Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.07.2013 Revision: 05.03.2007

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name Geranyl acetate A19864

Stock number: CAS Number: 105-87-3 203-341-5

EC number: 203-341-5
1.2 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG A Johnson Matthey Company Zeppelinstr. 7b Zeppelinsti. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com

Informing department:

www.alfa.com
www.alfa.com
product safety Tel + +049 (0) 7275 988687-0
Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240 1.4 Emergency telephone number:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xi; Irritant

R36/38: Irritating to eyes and skin. Information concerning particular hazards

for human and environment: Other hazards that do not result in

classification

Not applicable No information known.

GHS07

2.2 Label elements
Labelling according to Regulation (EC) No
1272/2008

Hazard pictograms

Signal word

Warning

H315 Causes skin irritation. H319 Causes serious eye irritation. Hazard statements

Precautionary statements

The substance is classified and labelled according to the CLP regulation.

H319 Causes serious eye irritation.

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.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

Specific treatment (see on this label).

P362 Take off contaminated clothing and wash before reuse.

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

2.3 Other hazards Results of PBT and vPvB assessment

PBT:

Not applicable. Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS# Designation: Identification number(s):

105-87-3 Geranyl acetate

203-341-5 EC number:

SECTION 4: First aid measures

4.1 Description of first aid measures After inhalation

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

After skin contact

Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact After swallowing

Seek medical tréatment.

4.2 Most important symptoms and effects,

both acute and delayed
4.3 Indication of any immediate medical
attention and special treatment needed

No further relevant information available. No further relevant information available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents 5.2 Special hazards arising from the substance or mixture

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

If this product is involved in a fire, the following can be released:

Carbon monoxide and carbon dioxide

5.3 Advice for firefighters Wear self-contained breathing apparatus. Wear full protective suit.

Protective equipment:

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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

Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil.

6.3 Methods and material for containment

and cleaning up: Prevention of secondary hazards:

Absorb with liquid-binding material (sand. diatomite, acid binders, universal binders, sawdust).

No special measures required.

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6.4 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 information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Information about protection against explosions and fires:

Keep containers tightly sealed. Ensure good ventilation/exhaustion at the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and

containers:

Information about storage in one common

storage facility:

7.3 Specific end use(s)

Refrigerate

Store away from oxidizing agents.

Protect from heat

No information known.

Further information about storage conditions:

Keep container tightly sealed.

Refrigerate
No further relevant information available.

SECTION 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.

8.1 Control parameters Components with critical values that require monitoring at the workplace: Additional information:

Not required. No data

8.2 Exposure controls

Personal protective equipment General protective and hygienic measures

Breathing equipment: Protection of hands:

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. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition. 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. Impervious gloves

Impervious gloves

Material of gloves Penetration time of glove material Eye protection: Not determined

Safety glasses
Face protection
Protective work clothing. **Body protection:**

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Form: Liquid Colour: Colourless Pleasant Smell: Odour threshold: Not determined pH-value: Not determined.

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 137-139 °C (25mm Hg) Not determined

104 °C Flash point Inflammability (solid, gaseous) Inflammability (solid, gaseous) Ignition temperature: Not determined. Not determined Not determined Self-inflammability: Not determined

Danger of explosion:

Product is not explosive. Critical values for explosion: Lower: Not determined Not determined Not determined

Upper: Steam pressure: Density at 20 °C Relative density 0,91 g/cm³ Not determined. Vapour density Not determined. Evaporation rate Solubility in / Miscibility with Not determined.

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

Viscosity: dynamic: Not determined kínematic Not determined.

9.2 Other information No further relevant information available

SECTION 10: Stability and reactivity

10.1 Reactivity 10.2 Chemical stability Thermal decomposition / conditions to be avoided:

10.3 Possibility of hazardous reactions 10.5 Incompatible materials:

No information known.

Stable under recommended storage conditions.

No decomposition if used and stored according to specifications.

No dangerous reactions known Oxidizing agents

Not miscible or difficult to mix

Heat

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10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide (Contd. of page 2)

SECTION 11: Toxicological information

11.1 Information on toxicological effects Acute toxicity:

No effects known.

LD/LC50 values that are relevant for classification:

Oral I D50 6330 mg/kg (rat) LDLo 8 gm/kg (mouse) Irritation of skin moderate 100 mg/24H (guinea pig) 100 mg/24H (rabbit) severe

Skin irritation or corrosion: Causes skin irritation Causes serious eye irritation. No sensitizing effect known. No effects known. Eye irritation or corrosion: Sensitization:

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

Reproductive toxicity:

Specific target organ system toxicity - repeated exposure:

Specific target organ system toxicity - single exposure:

Aspiration hazard: Other information (about experimental

toxicology): Additional toxicological information:

Tumorigenic effects have been observed in tests with laboratory animals at very high doses To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:

No further relevant information available. 12.2 Persistence and degradability
12.3 Bioaccumulative potential No further relevant information available. No further relevant information available 12.4 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.

Generally not hazardous for water.
Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment PBT:

vPvB:

12.6 Other adverse effects

Not applicable.

No effects known.

No effects known.

No effects known.

No effects known.

Not applicable. No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

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

None

None

Uncleaned packagings: Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

UN-Number ADR, IMDG, IATA

14.2 UN proper shipping name ADR, IMDG, IATA

14.3 Transport hazard class(es)

ADR, IMDG, IATA

None Class

Packing group ADR, IMDG, IATA

None

14.5 Environmental hazards:

Not applicable

14.6 Special precautions for user

14.7 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.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Australian Inventory of Chemical Substances
Substances
Substance is listed.

Drugs and Poisons

National regulations Information about limitation of use:

Substance is not listed.

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

Generally not hazardous for water. Water hazard class: Generally no Other regulations, limitations and prohibitive regulations

ELINCS (European List of Notified Chemical Substances)

Substances of very high concern (SVHC) according to REACH, Article 57 REACH - Pre-registered substances 15.2 Chemical safety assessment:

Substance is not listed.

Substance is not listed. Substance is listed.

A Chemical Safety Assessment has not been carried out.

SECTION 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.

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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 Régulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Martime Code for Dangerous Goods
IATA: International Air Transport Association
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 Abbreviations and acronyms:

DE/E