



#### 1 Identification

Product identifier

Product name: N-Ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline

Stock number: L00250

**CAS Number:** 16357-59-8 EC number: 240-418-2

Relevant identified uses of the substance or mixture and uses advised against.

Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Details of the supplier of the safety da Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.walfa.com

www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

#### 2 Hazard(s) identification

#### Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Hazards not otherwise classified No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms



GHS07

#### Signal word Warning

Hazard statements
H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

Precationary statements
Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405

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

WHMIS classification

D2B - Toxic material causing other toxic effects



# Classification system

HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Health (acute effects) = 1 Flammability = 1 Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment PBT: Not applicable.

vPvB: Not applicable

#### 3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 16357-59-8 N-Ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline

Identification number(s): EC number: 240-418-2

### 4 First-aid measures

#### Description of first aid measures

After inhalation

Arter minatation 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.

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Seek immediate medical advice.

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

After swallowing Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

# 5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

Advice for firefighters

Protective equipment: Wear self-contained respirator.

Wear fully protective impervious suit.

#### 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away

Ensure adequate ventilation

Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Ensure adequate ventilation.

Prevention of secondary hazards: No special measures required. Reference to other sections

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 Precautions for safe handling

Precautions for safe nandling
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: No information known.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Specific end use(s) No further relevant information available.

# 8 Exposure controls/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.

Control parameters
Components with limit values that require monitoring at the workplace: Not required.
Additional information: No data

Exposure controls
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.
Maintain an ergonomically appropriate working environment.
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.

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

Information on basic physical and chemical properties

General Information

Appearance: Form:

Powder Color: Off-white Odor: Odor threshold: Not determined

pH-value:

Change in condition Melting point/Melting range: Boiling point/Boiling range: 66-67 °C (151-153 °F) Not determined Sublimation temperature / start: Not determined

Not applicable Not determined.

Not determined

Not applicable.

Flash point: Flammability (solid, gaseous) Ignition temperature:

Not determined

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(Contd. of page 2) Decomposition temperature: Not determined Auto igniting: Not determined. Danger of explosion: Explosion limits: Product does not present an explosion hazard. Lower: Not determined Upper: Vapor pressure: Density: Relative density Not determined Not applicable. Not determined Not determined. Vapor density Evaporation rate Not applicable. Not applicable. Solubility in / Miscibility with Not determined Partition coefficient (n-octanol/water): Not determined. Viscosity:

# 10 Stability and reactivity

dynamic.

kinematic:

Other information

Reactivity No information known.

Chemical stability Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions No dangerous reactions known

Conditions to avoid No further relevant information available.

Incompatible materials: Oxidizing agents

Hazardous decomposition products:

Carbon managing and earlied and earlied the dissidered.

No further relevant information available.

Carbon monoxide and carbon dioxide Nitrogen oxides

### 11 Toxicological information

Information on toxicological effects

Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: Causes skin irritation.

Eye irritation or corrosion: Causes serious eye irritation.

Sensitization: No sensitizing effects known.

Germ cell mutagenicity: No effects known.

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

Reproductive toxicity: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: May cause respiratory irritation. Aspiration hazard: No effects known.

Not applicable.

Not applicable.

Subacute to chronic toxicity: No effects known.

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

#### 12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Additional ecological information:

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

Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.

Avoid transfer into the environment.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No further relevant information available.

#### 13 Disposal considerations

Waste treatment methods

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 Not a hazardous material for transportation

**UN-Number** 

DOT, IMDG, IATA None

UN proper shipping name DOT, IMDG, IATA

None

Transport hazard class(es)

DOT, ADR, IMDG, IATA

Packing group DOT, IMDG, IATA

None

Environmental hazards: Special precautions for user Not applicable.

None

Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

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Not dangerous according to the above specifications.

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Transport/Additional information: DOT

Marine Pollutant (DOT): No

## 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms



# Signal word Warning

Hazard statements

H315 Causes skin irritation.

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H335 May cause respiratory irritation. Precautionary statements

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 P501

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

National regulations

National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).
SARA Section 313 (specific toxic chemical listings) Substance is not listed.
California Proposition 65
Prop 65 - Chemicals known to cause cancer Substance is not listed.
Prop 65 - Developmental toxicity Substance is not listed.
Prop 65 - Developmental toxicity, female Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.
Information about limitation of use: For use only by technically qualified individuals.
Other regulations, limitations and prohibitive regulations

Other regulations, limitations and prohibitive regulations
Although this chemical may sometimes be used as a food or drug or cosmetic, our products are not approved or suitable for such use or for human consumption.

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 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 SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / -Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PVB: very Persistent and very Bioaccumulative VPB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) INTP: National Toxicology Program (USA) INTP: National Toxicology Program (USA)