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

1.1 Product identifier

Isopropyl tetradecanoate

Trade name Stock number: CAS Number: A18111 110-27-0 203-751-4

EC number: 203-/51-4

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

Sil24 Scientific research and developr 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.

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

Xi; Irritant

Irritating to skin. R38:

Information concerning particular hazards for human and environment:

Other hazards that do not result in

classification No information known.

2.2 Label elements

2.2 Laber elements
Labelling according to Regulation (EC) No
1272/2008
Hazard pictograms
Signal word

GHS07 Warning

Hazard statements Precautionary statements

Warning
H315 Causes skin irritation.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 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.

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

2.3 Other hazards

Results of PBT and vPvB assessment

PRT vPvB:

Not applicable. Not applicable.

Not applicable

### SECTION 3: Composition/information on ingredients

3.1 Substances

CAS# Designation: Identification number(s):

110-27-0 Isopropyl tetradecanoate

EC number: 203-751-4

#### SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation

persist. Seek immediate medical advice

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

After eye contact After swallowing 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

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

Carbon monoxide and carbon dioxide

3 Advice for firefighters Protective equipment: Wear self-contained breathing apparatus. Wear full protective suit.

#### SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

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

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

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

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: 6.4 Reference to other sections

6.2 Environmental precautions:

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

No special measures required.

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

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See Section 13 for information on disposal

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SECTION 7: Handling and storage

7.1 Precautions 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:

No information known. 7.2 Conditions for safe storage, including any incompatibilities

Storage Requirements to be met by storerooms and

Information about storage in one common

storage facility:
Further information about storage

conditions:

No special requirements.

Store away from oxidizing agents.

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of

technical systems:

7.3 Specific end use(s)

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

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 skin.

Breathing equipment: Protection of hands:

Avoid contact with the skin.

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.

Material of gloves Penetration time of glove material Impervious gloves Not determined

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Form:

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

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 191-194 °C (20mm Hg) Not determined

Flash point: Inflammability (solid, gaseous) 110 °C Not determined. Ignition temperature:
Decomposition temperature: Not determined Not determined Self-inflammability: Not determined

Danger of explosion: Critical values for explosion:

Not determined Lower: Upper: Not determined Steam pressure:
Density at 20 °C
Relative density
Vapour density Not determined 0,85 g/cm<sup>3</sup> Not determined. Not determined.

Evaporation rate Solubility in / Miscibility with Water:

Partition coefficient (n-octanol/water): Viscosity: dynamic:

Not determined. Not determined. Not determined.

Not determined.

kinematic: 9.2 Other information No further relevant information available

SECTION 10: Stability and reactivity

10.1 Reactivity 10.2 Chemical stability

No information known. Stable under recommended storage conditions.

Product is not explosive.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications. No dangerous reactions known

Not miscible or difficult to mix

10.3 Possibility of hazardous reactions 10.5 Incompatible materials: 10.6 Hazardous decomposition products:

Oxidizing agents
Carbon monoxide and carbon dioxide

DE/E (Contd. on page 3)

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SECTION 11: Toxicological information

11.1 Information on toxicological effects Acute toxicity:

No effects known.

LD/LC50 values that are relevant for classification:

Oral LD50 >2000 mg/kg (rat)

Reproductive toxicity:

Skin irritation or corrosion: Causes skin irritation. Irritant effect.

Eye irritation or corrosion: Sensitization:

No sensitizing effect known.

Germ cell mutagenicity: Carcinogenicity:

No effects known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA

or ACGIH. No effects known.

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

Specific target organ system toxicity - single

piration hazard:

Additional toxicological information:

No effects known. No effects known.

Not applicable.

No further relevant information available. No further relevant information available. No further relevant information available No further relevant information available.

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

12.1 TOXICITY
Aquatic toxicity:
12.2 Persistence and degradability
12.3 Bioaccumulative potential
12.4 Mobility in soil
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 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

None

Not applicable

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 Class

Packing group ADR, IMDG, IATA

None 14.5 Environmental hazards: Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

14.6 Special precautions for user

Transport/Additional information:

Not applicable.

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.

Standard for the Uniform Scheduling of 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.

Water hazard class:
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:

Abbreviations and acronyms:

RID: Reglement 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: T: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International ICATA)

ICAO: International 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 Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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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

DE/E

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