

Material Safety Data Sheet

2-Aminophenol

ACC# 96355

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Aminophenol

Catalog Numbers: AC104260000, AC104260050, AC104261000, AC104265000, AC400940000, AC400941000 AC400941000, AC400945000

Synonyms: o-Hydroxyaniline; 2-Amino-1-hydroxybenzene; o-Aminophenol; 2-Hydroxyaniline.

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
95-55-6	2-Aminophenol	>97	202-431-1

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: rapidly turns brown.

Warning! May cause allergic skin reaction. May cause eye, skin, and respiratory tract irritation. May be harmful if swallowed or inhaled. Impairs the oxygen carrying capacity of the blood.

Target Organs: Blood, respiratory system, skin.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. o-Aminophenol is not readily absorbed through intact skin but may prove to be a sensitizing agent with resultant contact dermatitis. Cross-reactivity by patch-positive test responses among 80 patients positive to at least one hapten of the para group series (p-phenylenediamine, p-phenylenediamine hydrochloride, benzocaine, or diaminodiphenylmethane). [Rhone-Poulenc]

Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May form methemoglobin which in sufficient concentration causes cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

Inhalation: May cause respiratory tract irritation. 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. Inhalation of dust in excessive amounts may cause methemoglobinemia, irritation of mucosal membranes and, in rare instances, a bronchial asthma.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Groups of 5 male rats were fed 0.1 or 1.0% of o-aminophenol in the diet for 12 days. Effects observed in the high-dose group included abnormal red blood cell morphology and decreased hemoglobin and hematocrit. Histopathologic changes included hyperkeratosis of the nonglandular portion of the stomach, congestion and hypocellularity of the spleen, and serous atrophy of mesenteric fat. Except for a slight increase in relative liver weight, there were no compound-related effects in the low-dose group. (Eastman Kodak Company)

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid.

Skin: In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. 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. 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: Not applicable.

Autoignition Temperature: Not available.

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. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation.

Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Avoid breathing vapor.

Storage: Store in a cool, dry place. Keep containers tightly closed. 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
2-Aminophenol	none listed	none listed	none listed
Aminophenols	none listed	none listed	none listed

OSHA Vacated PELs: 2-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 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: Crystals

Appearance: rapidly turns brown

Odor: None reported.

pH: Not available.

Vapor Pressure: 0.01 mm Hg @ 25 deg C

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 164 deg C @ 15 mm Hg

Freezing/Melting Point: 172-177 deg C; sublimes

Decomposition Temperature: Not available.

Solubility: slightly soluble 3 g/l @ 20°C

Specific Gravity/Density: 1.328 g/cm³ @ 20°C

Molecular Formula: C₆H₇NO

Molecular Weight: 109.13

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. 2-Aminophenol readily becomes yellow-brown on exposure to air and light.

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

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, phenol.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 95-55-6: SJ4950000

CAS# 27598-85-2 unlisted.

LD50/LC50:

CAS# 95-55-6:

Dermal, guinea pig: LD50 = >1 gm/kg;

Draize test, rabbit, eye: 100 mg Mild;

Oral, mouse: LD50 = 800 mg/kg;

Oral, rat: LD50 = 951 mg/kg;

CAS# 27598-85-2:

Oral LD50 quail: 316 mg/kg.

Carcinogenicity:

CAS# 95-55-6: 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: See actual entry in RTECS for complete information.

Other Studies:

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: 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# 95-55-6 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 # 95-55-6: immediate, delayed.

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 depleters.

This material does not contain any Class 2 Ozone depleters.

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# 95-55-6 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

Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.
R 68 Possible risk of irreversible effects.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.
S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 95-55-6: 2
CAS# 27598-85-2: No information available.

Canada - DSL/NDSL

CAS# 95-55-6 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B, D1B.

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# 95-55-6 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 11/13/1997

Revision #3 Date: 9/07/2004

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.