

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: 4-AMINO ACETOPHENONE

CAS#: 99-92-3

C.I. No.:

Synonym: Acetophenone, p-amino-; Acetophenone, 4'-amino-; p-Acetylaniline; 4-Acetylaniline; p- Aminoacetophenone; p-Aminoacetylbenzene; 1-(4-Aminophenyl)ethanone; Ethanone.

Chemical Name:

Chemical Formula: $\text{H}_2\text{NC}_6\text{H}_4\text{COCH}_3$

Composition and Information on Ingredients

Name	S.K.U	% by Weight
4-AMINO ACETOPHENONE	GCS-8463	98-100%

Hazards Identification

EMERGENCY OVERVIEW

Appearance: yellow to brown crystalline powder.

Warning! Harmful if swallowed. Causes eye, skin, and respiratory tract irritation. May cause methemoglobinemia.

Potential Health Effects Eye:

Causes eye irritation.

Skin: Causes skin irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Effects may be delayed 2 to 4 hours. Methemoglobinemia is characterized by dizziness, drowsiness, and headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. Overexposure may cause methemoglobinemia.

Inhalation: Causes respiratory tract irritation.

Chronic: Absorption into the body leads to the formation of methemoglobin which in sufficient concentrations causes cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

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.

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

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. For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood. Effects may be delayed.

Fire and Explosion Data

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

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

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 runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Handling and Storage

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

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

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'-Aminoacetophenone	none listed	none listed	none listed.

OSHA Vacated PELs: 4'-Aminoacetophenone: 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: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Physical and Chemical Properties

Physical state and appearance: Crystalline powder

Odor	: pleasant odor - characteristic odor
Taste	: Not available.
Molecular Weight	: 135.17 g/mole
Color	: yellow to brown
pH (1% soln/water)	: Not available.
Boiling Point	: 293 deg C @ 760.00mmHg
Melting Point	: 105.00 - 107.00 deg C
Flash Point	: Not available.
Critical Temperature	: Not available.
Specific Gravity	: 0.77 g/cm ³ @ 20C
Vapor Pressure	: Not applicable.
Vapor Density	: Not available.
Volatility	: Not available.
Odor Threshold	: Not available.
Water/Oil Dist. Coeff.	: Not available
Ionicity (in Water)	: Not available.
Dispersion Properties	: Not available.
Solubility	: Not available.

Stability and Reactivity Data

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, excess heat, strong oxidants. Incompatibilities with Other Materials: Acids, acid chlorides, acid anhydrides, strong oxidizing agents, strong reducing agents.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon monoxide, carbon dioxide, nitrogen gas.
Hazardous Polymerization: Has not been reported

Toxicological Information

RTECS#: CAS# 99-92-3: AM5500000

LD50/LC50: CAS# 99-92-3: Oral, mouse: LD50 = 596 mg/kg; Oral, rat: LD50 = 381 mg/kg;

Carcinogenicity:

CAS# 99-92-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

Ecological Information

Ecotoxicity: Bacteria: *Phytobacterium phosphoreum*: EC50 = 4.0-4.0 mg/L; 5, 15, 30 min; Microtox test at 15C If released to the atmosphere, 4-aminoacetophenone is expected to degrade rapidly (estimated half-life of 3.6 hour) by reaction with photochemically produced hydroxyl radicals. If released to soil, 4-aminoacetophenone may undergo a covalent chemical bonding with humic materials which can result in its

Chemical alteration to a latent form and prevent leaching. In the absence of covalent bonding, 4-aminoacetophenone is expected to be highly mobile in soil.

Environmental: If released to water, covalent bounding with humic materials in the water column and sediments may result in partitioning from the water column to sediments. 4-aminoacetophenone in the water column may be susceptible to photooxidation (via hydroxyl and peroxy radicals). Direct photolysis of 4-aminoacetophenone in the environment is possible. Insufficient data are available to assess the relative importance of biodegradation in soil or water.

Physical: No information available.

Other: No information available.

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.

Transformation Information

Land transport (ADR-RID)

General information: Not regulated.

Sea transport (IMDG) [English only]

General information: Not regulated.

Air transport (ICAO-IATA) [English only]

General information: Not regulated.

Other Regulatory Information

US FEDERAL

TSCA

CAS# 99-92-3 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 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 # 99-92-3: 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 depleters. 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# 99-92-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

Hazard Symbols:

XN

Risk Phrases:

R 22 Harmful if swallowed.

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 99-92-3: 2

Canada - DSL/NDL

CAS# 99-92-3 is listed on Canada's DSL List.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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