

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Product Identifier

Product Form: Substance

Product Name: 1H-Pyrazole

CAS No: 288-13-1

Product Code: VOLO10006

Standard InChi: InChi=1S/C3H4N2/c1-2-4-5-3-1/h1-3H,(H,4,5)

1.2. Intended Use of the Product

Use of the substance/mixture: For laboratory research purposes.

1.3. Name, Address, and Telephone of the Responsible Party

Manufacturer

Volochem, Inc.

2600 Hilltop Dr.

Bldg B #C211

Richmond, CA 94806

T 510.748.0159

www.volochem.com

1.4. Emergency Telephone Number

Emergency Number : 510-748-0159 (9a-5p M-F)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Specific target organ toxicity – single exposure (Category 3)

Reproductive toxicity (Category 1)

Acute aquatic toxicity (Category 3)

2.2. Label Elements

GHS-US Labeling

Pictogram(s): GHS07, GHS08



Signal word: Danger

Hazard statement(s)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May causes respiratory irritation.
H360	May damage fertility or the unborn child.
H402	Harmful to aquatic life.

1H-Pyrazole

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P330+P310	IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER/doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/ doctor if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

No additional information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name	Synonym(s)	Product Identifiers
1H-Pyrazole	None	VOLO10006 CAS No. 288-13-1

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General advice

Consult a physician, Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. CAUTION! Victim may be a source of contamination. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries:

Symptoms/Injuries After Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

1H-Pyrazole

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/Injuries After Skin Contact: Harmful if absorbed through skin. Causes skin irritation.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed

Chronic Symptoms: The chronic effects of this substance are unknown.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Nausea, headache, vomiting, burning sensation, cough, labored breathing, shortness of breath, sore throat, redness, pain, abdominal pain, burning sensation, shock.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Product is not flammable, but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous decomposition products formed under fire conditions. – carbon oxides, nitrogen oxides (NOx).

5.3. Advice for Firefighters

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Wear self-contained breathing apparatus for firefighting if necessary.

5.4. NFPA Rating

Health Hazard: 2

Flammability: 1

Reactivity Hazard: 0

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Collect spillage. Avoid generation of dust during clean-up of spills. Clear up spills immediately and dispose of waste safely.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Avoid contact with skin and eyes. Avoid formation of dusts and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

1H-Pyrazole

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.3. Specific End Use(s) For laboratory research purposes

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Avoid high dust concentration. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

: Gloves. Protective goggles. Insufficient ventilation: wear respiratory protection.



Hand Protection

: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye Protection

: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH or EN 166.

Respiratory Protection

: For nuisance exposures use type P95 or type P1 particle respirator. For higher level protection use type OV/AG/P99 or type ABEK-P2 respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH or CEN.

Other Information

: When using, do not eat, drink or smoke.

This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	crystalline
Appearance	Off-white
Odor	No data available
Odor Threshold	No data available
pH	No data available
Relative Evaporation Rate (butylacetate=1)	No data available
Melting Point	Melting point/range: 67 - 70°C (153 - 158 °F) – lit.
Boiling Point	186 - 188 °C (367 - 370 °F) – lit.
Flash Point	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Flammability (solid, gas)	No data available
Vapor Pressure	No data available
Relative Vapor Density at 20 °C	No data available
Relative Density	No data available

1H-Pyrazole

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific Gravity	Not available
Solubility	No data available
Log Pow	No data available
Log Kow	No data available
Viscosity, Kinematic	No data available
Viscosity, Dynamic	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Explosive Limits	Not applicable
9.2. Other Information	No additional information available

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2 Chemical Stability:** Product is stable under recommended storage conditions.
- 10.3 Possibility of Hazardous Reactions:** No data available
- 10.4 Conditions to Avoid:** No data available
- 10.5 Incompatible Materials:** Acids, oxidizing agents
- 10.6 Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides (NOx)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity

Oral LD50
LD50 Oral – rat – 1,010 mg/kg
Remarks: Coma. Hepatitis (hepatocellular necrosis). Fatty liver degeneration.

Inhalation LC50
No data available

Dermal LD50
No data available

Other information on acute toxicity
No data available

Skin Corrosion/Irritation: No data available

Serious Eye Damage/Irritation: No data available

Respiratory or Skin Sensitization: No data available

Germ Cell Mutagenicity: No data available

Carcinogenicity: Not classified

Reproductive Toxicity: Reproductive toxicity – rat – Oral
Effects on Fertility: Post implantation mortality

Teratogenicity:

Developmental Toxicity – mouse – Intraperitoneal

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus) Effects on Embryo or Fetus: Fetal death.

Development Toxicity – rat – Oral

Specific Developmental Abnormalities: Eye, ear. Specific Developmental Abnormalities: Urogenital system.

Specific Target Organ Toxicity (Single Exposure): Inhalation – May cause respiratory irritation

Specific Target Organ Toxicity (Repeated Exposure): No data available

Aspiration Hazard: No data available

Symptoms/Injuries After Inhalation: May be harmful if inhaled. Causes respiratory tract irritation

Symptoms/Injuries After Skin Contact: Harmful if absorbed through skin. Causes skin irritation.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed.

1H-Pyrazole

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Chronic Symptoms: The chronic effects of this substance are unknown.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to fish LC50 – Lepomis macrochirus (Bluegill) – 66 – 111 mg/l – 96 h
Toxicity to daphnia and other aquatic invertebrates EC50 – Daphnia magna (Water flea) – 24 – 60 mg/l – 48h

12.2. Persistence and Degradability

No data available

12.3. Bioaccumulative Potential

No data available

12.4. Mobility in Soil

No data available

12.5. Other Adverse Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Contact a licensed professional waste disposal service to dispose of this material.
Dispose of waste material in accordance with all local, regional, national, and international regulations

SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/IMDG/DOT

- | | |
|--|-----------------------------|
| 14.1. UN Number | Not regulated for transport |
| 14.2. UN Proper Shipping Name | |
| 14.3. Transport hazard class(es) | |
| 14.4. Packing group | |
| 14.5.1. Marine Pollutant | |
| 14.5.2. Reportable Quantity | |
| 14.6.1. Toxic Inhalation Hazard | |
| 14.6.2. Mode specific comments | |
| 14.6.3. Ground transportation - DOT (US) | |
| 14.6.4. Marine transportation - IMDG | |
| 14.6.5. Air transportation - IATA/ICAO | |

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

EPA TSCA Inventory

Not listed

For research and development use only by technically qualified individuals under section 5(h)(3) of the Toxic Substances Control Act (TSCA).

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

1H-Pyrazole

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

SARA 311/312 Components

Acute Health Hazard

15.2. US State Regulations

California Proposition 65 List 2014

Not listed

Maine Chemicals of High Concern List 2012

Not listed

Massachusetts Right to Know Hazardous Substance List 2014

Not listed

New Jersey Right to Know Hazardous Substance List 2010

Not listed

Pennsylvania Right to Know Hazardous Substance List 2010

Not listed

SECTION 16: OTHER INFORMATION

16.1. Other Classifications

HMIS

Health hazard: 2

Flammability: 0

Physical hazards: 0

Revision date : 1/3/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Volochem chemicals are for research purposes only and are NOT intended for use as drugs, food additives, household goods, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

SDS US (GHS HazCom) - US Only