Material Safety Data Sheet 4-Aminophenol, 97.5%

ACC# 12199

Section 1 - Chemical Product and Company Identification

MSDS Name: 4-Aminophenol, 97.5%

Catalog Numbers: AC104270000, AC104270010, AC104270050, AC104272500

Synonyms: p-Hydroxyaniline; 4-Amino-1-hydroxybenzene; 4-Hydroxyaniline; p-Aminophenol.

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

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	
123-30-8	4-Aminophenol	97.5	204-616-2	

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: very slightly beige solid.

Warning! Harmful if swallowed. May cause allergic respiratory and skin reaction. May be harmful if inhaled. May cause eye and skin irritation. May cause respiratory tract irritation. Light sensitive. Air sensitive.

Target Organs: Blood, respiratory system, skin.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death.

Inhalation: Causes respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown blood. May cause methemoglobinemia.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately.

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

Ingestion: 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: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

Flash Point: > 188 deg C (> 370.40 deg F) Autoignition Temperature: Not applicable. Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing

precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Do not ingest or inhale.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from light.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
4-Aminophenol	none listed	none listed	none listed
Aminophenols	none listed	none listed	none listed

OSHA Vacated PELs: 4-Aminophenol: No OSHA Vacated PELs are listed for this chemical. Aminophenols: No OSHA Vacated PELs are listed for this chemical.

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. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: very slightly beige

Odor: None reported. **pH:** Not available.

Vapor Pressure: 0.075 mm Hg @ 20 deg C

Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.

Boiling Point: 284 deg C (decomposes) Freezing/Melting Point:188 deg C Decomposition Temperature:284 deg C Solubility: 1.5 g/100 ml in water. Specific Gravity/Density:Not available.

Molecular Formula:C6H7NO Molecular Weight:109.13

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. May discolor on exposure to light.

Conditions to Avoid: Light, dust generation, exposure to air.

Incompatibilities with Other Materials: Acids, chloroformates, strong oxidizing agents. **Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 123-30-8: SJ5075000

CAS# 27598-85-2 unlisted.

LD50/LC50:

CAS# 123-30-8:

Draize test, rabbit, eye: 100 mg Mild; Draize test, rabbit, skin: 12500 ug/24H Mild;

Inhalation, rat: LC50 = >5 mg/m3/1H; Oral, rabbit: LD50 = 10 gm/kg;

Oral, rat: LD50 = 375 mg/kg; Skin, rabbit: LD50 = >10 gm/kg;

CAS# 27598-85-2:

Carcinogenicity:

CAS# 123-30-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 27598-85-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available. **Teratogenicity:** No data available.

Reproductive Effects: See actual entry in RTECS for complete information.

Mutagenicity: See actual entry in RTECS for complete information.

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: Daphnia: Fathead Minnow: EC50=0.032 mg/l; ; cas#123-30-8Fish: Fathead Minnow: LC50 = 24 mg/L; 96 Hr.; Static Conditions, 22 degrees CFish: Goldfish: LC50 = 2 mg/L; 48 Hr.; Unspecified ConditionsBacteria: Phytobacterium phosphoreum: EC50 = 0.77-3.97 mg/L; 5,15,30 minutes; Microtox test No data available.

Environmental: No information available.

Physical: No information available.

Other: LC50=0.32 mg/l in Gammarus fasciatus and Dugesia tigrina; CAS#123-30-8: LC50=0.032 mg/l in Pimephales promelas and 3.2 mg/l in Helisoma trivolvis.

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: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	AMINOPHENOLS	AMINOPHENOLS
Hazard Class:	6.1	6.1
UN Number:	UN2512	UN2512
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 123-30-8 is listed on the TSCA inventory.

CAS# 27598-85-2 is not listed on the TSCA inventory. It is for research and development use only.

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

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 123-30-8: immediate.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

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# 123-30-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 27598-85-2 can be found on the following state right to know lists: New Jersey.

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:

XN N

Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

R 68 Possible risk of irreversible effects.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

S 60 This material and its container must be disposed of as hazardou

s waste.

S 28A After contact with skin, wash immediately with plenty of water

S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

WGK (Water Danger/Protection)

CAS# 123-30-8: 2

CAS# 27598-85-2: No information available.

Canada - DSL/NDSL

CAS# 123-30-8 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B, D2A.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 123-30-8 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 6/16/1999 Revision #5 Date: 8/23/2005

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.