1 Identification

Product identifier

Product name: 2-Ethyl-6-methylaniline

Stock number: A12796, L07886

**CAS Number:** 24549-06-2 EC number:

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

Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc.

Thermo Fisher Scientific S. 30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech @alfa.com www.alfa.com

Information Department:

Product Safety Department Health, Safety and Environmental Department

Treatili, Safety and Environmenta 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.

*A*lfa *A*esar

#### 2 Hazard(s) identification

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



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed. Acute Tox. 3 H311 Toxic in contact with skin.

GHS07

Acute Tox. 4 H332 Harmful if inhaled.

H227 Combustible liquid. **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



GHS06

#### Signal word Danger Hazard statements

H227 Combustible liquid. H301+H311 Toxic if swallowed or in contact with skin. H332 Harmful if inhaled.

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P210 Reep away from heavsparks/open frames/frot surfaces. No smoking P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...
P361 Take off immediately all contaminated clothing.
P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations. **WHMIS classification** 

Combustible liquid

D1B - Toxic material causing immediate and serious toxic effects



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



Health (acute effects) = 2
Flammability = 2 EACTIVITY Physical Házard = 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: 24549-06-2 2-Ethyl-6-methylaniline

# Product name: 2-Ethyl-6-methylaniline

Identification number(s): EC number: 246-309-6

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### 4 First-aid measures

Description of 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 medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed Methemoglobinemia

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:

Trins product is involved in a life, the 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:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation.

Provention of secondary hazards: Keep away from ignition sources

Prevention of secondary hazards: Keep away from ignition sources.

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

Recautions for sale 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.

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

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

USA

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## Product name: 2-Ethyl-6-methylaniline

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9 Physical and chemical properties

Information on basic physical and chemical properties General Information

Appearance:

pH-value:

. Form: Color: Liquid Brown Odor: Not determined Odor threshold: Not determined Not determined.

Change in condition

Melting point/Melting range: Not determined 226-228 °C (439-442 °F)

Boiling point/Boiling range: Sublimation temperature / start: Not determined

Flash point: 89 °C (192 °F) Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Not determined. Not determined Not determined Auto igniting: Not determined

Product does not present an explosion hazard.

Danger of explosion: Explosion limits: Lower: Not determined Not determined Upper: Vapor pressure: Density at 20 °C (68 °F): Relative density

Not determined 0.968 g/cm³ (8.078 lbs/gal) Not determined.

Vapor density Evaporation rate Solubility in / Miscibility with Not determined. Not determined. Water: Not determined

Partition coefficient (n-octanol/water): Not determined. Viscosity: dynamic: Not determined.

kinematic: Not determined.

Other information No further relevant information available.

### 10 Stability and reactivity

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 monoxide and carbon dioxide

Nitrogen oxides

#### 11 Toxicological information

### Information on toxicological effects

Acute toxicity: Harmful if inhaled.

Harmful in contact with skin. Harmful if swallowed.

Danger through skin absorption.

LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known.

Germ cell mutagenicity: No effects known.

Caraingganicity: No elessification data on caraingganic propositions.

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: No effects known.

Aspiration hazard: No effects known.

Other information (about experimental toxicology): Mutagenic effects have been observed on tests with bacteria.

Subacute to chronic toxicity:
The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:
Liver - other changes.
Blood - changes in bone marrow (not otherwise specified).

Blood - changes in spleen.
Blood - changes in spleen.
Blood - changes in erythrocyte (RBC) count.
Sense Organs and Special Senses (Eye) - effect, not otherwise specified.
Lungs, Thorax, or Respiration - dyspnea.
Nutritional and Gross Metabolic - weight loss or decreased weight gain.
Nutritional and Gross Metabolic - changes in chlorine.
Autonomic Nervous System - other (direct) parasympathomimetic.
Behavioral - muscle weakness

Behavioral - muscle weakness. Behavioral - ataxia.

The National Talanta.
Kidney, Ureter, Bladder - other changes in urine composition.
Absorption into the body may lead to the formation of methemoglobin, producing cyanosis, and marked fall in blood pressure leading to collapse, coma and possibly death. Onset may be delayed 2-4 hours or longer.

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.

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# Product name: 2-Ethyl-6-methylaniline

Ecotoxical effects:

Remark: Harmful to aquatic organisms Additional ecological informătion:

General notes:

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

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

Harmful to aquatic organisms
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.

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:

None Not applicable.

Special precautions for user

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

Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

DOT

Class

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



GHS06

Signal word Danger

Hazard statements

H227 Combustible liquid. H301+H311 Toxic if swallowed or in contact with skin. H332 Harmful if inhaled.

H332 Harmiul il illiniario.

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...
P361 Take off immediately all contaminated clothing.
P405 Store locked up.
Dispose of contents/container in accordance with local/regional/nation

P501 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 Domestic Substances List (DSL).

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.

Prop 65 - Developmental toxicity, use: Ear use only by technically qualified individuals

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

Other regulations, limitations and prohibitive regulations
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. Substance is not listed

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 /

(Contd. on page 5)

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# Product name: 2-Ethyl-6-methylaniline

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Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transport Association
IATA: International Air Transport Association
INICAS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Information System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
VPUB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)

USA