

Safety Data Sheet
according to 1907/2006/EC, Article 31

Revision: 27.02.2009

Printing date 27.02.2009

1 Identification of substance**Product details**

Trade name: 1,2,3,4-Tetrahydroisoquinoline
Stock number: L08143
Manufacturer/Supplier: Alfa Aesar
 Shore Road
 Port of Heysham Industrial Park
 Heysham Lancashire LA3 2XY
 United Kingdom
 Office Tel: +44 (0) 1524 850506
Informing department: Product safety department.
Emergency information: Call Carechem 24 at +44 (0) 1865 407333

2 Hazards identification**Hazard designation:**

Xn Harmful

Information pertaining to particular dangers for man and environment

R 22 Harmful if swallowed.
 R 36/37/38 Irritating to eyes, respiratory system and skin.

GHS label elements**Danger**

3.1/3 - Toxic if swallowed.
 3.2/2 - Causes skin irritation.
 3.3/2A - Causes serious eye irritation.
 3.8/3 - May cause respiratory irritation.
Prevention: Avoid breathing dust/fume/gas/mist/vapours/spray.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
Response: Wear protective gloves/protective clothing/eye protection/face protection.
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 IF ON SKIN: Wash with plenty of soap and water.
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Call a POISON CENTER or doctor/physician if you feel unwell.
 Specific treatment (see label).
 Rinse mouth.
 If skin irritation occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Take off contaminated clothing and wash before reuse.
Storage: Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients**Chemical characterization:**

Designation: (CAS#) 1,2,3,4-Tetrahydroisoquinoline (CAS# 91-21-4): 100%
Identification number(s):
EINECS Number: 202-050-0

4 First aid measures**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contactSeek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.**After eye contact**Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.**After swallowing**

Seek immediate medical advice.

5 Fire fighting measures**Suitable extinguishing agents
Special hazards caused by the material, its
products of combustion or flue gases:**CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.**Protective equipment:**

Can be released in case of fire:
 Carbon monoxide and carbon dioxide
 Nitrogen oxides (NO_x)
 Wear self-contained breathing apparatus.
 Wear full protective 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.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.**Measures for cleaning/collecting:**

See Section 7 for information on safe handling
 See section 8 for information on personal protection equipment.
 See Section 13 for information on disposal.

Additional information:**7 Handling and storage****Handling****Information for safe handling:**

Keep containers tightly sealed.
 Store in cool, dry place in tightly closed containers.
 Ensure good ventilation/exhaustion at the workplace.

**Information about protection against
explosions and fires:**

Keep ignition sources away - Do not smoke.

Storage**Requirements to be met by storerooms and
containers:**

No special requirements.

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

Store away from oxidizing agents.

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Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

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 critical 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 should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

Breathing equipment:

Use breathing protection with high concentrations.

Protection of hands:

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

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

Not determined

Eye protection:

Safety glasses

Body protection:

Face protection

Body protection:

Protective work clothing.

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

Form: Liquid
Colour: Light yellow
Smell: Amine-like

Change in condition

Melting point/Melting range: -30°C
Boiling point/Boiling range: 232-233°C
Sublimation temperature / start: Not determined

Flash point: 98°C**Ignition temperature:** 380°C**Decomposition temperature:** Not determined**Danger of explosion:** Product is not explosive.**Critical values for explosion:**

Lower: Not determined
Upper: Not determined

Steam pressure: Not determined**Density at 20°C** 1.049 g/cm³

Solubility in / Miscibility with Water at 20°C: 20 g/l

pH-value (20 g/l) at 20°C: 11**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

Materials to be avoided:

Acids
Oxidizing agents

Dangerous reactions:

No dangerous reactions known

Dangerous products of decomposition:

Carbon monoxide and carbon dioxide
Nitrous vitriol gases

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

Oral LD50 710 mg/kg (rat)

Primary irritant effect:**on the skin:**

Irritant for skin and mucous membranes.

on the eye:

Irritant effect.

Sensitization:

No sensitizing effect known.

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:**General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations**Product:****Recommendation**

Consult state, local or national regulations for proper disposal.
Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.

Uncleaned packagings:**Recommendation:**

Disposal must be made according to official regulations.

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14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)
ADR/RID-GGVS/E Class: None

Maritime transport IMDG/GGVSea:
IMDG/GGVSea Class: None

Air transport ICAO-TI and IATA-DGR:
ICAO/IATA Class: None

Transport/Additional information: Not dangerous according to the above specifications.

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



Xn Harmful

Risk phrases:

22 Harmful if swallowed.
36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37 Wear suitable protective clothing and gloves.

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.
For use only by technically qualified individuals.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

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 user.

Department issuing data specification sheet: 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
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)
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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