

against

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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

1.1 Product identifier

| Trade name Product code EC-No. | : | DL-Asparagine Monohydrate A0541 221-521-1 |
|--|---|--|
| 1.2 Relevant identified uses of the Use of the Substance/Mixture | | ance or mixture and uses advised a Use as laboratory reagent |
| | | |

1.3 Details of the supplier of the safety data sheet

| | •• | | |
|-----|--|---|--|
| | Company | : | TCI EUROPE N.V. |
| | Address | : | Boereveldseweg 6 - Haven 1063, B-2070 Zwijndrecht, Belgium |
| | Telephone | : | +32 (0)3 735 07 00 |
| | Telefax | : | +32 (0)3 735 07 01 |
| | E-mail address of person responsible for the SDS | : | sales-eu@tcichemicals.com |
| 1.4 | Emergency telephone number | | |
| | Emergency telephone number | : | +44 844 892 0111 |
| | | | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

| Substance name EC-No. | | DL-Asparagine Monohydrate 221-521-1 |
|--------------------------|---|-------------------------------------|
| Components | | |
| Remarks | : | No hazardous ingredients |

SECTION 4: First aid measures

4.1 Description of first aid measures

| A0541: DL-Asparagine Monohyd | Irate | Version 1.1 | Revision Date: 22.11.2024 |
|------------------------------|-------|---|---------------------------|
| If inhaled | : | Remove person to fresh air and keep c Get medical advice/ attention if you fee | 0 |
| In case of skin contact | : | Take off all contaminated clothing imme If on skin, rinse well with water. If skin irritation or rash occurs: Get mee | |
| In case of eye contact | : | Rinse with plenty of water. If easy to do, remove contact lens, if wo If eye irritation persists: Get medical ad | |
| If swallowed | : | Get medical advice/ attention. Rinse mouth. | |

4.2 Most important symptoms and effects, both acute and delayed None known.

4.3 Indication of any immediate medical attention and special treatment needed None known.

SECTION 5: Firefighting measures

| 5.1 Extinguishing media | | |
|--|------|---|
| Suitable extinguishing media | : | Dry powder, Foam, Water spray, Carbon dioxide (CO2) |
| 5.2 Special hazards arising from the | e su | bstance or mixture |
| Specific hazards during fire- fighting | : | No information available. |
| 5.3 Advice for firefighters | | |
| Special protective equipment for firefighters | : | Use personal protective equipment. |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circum- stances and the surrounding environment. Immediately evacuate personnel to safe areas. Remove undamaged containers from fire area if it is safe to do so. |

SECTION 6: Accidental release measures

| 6.1 Personal precautions, protective | eq | uipment and emergency procedures | | |
|--|----|---|--|--|
| Personal precautions | : | Wear suitable protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be con-trolled around the leakage area by roping off, etc. | | |
| 6.2 Environmental precautions | | | | |
| Environmental precautions | : | Prevent product from entering drains. | | |
| 6.3 Methods and material for containment and cleaning up | | | | |
| Methods for cleaning up | : | Pick up and arrange disposal without creating dust. | | |
| 6.4 Reference to other sections | | | | |
| See sections: 7, 8, 11, 12 and 13. | | | | |

SECTION 7: Handling and storage

| 7.1 Precautions for safe handling | | |
|-----------------------------------|---|--|
| Technical measures | : | Prevent dispersion of dust. |
| Local/Total ventilation | : | Ensure adequate ventilation. Use a local exhaust ventilation. |
| Advice on safe handling | : | Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Wash hands and face thoroughly after handling. |

| 7.2 Conditions for safe storage, including any incompatibilities | | | | |
|--|---|---|--|--|
| Requirements for storage areas and containers | | Keep container tightly closed. Store in a cool and shaded area. | | |
| Storage class (TRGS 510) | : | 11 | | |
| 7.3 Specific end use(s) | | | | |
| Specific use(s) | : | No information available. | | |

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

9.2

Engineering measures

Install a closed system or local exhaust. Also install safety shower and eye bath.

| Personal protective e | equipment |
|-----------------------|-----------|
|-----------------------|-----------|

| Eye/face protection | : | Safety glasses, Face-shield |
|--------------------------|---|-----------------------------|
| Hand protection | : | Protective gloves |
| Skin and body protection | : | Protective suit |
| Respiratory protection | : | Dust mask |

*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| internation on bable physical and | 011 | ennear properties |
|-----------------------------------|-----|-------------------|
| Physical state | : | Solid form |
| Colour | : | white |
| Odour | : | No data available |
| Odour Threshold | : | No data available |
| Melting point/freezing point | | No data available |
| Boiling point/boiling range | : | No data available |
| Flammability | : | No data available |
| Upper explosion limit/Upper | : | No data available |
| flammability limit | • | NO Udla avaliable |
| Lower explosion limit/Lower | : | No data available |
| flammability limit | | |
| Flash point | : | No data available |
| Auto-ignition point | : | No data available |
| Decomposition temperature | : | No data available |
| рН | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Solubility(ies) | | |
| Water solubility | : | No data available |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n- | : | No data available |
| octanol/water | | |
| Vapour pressure | : | No data available |
| Relative density | : | No data available |
| Relative vapour density | : | No data available |
| Particle characteristics | : | No data available |
| Other information | | |
| Molecular weight | : | 150,14 g/mol |
| | | |

SECTION 10: Stability and reactivity

| 10.1 Reactivity No data available | | | |
|--|---------------------------------|--|--|
| 10.2 Chemical stability | | | |
| Stable under normal conditions. | | | |
| 10.3 Possibility of hazardous reaction | ons | | |
| Hazardous reactions | : None under normal processing. | | |
| 10.4 Conditions to avoid | | | |
| 10.5 Incompatible materials | | | |
| Materials to avoid | : Oxidizing agents, | | |
| 10.6 Hazardous decomposition products Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx) | | | |

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

| Acute toxicity | : | No information available. |
|--|---|---------------------------|
| Skin corrosion/irritation | : | No information available. |
| Serious eye damage/eye irrita- tion | : | No information available. |
| Respiratory or skin sensitisa- tion | : | No information available. |
| Germ cell mutagenicity | : | No information available. |
| Carcinogenicity | : | No information available. |
| Reproductive toxicity | : | No information available. |
| STOT - single exposure | : | No information available. |
| STOT - repeated exposure | : | No information available. |
| Repeated dose toxicity | : | No information available. |
| Aspiration hazard | : | No information available. |

:

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 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 | |
|---|---|
| 12.5 Results of PBT and vPvB as | sessment |
| Product: | |
| Assessment | : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
| 12.6 Endocrine disrupting prope | ties |
| Product: | |
| Assessment | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Com- mission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| 12.7 Other adverse effects | |
| No data available | |
| SECTION 13: Disposal con | siderations |
| | |

| 13.1 Waste treatment methods | | |
|------------------------------|---|---|
| Product | : | Disposal in accordance with local and national regulations. Entrust disposal to a licensed waste disposal company. |
| Contaminated packaging | : | Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely. |

SECTION 14: Transport information

| 14.1 UN number or ID number | | |
|-----------------------------------|---|-----------------------------------|
| ADR | : | Not regulated as a dangerous good |
| IMDG | : | Not regulated as a dangerous good |
| ΙΑΤΑ | : | Not regulated as a dangerous good |
| 14.2 UN proper shipping name | | |
| ADR | : | Not regulated as a dangerous good |
| IMDG | : | Not regulated as a dangerous good |
| ΙΑΤΑ | : | Not regulated as a dangerous good |
| 14.3 Transport hazard class(es) | | |
| ADR | : | Not regulated as a dangerous good |
| IMDG | : | Not regulated as a dangerous good |
| ΙΑΤΑ | : | Not regulated as a dangerous good |
| 14.4 Packing group | | |
| ADR | : | Not regulated as a dangerous good |
| IMDG | : | Not regulated as a dangerous good |
| IATA (Cargo) | : | Not regulated as a dangerous good |
| IATA (Passenger) | : | Not regulated as a dangerous good |
| 14.5 Environmental hazards | | |
| Not regulated as a dangerous good | | |
| 14.6 Special precautions for user | | |

Remarks

: Not classified as dangerous in the meaning of transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

| REACH - Restrictions on the manufacture, placing on the mar- ket and use of certain dangerous substances, mixtures and articles (Annex XVII) | : | Not applicable |
|--|---|----------------|
| Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals | : | Not applicable |
| REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). | : | Not applicable |
| Regulation (EC) No 1005/2009 on substances that deplete the ozone layer | : | Not applicable |
| Regulation (EC) No 850/2004 on persistent organic pollutants | : | Not applicable |
| REACH - List of substances subject to authorisation (Annex XIV) | : | Not applicable |

| Water hazard class (Germany) | : | WGK 1 slightly hazardous to water |
|------------------------------|---|---|
| | | Code Number: 6 704 |
| | | Classification according to AwSV, Annex 1 (4) |

The components of this product are reported in the following inventories:

| CH BAGREG | : | On the inventory, or in compliance with the inventory |
|-----------|---|---|
| TSCA | : | All substances listed as active on the TSCA inventory |
| AICS | : | On the inventory, or in compliance with the inventory |
| DSL | : | None of the components of this product are on the Canadian DSL, but all are on the NDSL |
| | | DL-Asparagine Monohydrate |
| ENCS | : | On the inventory, or in compliance with the inventory |
| ISHL | : | On the inventory, or in compliance with the inventory |
| KECI | : | Not in compliance with the inventory |
| PICCS | : | Not in compliance with the inventory |
| IECSC | : | Not in compliance with the inventory |
| NZIoC | : | Not in compliance with the inventory |

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR -(Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

This SDS was prepared sincerely based on the information obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling operations, sufficient care should be taken, in addition to the safety measures suitable for the given situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

DE / 6N