 Bloomchemag Private Limited	MATERIAL SAFETY DATA SHEET	MSDS No.	M-01
	Phthalic Anhydride (PA)	Effective From	04/07/2021

## MATERIAL SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product Identifier

Trade Name	Phthalic Anhydride (PA)
Synonyms	2-Benzofuran-1,3-dione
Chemical Formula	C <sub>8</sub> H <sub>4</sub> O <sub>3</sub>
CAS-Number	85-44-9
Molecular Weight	148.1 g/mol
REACH REGISTRATION NUMBER	01-2119457017-41-XXXX

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

Industrial uses	Plasticizers, Unsaturated Polyester and Alkyd resin, Dyes, Pigments, Insecticides, Fire retardants etc.
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#### 1.3. Manufacturer / Supplier Contact Information :

Name	<b>Bloomchemag Private Limited</b>
Address	Unit 108, Tower 1, Assotech Business Cresterra (ABC) Sector 135, Noida - 201301 India
Telephone	Phone: +91 72919 98685/ 72919 74482/7291998687/9871371594
Email	<a href="mailto:info@bloomchemag.com">info@bloomchemag.com</a>

#### Belgium Office Address –

Name	<b>Bloomchemag bvba</b>
Address	Sint-Antoniusstraat 16 b1 B-2400, Mol, Belgium. Phone: + 00 32 14 322136
Email	<a href="mailto:exports@bloomchemag.com">exports@bloomchemag.com</a> / <a href="mailto:corporate@bloomchemag.com">corporate@bloomchemag.com</a>

#### 1.4. Emergency telephone number

Contact with the nearest local Fire Department

### SECTION 2: Hazard Identification

## 2.1. Classification of the substance or mixture

### Label elements

Globally Harmonized System, (GHS)

Pictogram:



Signal Word:

Warning

### Hazard Statement:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

### Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
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### Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.
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Remove contact lenses, if present and easy to do. Continue rinsing.

### Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
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### Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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## SECTION 3: Composition and Information on the Ingredients

### 3.1 Substance

Hazardous ingredient	CASNo:	EC-Number:
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201-607-5

**SECTION 4: First Aid Measurements****General advice:**

Immediately remove contaminated clothing. If danger of loss of consciousness, place patient in recovery

position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to their own safety.

**If inhaled:**

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

**If on skin:**

Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

**If in eyes:**

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

**If swallowed:**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

**Note to physician**

Symptoms: Overexposure may cause:, asthma, atrophy of the nasal mucosa, bloody diarrhea, bronchitis, conjunctivitis, hoarseness, emphysema, coughing

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

**SECTION 5 : FIRE-FIGHTING MEASURES**

Flash point:	152 °C
Auto-ignition:	570 °C
Flammability:	not self-igniting (other)



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Self-ignition temperature:

(other) not self-igniting,  
(other) not self-igniting,  
The value has not be determined because of  
the low risk of self-ignition in consequence of  
the low melting point.

**Suitable extinguishing media:**

dry extinguishing media, foam, carbon dioxide

**Protective equipment for fire-fighting:**

Wear a self-contained breathing apparatus.

**Further information:** Keep containers cool by spraying with water if exposed to fire. Fire debris must be disposed of in accordance with official regulations.

**SECTION 6: Accidental Release Measures****Personal precautions:**

Avoid inhalation. Avoid contact with the skin, eyes and clothing.

**Environmental precautions:**

Discharge into the environment must be avoided.

**Cleanup:**

Avoid raising dust.

For small amounts: Protect from water. Sweep/shovel up.

For large amounts: Protect from water. Sweep/shovel up.

**SECTION 7: HANDLING AND STORAGE****Handling****General advice:**

Ensure thorough ventilation of stores and work areas.

Take precautionary measures against static discharges. Keep away from sources of ignition – No smoking.

**Protection against fire and explosion:**

Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Electrical devices must meet the specified temperature class.



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**Storage****General advice:**

Protect against moisture. Containers should be stored tightly sealed in a dry place.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Phthalic anhydride	OSHA PEL 2 ppm 12 mg/m <sup>3</sup> ;
	ACGIH TWA value 1 ppm ;

**Personal protective equipment****Respiratory protection:**

Wear the following respiratory protection if exposure limits may be exceeded: Wear a NIOSH-certified (orequivalent) respirator as necessary.

**Hand protection:**

Chemical resistant protective gloves

**Eye protection:**

Tightly fitting safety goggles (chemical goggles) and face shield.

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

**General safety and hygiene measures:**

Do not breathe vapour/spray. Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Wash soiled clothing immediately.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	white flakes	
Odour:		



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	characteristic choking odour	
Odour threshold:	No data available.	
Colour:	white	
pH value	2	( 6 g/l, 20 °C)
Melting point:	131.3 °C	(other)
Boiling point:	284.8 °C	( 1,013.25 hPa) (other)
Vapour pressure:	0.00069 hPa	( 25 °C) (measured) Literature data.
Density:	1.53 g/cm <sup>3</sup>	( 20 °C) (other) Literature data.
Bulk density:	500 - 700 kg/m <sup>3</sup>	
Partitioning coefficient	0.73	n-octanol/water (log Pow):
Viscosity, dynamic:	not applicable	
Viscosity, kinematic:	not applicable	
Solubility in water:	6.200 g/l	( 25 °C) Literature data.

**SECTION 10: STABILITY AND REACTIVITY**

<b>Substances to avoid:</b>	Heating. Exposable with air in vaporous/gaseous state
Materials to avoid	Avoid strong oxidizing agents and alkali salts
Hazardous decomposition products	May form peroxides

**Oxidizing properties:**



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Based on its structural properties the product is not classified as oxidizing. ( other )

**SECTION 11: TOXICOLOGICAL****Acute toxicity****Oral:**

LD50/rat: 1,530 mg/kg

Literature data.

**Inhalation:**

LCLo/rat: 0.547 mg/l / 10 min

**Dermal:**

LD50/rabbit: &gt; 10,000 mg/kg

**Skin irritation:**

rabbit: Irritant. (OECD Guideline 404)

**Eye irritation :**

rabbit: Risk of serious damage to eyes. (Draize test)

**Sensitization:**

Mouse Local Lymph Node Assay (LLNA)/mouse: sensitizing

Literature data.

**Chronic toxicity****Genetic toxicity:**

No mutagenic effect was found in various tests with bacteria and mammalian cell culture.

**Carcinogenicity:**

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

**SECTION 12: ECOLOGICAL INFORMATION****Environmental fate and transport****Biodegradation:**


Test method OECD 301C; ISO 9408; 92/69/EEC, C.4-F (aerobic), Inoculum conforming to MITI.

Method of analysis: BOD of the ThOD

Degree of elimination: 85 % (14 d)

Evaluation: Readily biodegradable (according to OECD criteria).

**Bioaccumulation:**

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No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

### **Environmental toxicity**

#### **Acute and prolonged toxicity to fish:**

OECD Guideline 203 semistatic

zebra fish/LC50 (7 d): 560 mg/l

The details of the toxic effect relate to the nominal concentration.

#### **Acute toxicity to aquatic invertebrates:**

StaticDaphnia magna/EC50 (48 h): > 640 mg/l

The product has not been tested. The statement has been derived from products of a similar structure and composition. The details of the toxic effect relate to the nominal concentration.

#### **Toxicity to aquatic plants:**

OECD Guideline 201 static

green algae/No observed effect concentration (72 h): > 100 mg/l

The product has not been tested. The statement has been derived from products of a similar structure and composition. The statement of the toxic effect relates to the analytically determined concentration.

#### **Toxicity to microorganisms:**

DIN EN ISO 8192 activated sludge/EC50 (3 h): > 1,000 mg/l

#### **Other ecotoxicological advice:**

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters.

## **SECTION 13: DIOSPOSAL AND TREATMENT CONSIDERATIONS**

#### **Waste disposal of substance:**

Must be dumped or incinerated in accordance with local regulations.

A waste code in accordance with the European waste catalog (EWC) cannot be specified, due to dependence on the usage.

#### **Container disposal:**

Uncleaned empties should be disposed of in the same manner as the contents.

## **SECTION 14: TRANSPORT INFORMATION**

#### **Land transport**

TDG

Not classified as a dangerous good under transport regulations.





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**Sea transport**

IMDG

Not classified as a dangerous good under transport regulations.

**Air transport**

IATA/ICAO

Not classified as a dangerous good under transport regulations.

**The maleic anhydride content is less than 0.05%.****SECTION 15: REGULATORY INFORMATION**Federal Regulations**Registration status:**

DSL, CA released / listed

**WHMIS classification:** D2B: Materials Causing Other Toxic Effects - Toxic material  
**THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE SDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.**

**SECTION 16: ADDITIONAL INFORMATION**

NIOSH/OSHA, Occupational Health Guidelines for Chemical Hazards, 2014

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**End of the data Sheet.**