

MATERIAL SAFETY DATA SHEET

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Version 1.3

Section 1 - Product and Company Information

Product Name 3-HYDROXYANTHRANILIC ACID
Product Number H9391
Brand SIGMA

Company Sigma-Aldrich Canada, Ltd
Address 2149 Winston Park Drive
Oakville ON L6H 6J8 CA
Technical Phone: 9058299500
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Emergency Phone: 800-424-9300

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
3-HYDROXYANTHRANILIC ACID	548-93-6	No

Formula C7H7NO3
Synonyms 2-Amino-3-hydroxybenzoic acid * Anthranilic acid,
3-hydroxy- * 3-Hydroxyanthranilic acid *
3-Hydroxy-anthranilsaeure (German) * 3-Ohaa *
3-Oxyanthranilic acid
RTECS Number: DG2625000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful.
Harmful by inhalation, in contact with skin and if swallowed.
Limited evidence of a carcinogenic effect. Irritating to eyes,
respiratory system and skin.
Possible carcinogen.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is
conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give
artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious
amounts of water.

EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts

of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

EXPOSURE HAZARD(S)

Material: Irritant. Harmful solid.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing.

STORAGE

Suitable: Keep tightly closed. Store in a cool dry place.
Store at -20°C

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.
Hand: Rubber gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before

reuse.

Section 9 - Physical/Chemical Properties

Molecular Weight	153.14 AMU
pH	N/A
BP/BP Range	N/A
MP/MP Range	240 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Materials to Avoid: Strong oxidizing agents, Strong acids, Strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.

Multiple Routes: Causes eye and skin irritation. Harmful if swallowed, inhaled, or absorbed through skin.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

CHRONIC EXPOSURE - CARCINOGEN

Species: Mouse
Route of Application: Subcutaneous
Dose: 1600 MG/KG

Exposure Time: 8W
Frequency: I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Kidney, Ureter, Bladder: Tumors.

Species: Mouse
Route of Application: Subcutaneous
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic Effects: Uterine tumors. Lungs, Thorax, or Respiration: Bronchiogenic carcinoma.

Species: Mouse
Route of Application: Implant
Dose: 160 MG/KG
Result: Tumorigenic: Neoplastic by RTECS criteria. Kidney, Ureter, Bladder: Tumors.

Species: Dog
Route of Application: Subcutaneous
Dose: 500 MG/KG
Exposure Time: 20W
Frequency: I
Result: Endocrine: Adrenal cortex tumors. Kidney, Ureter, Bladder: Tumors. Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Species: Mouse
Route of Application: Subcutaneous
Dose: 8000 MG/KG
Exposure Time: 19W
Frequency: I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Blood: Leukemia

Species: Mouse
Route of Application: Implant
Dose: 80 MG/KG
Result: Tumorigenic: Neoplastic by RTECS criteria. Kidney, Ureter, Bladder: Tumors.

Species: Mouse
Route of Application: Subcutaneous
Dose: 2000 MG/KG
Exposure Time: 7W
Frequency: I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Blood: Leukemia

Species: Mouse
Route of Application: Subcutaneous
Dose: 2040 MG/KG
Exposure Time: 59W
Frequency: C
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Blood: Leukemia

Species: Mouse
Route of Application: Subcutaneous
Dose: 121 MG/KG
Exposure Time: 21D
Frequency: I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS

criteria. Liver:Tumors. Lungs, Thorax, or
Respiration:Bronchiogenic carcinoma.

CHRONIC EXPOSURE - MUTAGEN

Species: Human
Dose: 30 MG/L
Cell Type: Embryo
Mutation test: Cytogenetic analysis

Species: Human
Dose: 100 MG/L
Cell Type: leukocyte
Mutation test: Cytogenetic analysis

Species: Mouse
Route: Subcutaneous
Dose: 400 MG/KG
Mutation test: Cytogenetic analysis

Species: Hamster
Dose: 125 MG/L
Exposure Time: 48H
Cell Type: fibroblast
Mutation test: Cytogenetic analysis

Species: Monkey
Route: Subcutaneous
Dose: 1485 MG/KG
Exposure Time: 57D
Mutation test: Cytogenetic analysis

Species: Monkey
Dose: 100 MG/L
Cell Type: kidney
Mutation test: Cytogenetic analysis

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 20/21/22-36/37/38-40

Risk Statements: Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect.

S: 22-26-36

Safety Statements: Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.

Risk Statements: Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect.

Irritating to eyes, respiratory system and skin.

Safety Statements: Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Statements: Possible carcinogen.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.