Safety Data Sheet

Section 1 – Identification of the substance/preparation and of the company/undertaking

Identification of the substance or mixture

Product name: L-arginine
Catalog number: 550-002-**
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Company details

Wisent Inc.
3645 Principale
Saint-Jean-Baptiste, Qc
Canada J0L2B0
Telephone: +1 (450) 446-2660
Toll-free in Canada: 1-888-947-3681
Fax: +1 (450) 446-7038
Emergency telephone: +1 (514) 777-1312

Wisent Inc.
PO Box 131
St-Bruno, Qc
Canada, J3V 4P8

Section 2 – Hazards identification

Classification of the substance or mixture
Not a hazardous substance or mixture.
GHS Label elements, including precautionary statements
Not a hazardous substance or mixture.
Hazards not otherwise classified (HNOC) or not covered by GHS – none

Section 3 – Composition/Information on ingredients

Formula : C6H14N4O2
Molecular weight : 174.20 g/mol
CAS-No. : 74-79-3
EC-No. : 200-811-1

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

Section 4 – First aid measures

Description of first aid measures
Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin contact

Rinse with plenty of soap and water. Consult a physician.

Eye contact

Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling.

Information for doctor

No data available

Section 5 – Firefighting measures

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx)

Not combustible.

Advice for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

Section 6 – Accidental release measures

Personal precaution, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

Methods and material for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Environmental precautions

Do not let product enter drains.

Reference to other sections

For disposal see section 13.

Section 7 – Handling and storage

Precaution for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection. For precautions see section 2.

Condition for safe storage, including any incapability

Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place. Storage class (TRGS 510): 13: Non Combustible Solids

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8 – Exposure controls/personal protection

Control parameters

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.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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

No special environmental precautions required.

Section 9 – Physical and chemical properties

Information on basic physical and chemical properties

Appearance	powder
Colour	white
Odour	No data available

Odour Threshold	weak
pH	ca.11.4 at 100 g/l at 20 °C (68 °F)
Melting point/ freezing point	Melting point/range: 222 °C (432 °F) - dec.
Boiling point	No data available
Flash point	No data available
Auto ignition temperature	does not ignite
Decomposition temperature	No data available
Viscosity	No data available
Evaporation rate	No data available
Flammability	The product is not flammable. - Flammability (solids)
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	< 0.1 hPa at 25 °C (77 °F)
Vapour density	No data available
Relative density	1.1 g/cm3
Relative vapour density	No data available
Specific gravity	No data available
Water Solubility	182 g/l at 25 °C (77 °F) - completely soluble
Solubility (solvents)	No data available
Partition coefficient	log Pow: -4.20 at 20 °C (68 °F) - Bioaccumulation is not expected.
Explosive properties	No data available
Oxidizing properties	No data available
Dissociation constant	2.17 at 20 °C (68 °F)

Other safety information
No data available

Section 10 – Stability and reactivity

Reactivity
No data available
Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Condition to avoid
No data available
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 Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) In the event of fire: see section 5

Section 11 – Toxicological information

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - > 5,110 mg/kg

Remarks: (ECHA)

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 1 h

(OECD Test Guideline 405)

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

Mutagenicity (mammal cell test): chromosome aberration.

Human lymphocytes

Result: negative

Ames test

Escherichia coli/Salmonella typhimurium

Result: negative

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.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - 91 d - No observed adverse effect level - 3,130.9 - 3,565.1 mg/kg (ECHA)

RTECS: CF1934200

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. This is a semi-essential amino acid which is frequently found in natural protein. Therapeutically used substance. Handle in accordance with good industrial hygiene and safety practice.

Section 12 –Ecological information

Toxicity

Toxicity to fish

semi-static test LC50 - Danio rerio (zebra fish) - 2,800 mg/l - 96 h (OECD Test Guideline 203)

Persistence and degradability

Biodegradability

aerobic - Exposure time 28 d Result: 100 % - Readily biodegradable. (OECD Test Guideline 301C)

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment PBT/vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

Section 13 – Disposal considerations

Waste treatment methods

Product

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

Contaminated packaging

Dispose of as unused product.

Section 14 – Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15 – Regulatory information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

Section 16 – Other information

MSDS Date of revision: June 2019

For research use only. Not use for diagnostic procedures.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions