FLINN SCIENTIFIC

2/3/2025:: File reviewed, more current MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Phthalic Anhydride

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261 Chemtrec Emergency Phone Number: (800) 424-10125

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral and inhalation (Category 5). May be harmful if swallowed or inhaled (H303+H333).

Hazard class: Skin corrosion or irritation (Category 2). Causes skin irritation (H315).

Hazard class: Sensitization, skin and respiratory tract (Category 1). May cause an allergic skin reaction,
allergy or asthma symptoms or breathing difficulties if inhaled (H317+H334). Avoid breathing dust or fume
(P261).

Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335).

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Phthalic Anhydride	85-44-9	C ₈ H ₄ O ₃	148.11	
Synonyms: PAN; 1,2-Benzene dicarboxylic acid anhydride; 1,2- Benzenedicarboxylic anhydride; Phthalic acid anhydride				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310). **If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If experiencing respiratory symptoms:** Call a POISON CENTER or physician (P342+P311). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Class IIIB combustible solid.	NFPA Code
Flash point: 152 °C Flammable limits: Lower: 1.7% Upper: 10.5% Autoignition Temperature:	H-2
570 °C	F-1

Signal Word DANGER

Pictograms

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area. Wipe up, place in sealed bag or container and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides and peracids. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). In case of inadequate ventilation, wear respiratory protection (P285). Exposure guidelines: PEL 2 ppm (OSHA); TLV 1 ppm (ACGIH) Sensitizer; IDLH 60 mg/m³

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystalline needles. Odorless.

Soluble: Alcohol, hot water and carbon disulfide.

Boiling point: 295 °C Melting point: 130.8 °C Specific gravity: 1.53

SECTION 10 - STABILITY AND REACTIVITY

Avoid contact with strong acids, strong bases, oxidizing agents and reducing agents.

Reacts vigorously with nitric acid and nitrating mixtures to produce potentially explosive products.

Shelf life: Poor, moisture sensitive. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye, skin, and upper respiratory tract irritation; conjunctivitis; bronchitis, bronchial asthma; dermatitis. Sensitizer. Chronic effects: Asthma

ORL-RAT LD₅₀: 1530 mg/kg IHL-RAT LC₅₀: greater than 210 mg/m³ SKN-RBT LD₅₀: greater than 10,000 mg/kg

Target organs: Eyes, skin, and respiratory tract.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #24a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (201-607-5), RCRA code U190.

SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated. N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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