

Solution*Partner*

NCC Division



BPA

(Bisphenol-A)

Overview

Bisphenol-A(BPA) is used primarily to produce polycarbonate and epoxy resins, both of them are used in a wide variety of applications. Common examples of polycarbonate products include electrical components, vehicles, CD/DVD, food and drink containers. In addition, epoxy resins are most commonly used as protective coatings, and adhesives. BPA is produced through a catalyzed condensation reaction of phenol and acetone. (Please refer to the Material Safety Data Sheet when handling)

Common Name	Chemical Name	Empirical Name
BPA	4, 4-isopropylidenediphenol	$(\text{CH}_3)_2\text{C}(\text{C}_6\text{H}_4\text{OH})_2$

Specification

Molten Color, APHA No.	20 max.	Water, wt ppm	1,000 max.
Appearance	White Prills	Iron, wt ppm	0.1 max.
Purity, wt %	99.85 min.	Freezing point, °C	156.5
Phenol, wt ppm	100 max.	Solution Color, APHA No.	10 max.
o, p-Isomer, wt ppm	500 max.		

Typical Property

Molecular Weight	228.3	Heat of Fusion, cal/g	30.6
Appearance	White Prills	Specific Heat, cal/g/°C	
Boiling Point, °C	250~252°C (1.7kpa)	@165°C	0.56
Melting Point, °C	156.5	@157°C (liquid)	0.61
Flash Point, °C COC	207	@157°C (solid)	0.45
CC	227		
Min. Ignition Point, °C	532	@60°C	0.36
Explosion Limit, g/l	0.6~4.0%	Bulk Density, kg/m³	630~680
Specific Gravity, 25/25 °C	1.2	Solubility, g/100g solvent @25°C	
Density,kg/m³@165°C	1.054	Acetone	85
		Epichlorohydrin	38
		Ethane	150
		Methanol	210
		Water	<0.1

Packing Unit

FLECON BAG	500KG, 650KG, 750KG, 800KG, 1TON	SEA BULK CONTAINER
TRUCK		

Phenol

Overview

Phenol is also named as carbolic acid or hydroxy benzene, is the raw material of phenolic resins, dye stuffs, synthetic fiber, herbicides, photo materials, aromatic essences, etc. Moreover, it is also used as disinfectant and sterilizer. We also use phenol as the base material for BPA. Through the application of the cumene process, we produce isopropyl benzene (cumene) from benzene and propylene which is oxidized with air to form cumenehydro-peroxide and then is decomposed to yield phenol and acetone using a homogeneous acid catalyst. (Please refer to the Material Safety Data Sheet when handling)

Common Name

Phenol

Chemical Name

Hydroxy Benzene

Empirical Name

C₆H₅OH

Specification

Appearance	clear	Water Solubility at 25°C	Clear
Phenol Purity, wt %	99.95 min.	Solidifucation Point, °C	41 min
Water Content, wt ppm	300 max.	Molten Color, Pt/Co	10 max.

Typical Property

Molecular Weight	94.11	Specific heat, cal/g/°C	0.306 (solid at 4°C)
Appearance	White Cryst alline	Specific Pressure, mbar	
Boiling Point, °C	182	25°C	0.29
Melting Point, °C	41	50°C	0.35
Flash Point, °C TOC	85	100°C	54
CC	79	160°C	530
Min. Ignition Point, °C	715	Solubility, g/100g solvent	6.7g/100ml (Water 16°C)
Explosion Limit, g/l	1.36~10%	Viscosity, centistoke	
Specific Gravity, 25/25 °C	1.0576	45°C	3.8
Density,kg/m³@165°C	1.132	60°C	2.47
Critical Temperature, °C	419	80°C	1.56
		100°C	1.09

Packing Unit

TRUCK BULK	
VESSEL BULK	

Acetone

Overview

Acetone is the raw material of MMA (Methyl Methacrylate), BPA, ascorbic acid (vitamin C), etc. In addition, acetone is widely used as solvents for synthetic resins, rubber, oil paper and paints, as well as for acetyl cellulose, nitro cellulose, etc. By applying the cumene process. LG Chem, Ltd. produces acetone and phenol by using benzene and propylene as raw materials. Acetone is a colorless liquid with a distinct smell and is inflammable due to its low boiling point. (Please refer to the Materials Safety Data Sheet when handling)

Common Name

Acetone

Chemical Name

2-Propanone

Empirical Name

CH₃COCH₃

Specification

Appearance	Clear liquid	Color, Pt/Co	5 max.
Purity, wt %	99.7 min.	Permanganate Test, minute	150 min
Water Content, wt ppm	3,000 max	Nonvolatiles, wt ppm	10 max
Water Solubility at 25 °C	complete	Acidity, wt ppm	20 max
Sp. Gr @20/20°C	0.791~0.793	Distillation Range, °C	0.8 max

Typical Property

Molecular Weight	58.1	Electric conductivity, 25°C	40.8
Appearance	Clear liquid	Stea Pressure, mmHg	
Boiling Point, °C	56.2	0°C	69.2
Melting Point, °C	-95.3	20°C	180
Flash Point, °C TOC	-20	30°C	282.5
CC	-9	40°C	420.5
Min. Ignition Point, °C	465	Solubility, wt %	complete (in water)
Ignition limit, vol%, @25°C	2.5~12.8%	Viscosity, centipoise	
Heat of combustion, cal/g	7,362	0°C	0.401
Heat of vaporization, Kcal/kg, @56.1°C	-122	20°C	0.331
Refractive index, @20°C	1,359	50°C	0.256
Heat of fusion, cal/g	23.4		

Packing Unit

TRUCK BULK	
VESSEL BULK	
DRUM	