

# Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 07/13/2010

Reviewed on 07/12/2010

## 1 Identification of substance:

### Product details:

**Product name:** 2-Ethylphenylhydrazine hydrochloride

**Stock number:** A16853, L13449

### Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company  
Johnson Matthey Catalog Company, Inc.  
30 Bond Street  
Ward Hill, MA 01835-8099  
Emergency Phone: (978) 521-6300  
CHEMTREC: (800) 424-9300  
Web Site: [www.alfa.com](http://www.alfa.com)

**Information Department:** Health, Safety and Environmental Department

### Emergency information:

During normal hours the Health, Safety and Environmental Department. After normal hours call Chemtrec at (800) 424-9300.

## 2 Hazards identification

### Hazard description:



T Toxic  
N Dangerous for the environment

### Information pertaining to particular dangers for man and environment

R 22 Harmful if swallowed.  
R 40 Limited evidence of a carcinogenic effect.  
R 41 Risk of serious damage to eyes.  
R 43 May cause sensitization by skin contact.  
R 48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.  
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### Classification system

#### HMIS ratings (scale 0-4)

#### (Hazardous Materials Identification System)

HEALTH	*2
FIRE	1
REACTIVITY	1

Health (acute effects) = \*2  
Flammability = 1  
Reactivity = 1

### GHS label elements



**Danger**

3.9/1 - Causes damage to organs through prolonged or repeated exposure.  
3.6/2 - Suspected of causing cancer.



**Danger**

3.3/1 - Causes serious eye damage.



**Warning**

4.1/1 - Very toxic to aquatic life.  
4.1/1 - Very toxic to aquatic life with long lasting effects.



**Warning**

3.1/4 - Harmful if swallowed.  
3.4/1 - May cause an allergic skin reaction.

### Warning

3.1/5 - May be harmful in contact with skin.

### Prevention:

Do not breathe dust/fume/gas/mist/vapours/spray.

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**Response:**

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/Data on components:

**Chemical characterization:****Description: (CAS#)**

2-Ethylphenylhydrazine hydrochloride (CAS# 58711-02-7)

**Identification number(s):****ELINCS Number:** 421-460-2**Index number:** 612-245-00-6

### 4 First aid measures

**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

**After skin contact**

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

**After eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing** Seek immediate medical advice.

### 5 Fire fighting measures

**Suitable extinguishing agents**

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards caused by the material, its products of combustion or resulting gases:**

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

**Protective equipment:**

Wear self-contained respirator.

Wear fully protective impervious suit.

### 6 Accidental release measures

**Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

**Measures for cleaning/collecting:** Ensure adequate ventilation.**Additional information:**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

**Handling****Information for safe handling:**

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

**Information about protection against explosions and fires:** Keep ignition sources away.**Storage****Requirements to be met by storerooms and receptacles:** No special requirements.

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**Product name: 2-Ethylphenylhydrazine hydrochloride**

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**Information about storage in one common storage facility:**

Store away from water/moisture.  
Store away from oxidizing agents.

**Further information about storage conditions:**

This product is hygroscopic.  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.  
Protect from humidity and water.

**8 Exposure controls and personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Components with limit values that require monitoring at the workplace:** Not required.

**Additional information:** No data

**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Remove all soiled and contaminated clothing immediately.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

**Breathing equipment:** Use suitable respirator when high concentrations are present.

**Protection of hands:**

Impervious gloves  
Check protective gloves prior to each use for their proper condition.

**Material of gloves**

The selection of suitable gloves not only depends on the material, but also on quality.  
Quality will vary from manufacturer to manufacturer.

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

**9 Physical and chemical properties:****General Information**

<b>Form:</b>	Solid in various forms
<b>Odor:</b>	Not determined

**Change in condition**

<b>Melting point/Melting range:</b>	178°C (352°F)
<b>Boiling point/Boiling range:</b>	Not determined
<b>Sublimation temperature / start:</b>	Not determined

<b>Flash point:</b>	Not applicable
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<b>Ignition temperature:</b>	Not determined
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<b>Decomposition temperature:</b>	Not determined
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<b>Danger of explosion:</b>	Product does not present an explosion hazard.
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**Explosion limits:**

<b>Lower:</b>	Not determined
<b>Upper:</b>	Not determined

<b>Vapor pressure:</b>	Not determined
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<b>Density at 20°C (68°F):</b>	1.21 g/cm <sup>3</sup>
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<b>Solubility in / Miscibility with Water:</b>	Soluble
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**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:**

Decomposition will not occur if used and stored according to specifications.

**Materials to be avoided:**

Water/moisture  
Oxidizing agents

**Dangerous reactions** No dangerous reactions known

**Dangerous products of decomposition:**

Carbon monoxide and carbon dioxide

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**Product name: 2-Ethylphenylhydrazine hydrochloride**

 Nitrogen oxides  
 Hydrogen chloride (HCl)

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### 11 Toxicological information

**Acute toxicity:**
**LD/LC50 values that are relevant for classification:**

Oral	LD50	424 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)

**Primary irritant effect:**
**on the skin:** Irritant to skin and mucous membranes.

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

**Subacute to chronic toxicity:**

Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available.

**Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

### 12 Ecological information:

**Ecotoxicological effects:**
**Remark:** Very toxic for aquatic organisms

**Additional ecological information:**
**General notes:**

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits.

Very toxic for aquatic organisms

### 13 Disposal considerations

**Product:**
**Recommendation** Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**
**Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

**DOT regulations:**

**Hazard class:** 9

**Identification number:** UN3077

**Packing group:** III

**Proper shipping name (technical name):** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Ethylphenylhydrazine hydrochloride)

**Label** 9

**Remarks:** Special marking with the symbol (fish and tree).

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** 9 (M7) Miscellaneous dangerous substances and articles

**Danger code (Kemler):** 90

**UN-Number:** 3077

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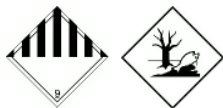
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**Product name:** 2-Ethylphenylhydrazine hydrochloride

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<b>Packaging group:</b>	III
<b>Special marking:</b>	Symbol (fish and tree)
<b>Description of goods:</b>	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Ethylphenylhydrazine hydrochloride)

**Maritime transport IMDG:**

<b>IMDG Class:</b>	9
<b>UN Number:</b>	3077
<b>Label</b>	9
<b>Packaging group:</b>	III
<b>Marine pollutant:</b>	Yes (P)
	Symbol (fish and tree)
<b>Proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Ethylphenylhydrazine hydrochloride)

**Air transport ICAO-TI and IATA-DGR:**

<b>UN/ID Number:</b>	3077
<b>Label</b>	9
<b>Packaging group:</b>	III
<b>Proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Ethylphenylhydrazine hydrochloride)

**UN "Model Regulation":** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

## 15 Regulations

**Product related hazard informations:****Hazard symbols:**

T Toxic  
N Dangerous for the environment

**Risk phrases:**

22 Harmful if swallowed.  
40 Limited evidence of a carcinogenic effect.  
41 Risk of serious damage to eyes.  
43 May cause sensitization by skin contact.  
48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.  
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Safety phrases:**

22 Do not breathe dust.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
45 In case of accident or if you feel unwell, seek medical advice immediately.  
60 This material and its container must be disposed of as hazardous waste.  
61 Avoid release to the environment. Refer to special instructions/Safety data sheets

**National regulations**

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only.

Some or all of the components of this product are not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

**Information about limitation of use:** For use only by technically qualified individuals.

## 16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the

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user.

**Department issuing MSDS:** Health, Safety and Environmental Department.**Contact:** Zachariah Holt**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

P: Marine Pollutant

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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