# SIGMA-ALDRICH

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SAFETY DATA SHEET

Revision Date 07/24/2018 Print Date 11/16/2018

#### 1. PRODUCT AND COMPANY IDENTIFICATION 1.1 **Product identifiers** Product name : Z-<SC>L</>-Isoleucine Product Number 408530 Brand Aldrich CAS-No. : 3160-59-6 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses : Laboratory chemicals, Synthesis of substances Details of the supplier of the safety data sheet 1.3 Company Sigma-Aldrich Inc. 3050 Spruce Street ST. LOUIS MO 63103 UNITED STATES +1 314 771-5765 Telephone +1 800 325-5052 Fax

#### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

# 2. HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture
- 2.2 GHS Label elements, including precautionary statements
- 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS none

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1	Substances		
	Formula	:	C <sub>14</sub> H <sub>19</sub> NO <sub>4</sub>
	Molecular weight	:	265.30 g/mol
	CAS-No.	:	3160-59-6
	EC-No.	:	221-611-0

No components need to be disclosed according to the applicable regulations.

# 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

- **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

#### **5. FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture Carbon oxides, Nitrogen oxides (NOx)
- **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4 Further information No data available

#### 6. ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal precautions, protective equipment and emergency procedures** Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.
- 6.2 Environmental precautions Do not let product enter drains.
- **6.3** Methods and materials for containment and cleaning up Sweep up and shovel. Keep in suitable, closed containers for disposal.
- **6.4 Reference to other sections** For disposal see section 13.

# 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection. For precautions see section 2.2.

- **7.2** Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): 13: Non Combustible Solids
- **7.3** Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters Components with workplace control parameters Contains no substances with occupational exposure limit values.
   8.2 Exposure controls
- 8.2 Exposure controls Appropriate engineering controls General industrial hygiene practice.

#### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

	a)	Appearance	Form: Solidified mass or fragments Colour: beige
	b)	Odour	No data available
	c)	Odour Threshold	No data available
	d)	рН	No data available
	e)	Melting point/freezing point	Melting point/range: 52 - 54 °C (126 - 129 °F)
	f)	Initial boiling point and boiling range	No data available
	g)	Flash point	No data available
	h)	Evaporation rate	No data available
	i)	Flammability (solid, gas)	No data available
	j)	Upper/lower flammability or explosive limits	No data available
	k)	Vapour pressure	No data available
	I)	Vapour density	No data available
	m)	Relative density	No data available
	n)	Water solubility	No data available
	o)	Partition coefficient: n- octanol/water	No data available
	p)	Auto-ignition temperature	No data available
	q)	Decomposition temperature	No data available
	r)	Viscosity	No data available
	s)	Explosive properties	No data available
	t)	Oxidizing properties	No data available
-	4005	200	

# 9.2 Other safety information

No data available

# **10. STABILITY AND REACTIVITY**

# 10.1 Reactivity

- No data available
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available
- **10.5** Incompatible materials Strong oxidizing agents

# Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) Other decomposition products - No data available In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

#### Acute toxicity

No data available Inhalation: No data available Dermal: No data available No data available

# Skin corrosion/irritation

No data available

Serious eye damage/eye irritation No data available

#### **Respiratory or skin sensitisation** No data available

Germ cell mutagenicity No data available

#### Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### **Reproductive toxicity**

No data available No data available

Specific target organ toxicity - single exposure No data available

# Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard No data available

#### **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **12. ECOLOGICAL INFORMATION**

- 12.1 Toxicity No data available
- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available

## 12.4 Mobility in soil No data available(N-Benzyloxycarbonyl-L-isoleucine)

12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

#### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging** Dispose of as unused product.

#### **14. TRANSPORT INFORMATION**

DOT (US) Not dangerous goods IMDG Not dangerous goods

ΙΑΤΑ

Not dangerous goods

#### **15. REGULATORY INFORMATION**

# SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

Aldrich- 408530

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components				
N-Benzyloxycarbonyl-L-isoleucine	CAS-No. 3160-59-6	Revision Date		
New Jersey Right To Know Components				
N-Benzyloxycarbonyl-L-isoleucine	CAS-No. 3160-59-6	Revision Date		

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# **16. OTHER INFORMATION**

#### **Further information**

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#### **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956 Version: 6.1

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