

Safety Data Sheet per OSHA HazCom 2012

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#### 1 Identification

Product identifier

Product name: trans-beta-(2-Furylacrolein)

Stock number: A13042, L06248

CAS Number: 623-30-3 EC number: 210-785-3

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.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 Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed. **Hazards not otherwise classified** No information known.

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







Signal word Danger **Hazard statements** H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P405 Store locked up.

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

WHMIS classification

D2B - Toxic material causing other toxic effects
E - Corrosive material



Classification system

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



Other hazards Results of PBT and vPvB assessment PBT: Not applicable.

vPvB: Not applicable

## 3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description:

ldentification number(s): EC number: 210-785-3

#### 4 First-aid measures

Description of first aid measures

General information Immediately remove any clothing soiled by the product.

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#### Product name: trans-beta-(2-Furylacrolein)

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.

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

Causes serious eye damage.

Causes serious eye damage.

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

Carbon monoxide and carbon dioxide
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

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

Use neutralizing agent.
Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation

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

Hecautions for sale naturing
Handle under dry protective gas.
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

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

Information about storage in one common storage facility: Store away from oxidizing agents. Store away from air. Further information about storage conditions:

Store under dry inert gas. This product is air sensitive.

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.

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.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
Eye protection:
Tightly sealed goggles
Full face protection:
Protective work clothing.

USA

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#### Product name: trans-beta-(2-Furylacrolein)

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9 Physical	and	chemical	properties

Information on basic physical and chemical properties

General Information

Appearance: Form:

Powder Odor: Not determined

Odor threshold: Not determined pH-value: Not applicable.

Change in condition Melting point/Melting range: Boiling point/Boiling range: 48-50 °C (118-122 °F) Not determined Sublimation temperature / start: Not determined

Not applicable Not determined. Not determined Flash point: Flash point. Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting: Not determined Not determined

Product does not present an explosion hazard.

Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure: Not determined Not determined Not applicable. Not determined Density: Relative density Not determined. Vapor density Evaporation rate Not applicable. Not applicable. Solubility in / Miscibility with

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

dynamic: kinematic: Not applicable. Not applicable.

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

#### 11 Toxicological information

Information on toxicological effects

Acute toxicity: Harmful if swallowed. Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### LD/LC50 values that are relevant for classification:

Oral LD50 >860 mg/kg (rat)

Skin irritation or corrosion: Causes severe skin burns.
Eye irritation or corrosion: Causes serious eye damage.
Sensitization: No sensitizing effects known.
Germ cell mutagenicity: No effects known.
Carcinogenicity: No effects known.
Carcinogenicity: No effects known.
Carcinogenicity: No effects known.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: No effects known.
Specific target organ system toxicity - single exposure: No effects known.
Aspiration hazard: No effects known.
Subacute to chronic toxicity: No effects known.

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:

General notes:

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.

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Product name: trans-beta-(2-Furylacrolein) (Contd. of page 3) Uncleaned packagings: Recommendation: Disposal must be made according to official regulations. 14 Transport information UN-Number DOT, IMDG, IATA UN1759 UN proper shipping name DOT Corrosive solids, n.o.s. (trans-beta-(2-Furylacrolein)) CORROSIVE SOLID, N.O.S. (trans-beta-(2-Furylacrolein)) IMDG, IATA Transport hazard class(es) DOT 8 Corrosive substances. Class Label 8 (C10) Corrosive substances Label ĪMĎĠ, IATA Class 8 Corrosive substances Label Packing group DOT, IMDG, IATA 111 Environmental hazards: Not applicable. Warning: Corrosive substances Special precautions for user Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport/Additional information: Marine Pollutant (DOT): No UN "Model Regulation": UN1759, Corrosive solids, n.o.s. (trans-beta-(2-Furylacrolein)), 8, III

### 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





GHS05 GHS07

Signal word Danger Hazard statements

H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.

Precautionary statements

Precautionary statements
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P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

National 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, male Substance is not listed.
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. 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 11/23/2015 / 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)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
LATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances

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# Product name: trans-beta-(2-Furylacrolein)

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 vPuB: 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) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

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