# Material Safety Data Sheet

## Phthalic Anhydride, Reagent acs

### ACC# 96133

# Section 1 - Chemical Product and Company Identification

MSDS Name: Phthalic Anhydride, Reagent acs

Catalog Numbers: AC423320000, AC423320020, AC423320250, AC423325000

**Synonyms:** 1,3-Isobenzofuranidone

Fair Lawn, NJ 07410

Company Identification:
Acros Organics N.V.
One Reagent Lane

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

# Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
85-44-9	Phthalic Anhydride	99%	201-607-5

## Section 3 - Hazards Identification

### **EMERGENCY OVERVIEW**

Appearance: white to pale yellow solid.

**Danger!** Corrosive. Water-reactive. Flammable solid. Causes eye and skin irritation and possible burns. Causes respiratory tract irritation and possible burns. May cause allergic skin reaction. May cause severe digestive tract irritation with possible burns.

Target Organs: Respiratory system, eyes, skin.

### **Potential Health Effects**

Eye: Contact with eyes may cause severe irritation, and possible eye burns.

**Skin:** May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May cause severe irritation and possible burns.

**Ingestion:** May cause irritation of the digestive tract and possible burns.

Inhalation: May cause asthmatic attacks due to allergic sensitization of the respiratory tract. May

cause severe irritation of the respiratory tract with possible burns.

Chronic: Not available.

## Section 4 - First Aid Measures

**Eyes:** Get medical aid immediately. Gently lift eyelids and flush continuous ly with water. Extensive irrigation with water is required (at least 3 0 minutes).

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy

contaminated shoes.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. **Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do

NOT use mouth-to-mouth resuscitation.

Notes to Physician: Treat symptomatically and supportively.

# Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Dust can be an explosion hazard when exposed to heat or flame. Reacts with water to form explosive hydrogen gas. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated or if contaminated with water.

**Extinguishing Media:** Do NOT get water inside containers. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

Flash Point: 152 deg C ( 305.60 deg F)

**Autoignition Temperature:** 580 deg C ( 1,076.00 deg F)

Explosion Limits, Lower: 1.70 vol %

**Upper:** 10.50 vol %

NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Do not get water inside containers.

# Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not ingest or inhale. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water. Corrosives area.

# Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Phthalic Anhydride	1 ppm TWA	1 ppm TWA; 6 mg/m3 TWA 60 mg/m3 IDLH	2 ppm TWA; 12 mg/m3 TWA

OSHA Vacated PELs: Phthalic Anhydride: 1 ppm TWA; 6 mg/m3 TWA

**Personal Protective Equipment** 

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's

eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

# Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white to pale yellow

Odor: acrid odor pH: Not available.

Vapor Pressure: 0.01 mbar @ 20

Vapor Density: 5.1

**Evaporation Rate:**Not available. **Viscosity:** 6.4 MP 97.00 deg C

**Boiling Point:** 284 deg C @ 760.00mm Hg **Freezing/Melting Point:**131.0 - 133.0 deg C **Decomposition Temperature:**Not available. **Solubility:** in water: 6g/l (forming phthalic acid)

Specific Gravity/Density:1.5300g/cm3

Molecular Formula:C8H4O3 Molecular Weight:148.12

# Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, moisture.

Incompatibilities with Other Materials: Strong acids, strong bases, strong oxidizing agents,

amines, ammonia, coatings, plastics, rubber, water.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, Forms acid when in

contact with hot water...

Hazardous Polymerization: Has not been reported.

# Section 11 - Toxicological Information

RTECS#:

CAS# 85-44-9: TI3150000

LD50/LC50: CAS# 85-44-9:

> Draize test, rabbit, eye: 50 mg/24H Moderate; Draize test, rabbit, skin: 500 mg/24H Mild; Inhalation, rat: LC50 = >210 mg/m3/1H;

Oral, mouse: LD50 = 1500 mg/kg; Oral, rat: LD50 = 1530 mg/kg; Skin, rabbit: LD50 = >10 gm/kg;

Carcinogenicity:

CAS# 85-44-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available. **Teratogenicity:** No information available.

Reproductive Effects: No information available.

**Neurotoxicity:** No information available. **Mutagenicity:** No information available.

Other Studies: No data available.

# Section 12 - Ecological Information

No information available.

# Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

**RCRA U-Series:** 

CAS# 85-44-9; waste number U190.

## Section 14 - Transport Information

	US DOT	Canada TDG	
Shipping Name:	PHTHALIC ANHYDRIDE	PHTHALIC ANHYDRIDE	
Hazard Class:	8	8	
UN Number:	UN2214	UN2214	
Packing Group:	III	III	

# Section 15 - Regulatory Information

#### **US FEDERAL**

### **TSCA**

CAS# 85-44-9 is listed on the TSCA inventory.

### **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

#### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

### **CERCLA Hazardous Substances and corresponding RQs**

CAS# 85-44-9: 5000 lb final RQ; 2270 kg final RQ

#### **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

### **SARA Codes**

CAS # 85-44-9: acute, chronic, reactive.

#### Section 313

This material contains Phthalic Anhydride (CAS# 85-44-9, 99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

CAS# 85-44-9 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 85-44-9 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

## **European/International Regulations**

# European Labeling in Accordance with EC Directives Hazard Symbols:

ΧI

#### **Risk Phrases:**

R 36/37/38 Irritating to eyes, respiratory system and skin.

## Safety Phrases:

### WGK (Water Danger/Protection)

CAS# 85-44-9: 0

### Canada - DSL/NDSL

CAS# 85-44-9 is listed on Canada's DSL List.

#### Canada - WHMIS

This product has a WHMIS classification of D2A, E.

### **Canadian Ingredient Disclosure List**

CAS# 85-44-9 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 12/19/1997 **Revision #3 Date:** 3/18/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.