



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

AccuDEP(TM) Iron Precursor

Revision Date: 08/13/2013

Supplier ROHM AND HAAS ELECTRONIC MATERIALS LLC
A Subsidiary of The Dow Chemical Company
455 FOREST STREET
MARLBOROUGH, MA 01752 United States

For non-emergency information contact: 215-592-3000

Emergency telephone number
1 800 424 9300

Local emergency telephone number
989-636-4400

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Iron amidinate		> 99.0 %

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance

Form solid
Colour off-white
Odour not applicable

Hazard Summary

DANGER!

Corrosive solid.
Repeated and prolonged contact may cause chemical burns.
May cause respiratory tract irritation.
Reacts with water and air but not violently.
Harmful if swallowed, inhaled, or absorbed through the skin.

Potential Health Effects

Primary Routes of Entry: Inhalation, ingestion, eye and skin contact.

Eyes: Will cause severe conjunctival irritation, corneal damage, and may result in loss of vision.

Skin: Material will cause chemical burns.

Ingestion: Swallowing may have the following effects:
corrosion of mouth, throat and digestive tract

Inhalation: Inhalation may have the following effects:
severe irritation of nose, throat and respiratory tract
Higher concentrations may have the following effects:
severe irritation to nose, throat and respiratory tract and possibly lung damage

Target Organs: Eye
Respiratory System
Skin

4. FIRST AID MEASURES

Inhalation: Remove from exposure. If there is difficulty in breathing, give oxygen. Immediate medical attention is required.

Skin contact: Immediately flush the skin with large quantities of water, preferably under a shower. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Continue washing for at least 20 minutes. Contaminated clothing should be washed or dry-cleaned before re-use. Immediate medical attention is required.

Eye contact: Immediately flush the eye with plenty of water for at least 20 minutes, holding the eye open. Immediate medical attention is required.

Ingestion: Do NOT induce vomiting. Wash out mouth with water. Have victim drink 1-3 glasses of water to dilute stomach contents. Immediate medical attention is required. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.

Notes to physician: Treat symptomatically. Treat skin burns conventionally.

5. FIREFIGHTING MEASURES

Flash point not applicable

Suitable extinguishing media: Use water spray, foam, dry chemical or carbon dioxide.

Specific hazards during firefighting: Avoid the formation of dust clouds. This product may give rise to hazardous vapors in a fire.

Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.

Further information: This product may give rise to hazardous vapors in a fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective clothing.
Wear respiratory protection.

Environmental precautions

Prevent the material from entering drains or water courses.
Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

Methods for cleaning up

Sweep up into suitable containers for recovery or disposal.
Avoid dust formation.

7. HANDLING AND STORAGE

Handling

Use local exhaust ventilation. Avoid contact with eyes, skin and clothing. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Avoid breathing vapor. Keep container tightly closed. Wash thoroughly after handling.

Storage

Storage conditions: Store in original container. Storage area should be: cool dry well ventilated out of direct sunlight away from incompatible materials

Further information on storage conditions: Practice good personal hygiene to prevent accidental exposure.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit(s)

Exposure limits are listed below, if they exist.

Exposure controls

Engineering measures: Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.

Individual protection measures

Eye/face protection: Chemical goggles and face shield.

Skin protection

Hand protection: Neoprene gloves. Other chemical resistant gloves may be recommended by your safety professional. Gauntlet sleeves.

Other protection: rubber or neoprene apron

Respiratory protection: Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	solid
Colour	off-white
Odour	not applicable
pH	not applicable
Melting point/range	ca.107 °C (225 °F)
Flash point	not applicable
Vapour pressure	Not available
Relative vapour density	not applicable
Water solubility	insoluble, Reacts with water.
Density	no data available
VOC's	Not Determined

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Hazardous reactions	Reacts with water and air but not violently. Stable under recommended storage conditions.
Conditions to avoid	Exposure to water or moisture Exposure to air or oxygen. contact with incompatible materials
Materials to avoid	Water Acids and bases Oxidizing agents halogens Reactive metals
Hazardous decomposition products	traces of organic compounds, Metal oxides,
polymerisation	Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Carcinogenicity:

Not considered carcinogenic by NTP, IARC, and OSHA

Component: **Iron amidinate**

Further information

The toxicological properties of this compound have not been fully investigated.

12. ECOLOGICAL INFORMATION

Ecotoxicological information on this product or its components appear in this section when such data is available.

13. DISPOSAL CONSIDERATIONS

Environmental precautions: Prevent the material from entering drains or water courses. Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

Disposal

Dispose in accordance with all local, state (provincial), and federal regulations. Under RCRA, it is the responsibility of the product's user to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because the product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Do not remove label until container is thoroughly cleaned. Empty containers may contain hazardous residues. This material and its container must be disposed of in a safe way.

14. TRANSPORT INFORMATION

DOT

Proper shipping name	Water-reactive solid, corrosive, n.o.s.(Iron amidinate)
UN number	UN 3131
Class	4.3 (8)
Packing group	II

Classification for SEA transport (IMO-IMDG):

Proper shipping name	WATER-REACTIVE SOLID, CORROSIVE, N.O.S.(Iron amidinate)
UN number	UN 3131
Class	4.3 (8)
Packing group	II

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.

15. REGULATORY INFORMATION

Workplace Classification

OSHA: Corrosive
Water Reactive

WHMIS: This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE III: Section 311/312 Categorizations (40CFR370): Immediate health hazard
Delayed (chronic) Health Hazard

SARA TITLE III: Section 313 Information (40CFR372)

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

United States TSCA Inventory (US.TSCA): This product contains at least one component that is not listed (and is not excluded from listing) on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory, and therefore can be used only for research and development purposes under the conditions described in the Code of Federal Regulations at 40 CFR 720.36.

California (Proposition 65)

This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

16. OTHER INFORMATION

NFPA Hazard Rating

Health	Fire	Reactivity
3	1	1

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior MSDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a

warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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