abbreviated: PDM or HVA - 2. (BMI-3000)

CAS No.: 3006-93-7 **Molecular weight:** 268

Formula: $C_{14}H_8N_2O_4$ **Structural formula:**



Technical indicators

Iterms	Index
Appearance	yellow powder
Melting point, ℃	≥195℃
Burning residue, %	≤0.5%
The heating loss, %	≤0.5%
Screenings, 325 目	≤0.5%

Usage: Also called PDM or HVA - 2, multi-functional rubber additives, can be used in the process of rubber processing as vulcanizing agent, also can make peroxide system helps the vulcanizing agent, can make anti scorching agent and tackifier, applies to general-purpose rubber, also applies to special rubber and rubber and system.Cooperate with sulfur in natural rubber, can prevent sulfide to return the original and improved heat resistance, reduce the heat generated, ageing resistance. Improve rubber and cord adhesion force and sulfide film.

Used in truck tire shoulder gum, rubber cushion layer. It can solve the problem of oblique load tire shoulder empty.It can also be used for large size thick products of natural rubber. In chloroprene rubber, chlorosulfonated polyethylene rubber, styrene-butadiene rubber, nitrile rubber, isoprene rubber, butyl rubber ,brominated butyl rubber, acrylate rubber, silicone rubber and rubber and rubber and other special rubber, as auxiliary vulcanizing agent, crosslinking performance can be improved significantly, improve the heat resistance, is suitable for the high temperature fluidization system. Reduce the compression permanent deformation is very obvious. It can reduce the do-sage of peroxide, can prevent the rubber scorch in the process, improve and rubber tire cord and metal bonding strength.

N, N ′- (4-METHYL-1,3-PHENYLENE) BISMALEIMIDE

Abbreviated: BMI-3000H

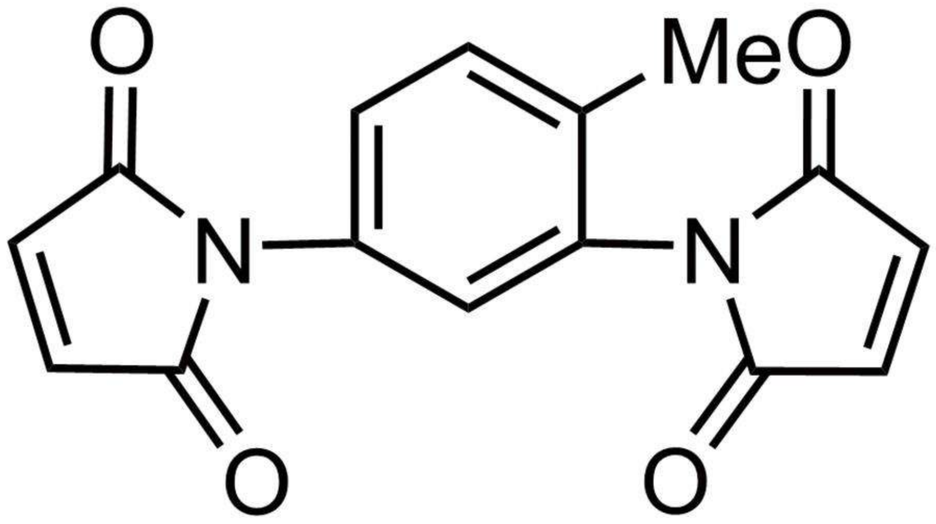
CAS No : 6422-83-9

EINECS No: 229-175-3

Formula: $C_{15}H_{10}N_2O_4$

Molecular weight: 282.25

Structural formula:



Technical indicators

Iterms	Index
Appearance	light yellow crystal or powder
Purity, %	≥95.0
Boiling point,℃	≥511.8
Moisture , %	≤0.50
Volatility , %	≤0.30
Gel time,min	≤3.0
Flash point , ℃	≥253.4

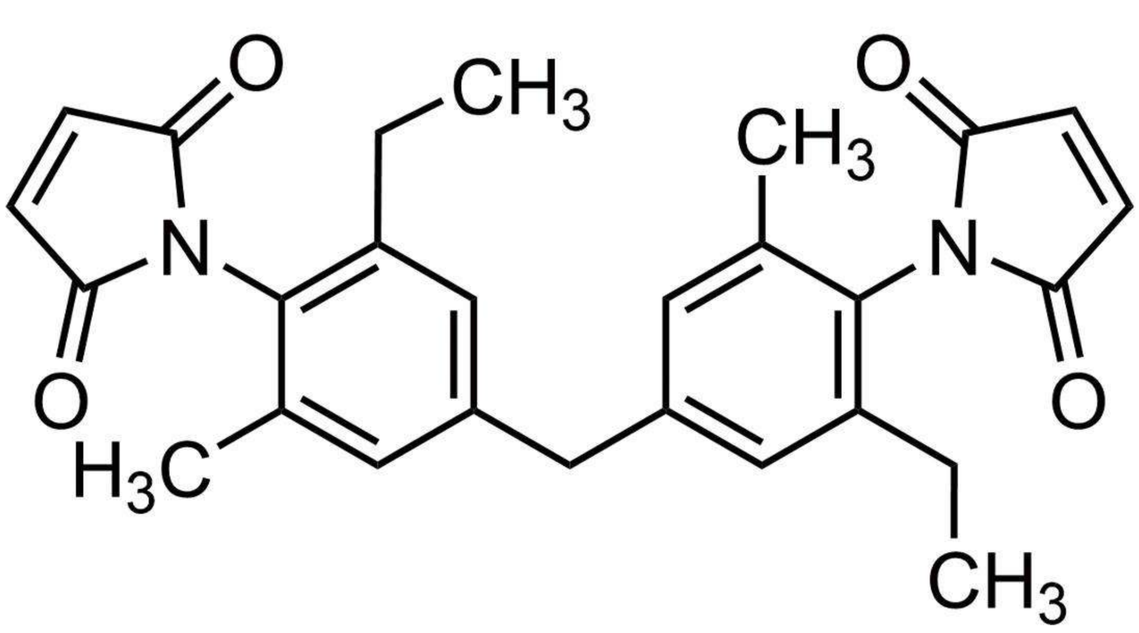
Usage: As an important resin matrix, the product has excellent high temperature resistance, oxidation resistance and radiation resistance, widely used in aerospace, electric power, communication, automobile, railway, construction, computer and other industrial fields.

3,3-DIMETHYL-5,5-DIETHYL-4, 4-DIPHENYLMETHANE BISMALEIMIDE

Abbreviated: BMI-5100(BMI-70)

CAS No.: 105391-33-1 **Molecular weight:** 442.51

Formula: $C_{27}H_{26}N_2O_4$ **Structural formula:**



Technical indicators

Iterms	Index
Appearance	White or Light-yellow powder
Purity, %	>98
Melting point ,℃	158~162℃
Loss on drying,%	≤1
Acid value,(mgKOH/g)	≤1

Usage: BMI-5100 as manufacturing heat resistant structure material,H or C electrical insulating materials, a kind of ideal resin matrix are widely used in aviation,aerospace,electric power,electronics,computer,communication,automobile,railway,construction and other industries.

- Motor insulation materials,the high temperature resistant dipping paint,wire coating,laminated board,knitting belt,mica tape,electronic copper clad,molded plastic,casting pieces.
- Advanced composite materials,polymer matrix: aerospace,aeronautical structure materials,carbon fiber high temperature resistant structure,high-grade printing circuit board and other functional materials,etc.

2,2-BIS(4-(4-MALEIMIDEPHENOXY)PHENYL) PROPANE

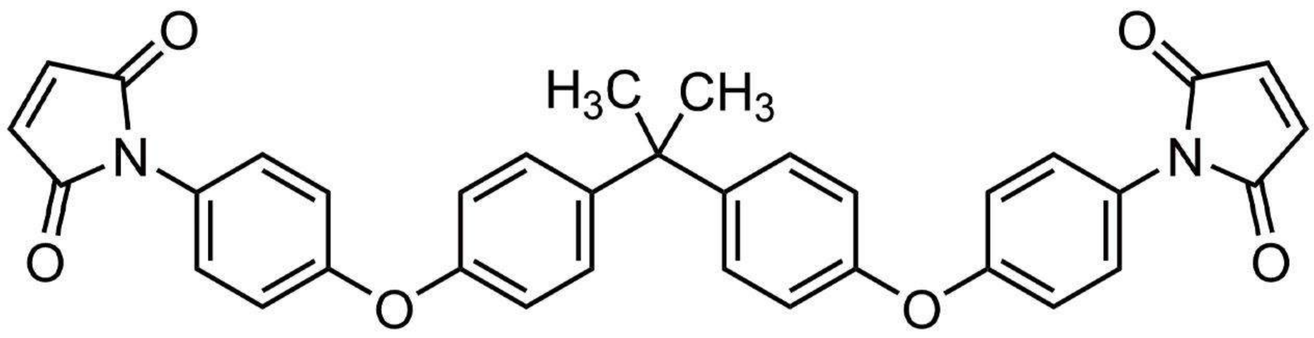
Abbreviated: BMI-80

CAS No.: 79922-55-7

Molecular weight: 570.5907

Formula: $C_{35}H_{26}N_2O_6$

Structural formula:



Technical indicators

Iterms	Index
Appearance	light yellow crystal or powder
Purity, %	>98.0
Melting point ,℃	150~170℃
Loss on drying,%	<0.2
Acid value,(mgKOH/g)	<2.5

Usage: Mainly used for copper-clad laminates.

ANILINE, 4-[2-(4-HYDROXYPHENYL)PROPAN-2-YL] PHENOL

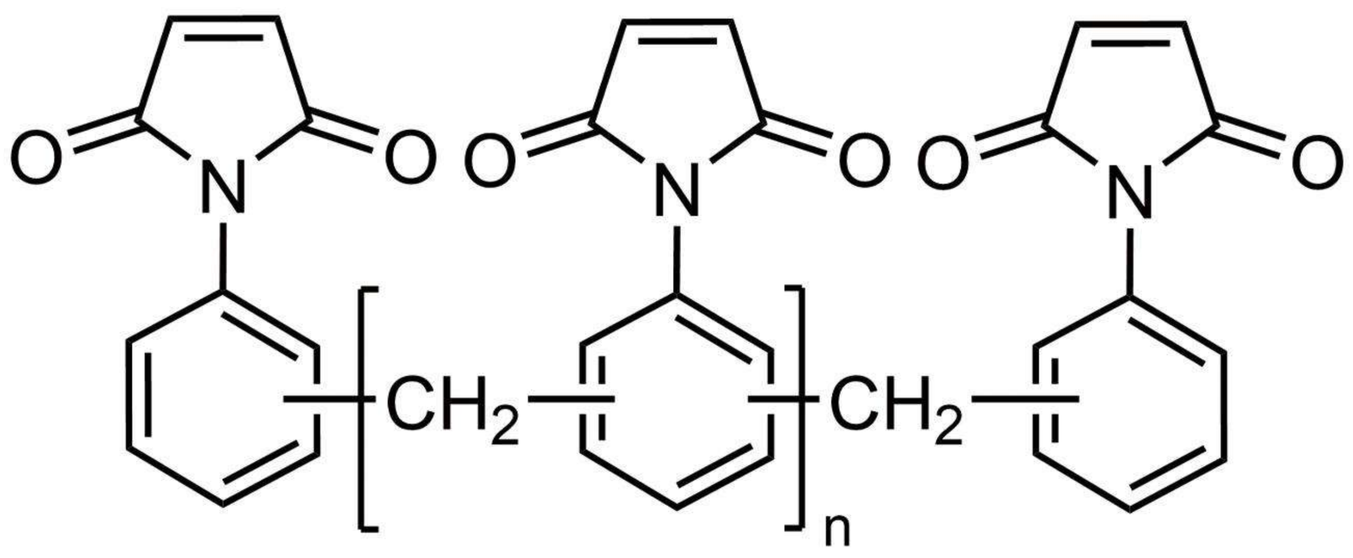
Abbreviated: BMI-2300

CAS No.: 67784-74-1

Molecular weight: 321.41

Formula: $C_{21}H_{23}NO_2$

Structural formula:



Technical indicators

Iterms	Index
Appearance	Light-yellow~brown crystal
Melting point ,℃	70~145℃
Moisture content, %	<0.15
Acid value, (mgKOH/g)	<3.0

Usage: BMI-2300 as manufacturing heat resistant structure matenial,H or C electrical insulating materials,a kind of ideal resin matrix are widely used in electric power,electronics,computer,communication and other industries.

- Motor insulation materials,the high temperature resistant dipping paint,wire coating,laminated board, knitting belt,mica tape,electronic copper clad,molded plastic,casting pieces.
- Advanced composite materials, polymer matrix: aerospace, aeronautical structure materials, carbon fiber high temperature resistant structure,high-grade printing circuit board and other functional materials,etc.

ULTRAFINE POLYIMIDE RESIN POWDER (PI)

Abbreviated: PI

Processing Performance

- During the curing reaction do not produce low molecular volatiles, has good compatibility with all kinds of packing, high bonding strength, good flexibility, after curing of diamond grinding wheel with phenolic resin sand round compared to its mechanical strength with 30 ~ 40%, heat-resisting temperature more than 50 degrees higher, too.
- When grinding wheel itself ,the temperature is low, grinding sound is ringing, the surface of the machined part has higher quality and lower surface roughness.
- Molding equipment and process is same as the phenolic resin. curing speed is faster.

Technical indicators

Iterms	Index
Appearance	yellow superfine powder
Density	1.3g/cm3
Gel time 200℃	300 ~ 500s
Softening point	90~130℃
Storage period	>1 year

Usage: This product appearance for yellow superfine powder, mainly used as diamond wheel, high-speed heavy-duty resin grinding wheel and grinding resin grinding wheel bond strength, it has excellent heat resistance, abrasion resistance, molten liquidity is good, the abrasive has good wetting and bonding performance.

Processing is convenient, good in usability, long-term use of the results showed that this product has been the preferred ideal binder, users.

PI products as high temperature resistant polymer and resin of high performance composite matrix resin, are also increasingly widely used in aerospace, electrical/electronics, motorcycle, automobile, precision machinery and automatic office machinery, and other fields can be used in the preparation of high resistance, low temperature solid self-lubricating materials, precision machinery parts, all kinds of bearings, gaskets, sealing ring, radar equipment, molded products, paint, adhesives and electric insulation board, insulation tube, transformer insulation of wire coil, coil high-performance electrical insulation materials and other products.

N-PHENYLMALEIMIDE

Abbreviated: N-PMI

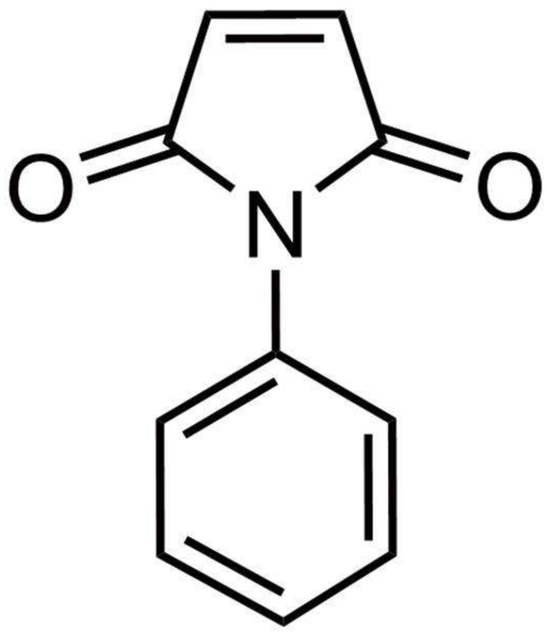
CAS No.: 941-69-5

EINECS No: 213-382-0

Formula: $C_{10}H_7NO_2$

Molecular weight: 173.17

Structural formula:



Technical indicators

Iterms	Index
Appearance	yellow flake solid
Purity, %	≥98.0
Initial M.P. ,℃	≥88.0
Loss on drying,%	≤0.50
Ash,%	≤0.30

Usage

- Heat-resistant modifiers (ABS, PVC, PMMA)
- Pharmaceutical intermediates
- Optical materials
- Antifouling paint

N-CYCLOHEXYLMALEIMIDE

Abbreviated: CH-MI

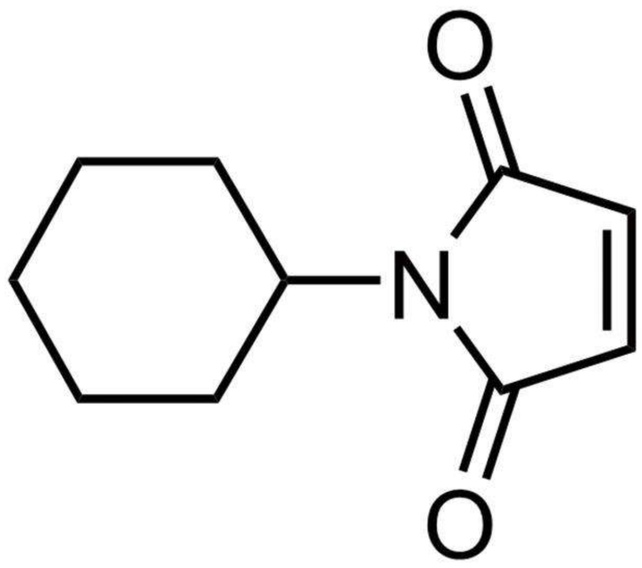
CAS No. : 1631-25-0

EINECS No: 216-360-6

Formula: $C_{10}H_{13}NO_2$

Molecular weight: 179.22

Structural formula:



Technical indicators

Iterms	Index
Appearance	White or Light-yellow crystal
Purity, %	≥98.0
Initial M.P. ,℃	≥86.0
Loss on drying,%	≤0.50
Ash,%	≤0.30

Usage

- Heat-resistant modifiers (ABS, PVC, PMMA)
- Pharmaceutical intermediates
- Optical materials
- Antifouling paint

2, 2 ′- DIALLYL BISPHENOL A

Abbreviated: DABPA

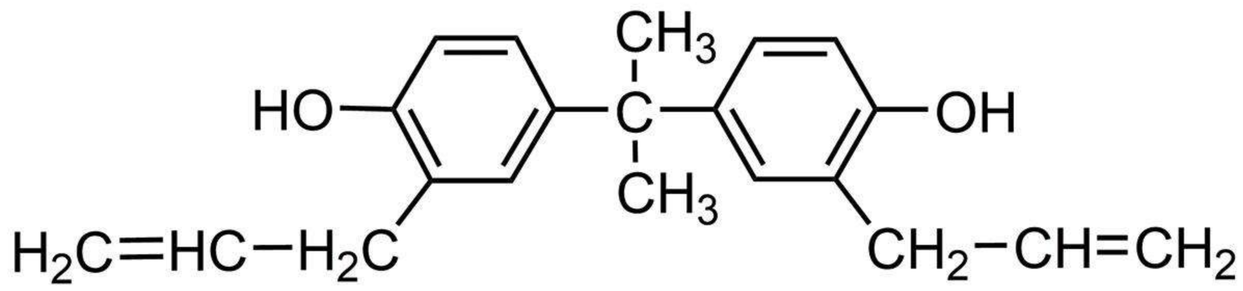
CAS No. : 1745-89-7

EINECS No: 217-121-1

Formula: $C_{21}H_{24}O_2$

Molecular weight: 308.42

Structural formula:



The chemical and physical properties

Appearance is light yellow or amber viscous liquid, dynamic viscosity(50℃): 600~1000 mpa.

S, purity: more than 90% The main content: more than96%

Proportion: 1.04 to 1.06 The refractive index: 1.587 Flash point: > 110 degrees Celsius

Technical indicators

Iterms	Index
Appearance	Light yellow or amber viscous liquid
The main content	≥96.0%
The purity(HPLC)	≥90%
Flash point	>100%
Dynamic viscosity(50℃)	600~1000mPa.S
Hydroxyl content	≥10.6%
The content of allyl	≥26%

Usage

- Mainly used for bismaleimide (BMI) modification, improve the operability and manufacturability of BMI resin.
- Improve BMI resin toughness and heat resistance.
  - Electronic chemicals, high temperature resistant dipping paint of electrical insulating materials, copper clad laminates, laminate, moulded plastic.
  - The wear-resisting material, diamond wheel, brake pads, high temperature resistant bearing adhesives.
  - The aerospace structure materials.
    Functional materials.
- The rubber stabilizer. Add 1-3% DABPA in rubber, can greatly improve the degree of resistance to aging of rubber.

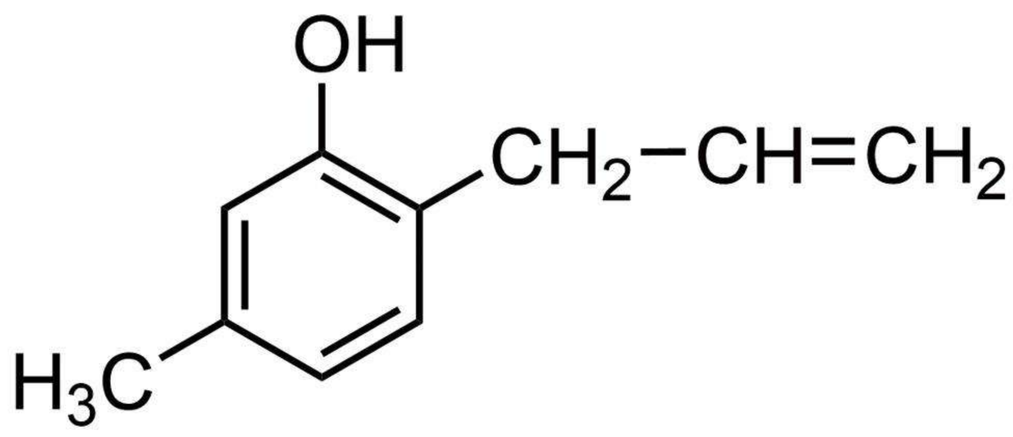
ALLYL METHYLPHENOL

CAS No.: 3354-58-3

Formula: $C_{10}H_{12}O$

Molecular weight: 148

Structural formula:



Technical indicators

Iterms	Index
Appearance	Light yellow or amber viscous liquid
Viscosity (25 degrees)	11 mPa.S
Moisture Content(%)	1.4

Usage

- Used as BMI or epoxy modified or RTM process low viscosity resin reactive diluent.

2 - ALLYLPHENOL

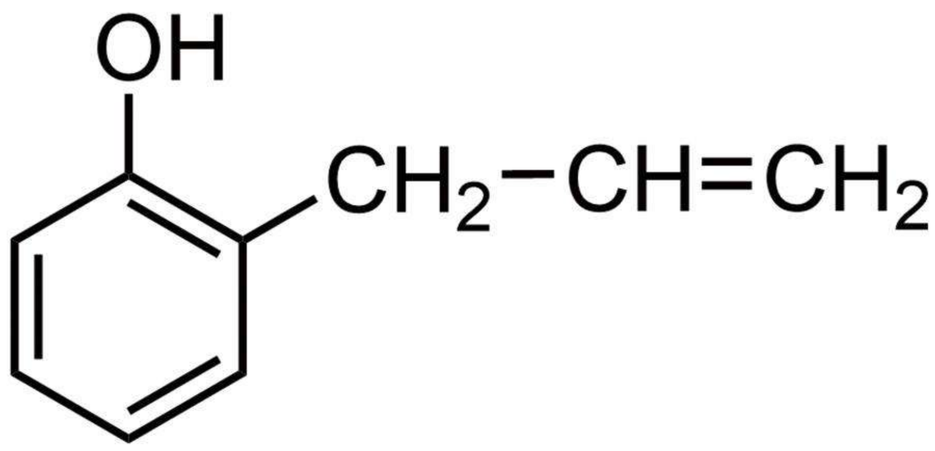
Product name: 2 - Allylphenol

CAS No. : 1745-81-9

Formula: $C_9H_{10}O$

Molecular weight: 134.18

Structural formula:



Technical indicators

Iterms	Index
Appearance	Light yellow or amber viscous liquid
Viscosity (25 degrees)	8~15 mPa.S
Purity %	≥90

Usage

- Used as BMI or epoxy modified or RTM process low viscosity resin reactive diluent, and organic synthesis intermediates.

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