

# KUMHO P&B CHEMICALS, INC.

## Material Safety Data Sheet

**Bisphenol-A**

**MSDS - 2**

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product name : Bisphenol-A  
Product type : Chemical intermediate  
Supplier : KUMHO P & B CHEMICALS, INC.  
Head Office Tel. 82-2-6303-3453  
Fax. 82-2-6303-3492  
Yeosu Plant( I ) Tel. 82-61-688-3500  
Fax. 82-61-688-3505

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance formal name :  
Substance chemical family :  
Common name :  
Synonyms :  
CAS number : 80-05-7

### 3. HAZARDS IDENTIFICATION

Human health hazards : To man irritating to eyes.

Environmental hazards : To the environment  
- toxic to fish, aquatic invertebrates and algae  
- harmful to bacteria  
- moderate potential for bioaccumulation

### 4. FIRST AID MEASURES

Symptoms and effects : non irritant

First Aid - Inhalation : slightly irritant

First Aid - Skin : irritant

First Aid - Eye : non irritant

First Aid - Ingestion :

Advice to physicians :

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### 4. FIRST AID MEASURES

Symptoms and effects :

First Aid - Inhalation :

Remove to fresh air

If rapid recovery does not occur, obtain medical attention

First Aid - Skin :

Remove contaminated clothing

Wash skin with water, using soap if available

First Aid - Eye :

Flush eye liberally with water. If irritation persists, obtain medical attention

First Aid - Ingestion :

DO NOT INDUCE VOMITING.

Advice to physicians :

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### 5. FIRE FIGHTING MEASURES

Extinguishing media :

SMALL FIRE

carbon dioxide, dry chemical powder, foam sand/earth, use water as a spray

LARGE FIRE

foam, water fog/spray

Hazards :

this product is not in the flammable range but will burn,

carbon monoxide is possible where incomplete combustion occurs

Protective equipment :

wear self-contained breathing apparatus for a large fire

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### 6. ACCIDENTAL RELEASE MEASURES

LEAKS AND SPILLS :	Extinguish any naked flames all spillages should be cleared up quickly
Small spillage :	sweep/shovel up and remove to a safe place for subsequent disposal, flush the contaminated area with plenty of water
Large spillage :	transfer to a salvage drum/tank if possible, otherwise treat as for a small spillage
Personal protection :	Refer Section 9 in the event of inhalation risk wear high efficiency dust respirator(NPF 1000)

### 7. HANDLING AND STORAGE

Handling :	danger of dust explosion maintain adequate ventilation electrostatic charges may be generated during handling, e.g. when crushing, grinding and sewing or emptying bags all equipment should be earthed, including funnels, chutes and drums
Storage :	satisfactory : carbon steel, stainless steel, aluminium polyethylene and paper bags unsatisfactory : copper, bronze
Storage conditions :	store in cool, dry conditions

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls :	although no exposure limit has been established for this product, an exposure limit of 10mg/m <sup>3</sup> for nuisance dusts and 6mg/m <sup>3</sup> for respirable dusts should be observed.
Personal Protection :	respiratory : not normally required in the event of inhalation risk use with local exhaust ventilation if this is not practical wear a general purpose dust respirator(NPF 7?10) hand : PVC gloves eye : chemical monogoggles skin : standard issue work clothes chemical resistance safety boots without lace holes

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### 9. PHYSICAL AND CHEMICAL PROPERTIES(typical values)

APPEARANCE(20°C) :	powder
ODOUR :	mild
PH :	
BOILING POINT/RANGE :	360°C
MELTING POINT/RANGE :	156.5°C
FLASH POINT(CC) :	207°C
FLAMMABILITY :	not established as flammable but will burn if ignited.
AUTOFLAMMABILITY :	570°C
EXPLOSIVE PROPERTIES :	LEL 12 g/m(dust cloud)
oxidising properties :	none
vapour pressure(170°C) :	2.6Pa
RELATIVE DENSITY(25°C) :	1.17
SOLUBILITY :	in water : 0.1% m/m(25°C) in other solvents : various org. solvents
PARTITION COEFFICIENT :	n-octanol/water : log Pow=2.2
RELATIVE VAPOUR DENSITY :	(air=1)
VISCOSITY(160°C) :	3.55mPa.s
COLOUR :	white
RELATIVE MOLECULAR MASS :	288
SPECIFIC CONDUCTIVITY :	

### 10. STABILITY/REACTIVITY

Stability :	stable under normal conditions at ambient temperature can function as antioxidant
Conditions to avoid :	decomposes above 11 mbar pressure when heated above 220°C
Materials to avoid :	readily undergoes condensation reactions.
Hazardous decomposition products :	

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### 11. TOXICOLOGICAL INFORMATION

CUTE TOXICITY :

oral(rat) LD<sub>50</sub> : > 2000mg/kg

dermal(rabbit) : > 2000mg/kg

IRRITATION :

inhalation(rat) : LC<sub>50</sub> :

skin : slight

eyes : moderate

OTHER TOXICOLOGICAL EFFECTS :

respiratory : Sensitisation not a skin sensitizer.  
there is no conclusive evidence for careinogenic  
or mutagenic(direct or indirect) potential  
not teratogenic following oral administration :  
foetotoxicity and reproductive effects are only  
observed at maternally toxic doses

### 12. ECOLOGICAL INFORMATION

ECOTOXICITY :

fish LC<sub>50</sub>(96h) : 3.9mg/L

daphnia(water fiea) EC<sub>50</sub>(48h) : 3.9mg/L

algae EC<sub>50</sub>(96h) : 2.5mg/L

PERSISTENCE :

bacteria EC<sub>50</sub>(8h) : 55mg/L

degredation

biotic(5days) : inherently biodegradable

abiotic :

bioaccumulation : moderate potential

### 13. DISPOSAL CONSIDERATIONS

DISPOSAL :

dispose to incinerator

CLASSIFICATION :

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### 14. TRANSPORT INFORMATION

ADR/RID CLASS :	not dangerous
SYMBOL :	none
NAME :	-
KEMLER PLATE :	-
IMO UN nr :	none
CLASS :	not dangerous
PACKING GROUP :	-
SYMBOL :	none
MARINE POLLUTANT :	no
NAME :	-
IATA/ICAO UN nr :	none
CLASS :	not dangerous
PACKING GROUP :	-
SYMBOL :	none
NAME :	-
REMARKS :	not dangerous by any mode of international transport

### 15. OTHER INFORMATION

USES AND RESTRICTIONS APPLICATION :	raw material in preparation of epoxy resins and polycarbonate resin manufacture
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**DISCLAIMER** : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only, It should not therefore be construed as guaranteeing any specific property of the product.