

4/12/07

DATE: 03/29/07 ACCT: 888235001
INDEX: D70874878 CAT NO: AC122021000 PO NBR: CROSSGROVE-BETA-57321

Material Safety Data Sheet

Imidazole
MSDS# 00780
Section 1 - Chemical Product and Company Identification

MSDS Name: Imidazole
Catalog Numbers: AC122020000, AC122020020, AC122020050, AC122021000, AC122025000, AC30187000
AC301870000, AC301870010, AC301872500, AC9240412, AC9739295, BP305-50,
NC9366144, O3196-500, XXAC12202502

Synonyms: 1,3-Diaza-2,4-cyclopentadiene; 1,3-Diazole; Formamidine,
N,N'-vinylene-; Glyoxalin; Glyoxaline; Imidazol; Miazole.

Company Identification:
Fisher Scientific One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call:
201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US:
800-424-9300

Section 2 - Composition, Information on Ingredients

CAS# 288-32-4
Chemical Name: Imidazole
% 99
EINECS# 206-019-2

Hazard Symbols:

C
Risk Phrases:
22 34

Section 3 - Hazards Identification
EMERGENCY OVERVIEW

Danger! Harmful if swallowed. Causes eye and skin burns. Causes
digestive and respiratory tract burns.
Target Organs: Eyes, skin, mucous membranes.
Potential Health Effects

Eye: Contact with eyes may cause severe irritation, and possible eye
burns.

Skin: Exposure may cause irritation and possible burns. May be absorbed
through the skin. The severity of injury depends on the
concentration of the solution and the duration of exposure.

Ingestion: Harmful if swallowed. Causes digestive tract irritation with
possible burns.

Inhalation: Causes respiratory tract irritation with possible burns.

Chronic: Laboratory experiments have resulted in mutagenic effects. May cause
adverse reproductive effects. Animal evidence suggests that
fetotoxicity and teratogenicity may be observed at doses that also
cause harmful effects in the mothers.

Section 4 - First Aid Measures

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

Skin: In case of contact, immediately flush skin with plenty of water for
at least 15 minutes while removing contaminated clothing and shoes.
Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately.
If victim is fully conscious, give a cupful of water. Never give
anything by mouth to an unconscious person.

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: 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. Dusts at sufficient concentrations can form
explosive mixtures with air. During a fire, irritating and highly
toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: 480 deg C (896.00 deg F)

Flash Point: 145 deg C (293.00 deg F)

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating:
health: 3; flammability: 1; instability: 0;
Section 6 - Accidental Release Measures

General Information: Section 6 - Accidental Release Measures

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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. Remove contaminated clothing and
wash before reuse. Minimize dust generation and accumulation. Do not
get in eyes, on skin, or on clothing. Keep container tightly closed.
Do not breathe dust. Use only with adequate ventilation.

Storage: Store in a tightly closed container. Keep from contact with
oxidizing materials. Store in a cool, dry, well-ventilated area away
from incompatible substances.

Engineering Controls: Section 8 - Exposure Controls, Personal Protection
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.

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Imidazole	none listed	none listed	none listed

OSHA Vacated PELs:
Imidazole:
None listed

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.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder
Color: white to beige
Odor: amine-like
pH: Weak base (aq. sol.)
Vapor Pressure: 0.046 mm Hg @ 25 deg C
Vapor Density: Not available
Evaporation Rate: Negligible
Viscosity: Not available
Boiling Point: 255 - 256 deg C
Freezing/Melting Point: 86 - 90 deg C
Decomposition Temperature: Not available
Solubility in water: Soluble
Specific Gravity/Density: Not available.
Molecular Formula: C3H4N2
Molecular Weight: 68.08

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Dust generation, excess heat.

Incompatibilities with Other Materials:
Strong oxidizing agents.

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

Hazardous Polymerization:
will not occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 288-32-4: NI3325000
LD50/LC50:
RTECS: CAS# 288-32-4: Oral, mouse: LD50 = 880 mg/kg;
Oral, rat: LD50 = 220 mg/kg.
Carcinogenicity:
Imidazole -
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Epidemiology:
Not available
Teratogenicity:
Not available
Reproductive:
Not available

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Neurotoxicity:
Not available
Mutagenicity:
Not available
Other:
Not available

Section 12 - Ecological Information

Not 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

Shipping Name: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.
Hazard Class: 8
UN Number: UN3263
Packing Group: III

Canada TDG

Shipping Name: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE)
Hazard Class: 8
UN Number: UN3263
Packing Group: III

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 288-32-4 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 TPO.

SARA Codes

CAS # 288-32-4: acute.

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:

STATE

Imidazole is not present on state lists from CA, PA, MN, MA, FL, or

NJ.

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: C

Risk Phrases:

R 22 Harmful if swallowed.

R 34 Causes burns.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately

with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves

and eye/face protection.

S 45 In case of accident or if you feel unwell, seek

medical advice immediately (show the label where

possible).

WGK (Water Danger/Protection)

CAS# 288-32-4: 1

Canada

CAS# 288-32-4 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1B, E

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.

CAS# 288-32-4 is not listed on Canada's Ingredient Disclosure

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List.

Section 16 - Other Information

MSDS Creation Date:

6/26/1999

Revision #7 Date

6/07/2006

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 the company 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 the company has been advised of the possibility of such damages.