CI TCI EUROPE N.V.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

| Revi | sion number: 1 | Revision date: 10/02/2018 |
|---|---|---------------------------|
| SECTION 1: Identification of the su | Ibstance/mixture and of the company/undertaking | |
| 1.1 Product identifiers | | |
| Product name: | N-(2,4-Dinitrophenyl)-L-alanine Methyl Ester | |
| Product code: | D2135 | |
| 1.2 Polovent identified uses of the sub- | stance or mixture and uses advised against | |
| Identified uses: | Reagents. | |
| 1.3 Details of the supplier of the safety Supplier: | data sheet | |
| TCI EUROPE N.V. | | |
| Boerenveldseweg 6 | | |
| Haven 1063 | | |
| B-2070 Zwijndrecht | | |
| Telephone: +32(0)3 735 07 00 | | |
| E-mail: sales-eu@tcichemicals | com | |
| 1.4 Emergency telephone number: | +32(0)70 245 245 | |
| SECTION 2: Horardo identification | | |
| SECTION 2: Hazards identification 2.1 Classification of the substance or n | | |
| Flammable solids | Category 2 | |
| | | |
| Signal word | Warning | |
| Hazard statements | H228-Flammable solid. | |
| Precautionary statements | P210-Keep away from heat/sparks/open flames/hot surfaces No smokir | 20 |
| Trecautionally statements | P240-Ground/bond container and receiving equipment. | ig. |
| | P241-Use explosion-proof electrical/ventilating/lighting equipment. | |
| | P280-Wear protective gloves, eye protection. | |
| 2.3 Other hazards | | |
| Results of PBT and vPvB assessmer | ıt | |
| PBT: | Not applicable | |
| vPvB: | Not applicable | |
| SECTION 3: Composition/informat | ion on ingredients | |
| 3.1 Substances | | |
| Components: | N-(2,4-Dinitrophenyl)-L-alanine Methyl Ester | |
| Percent: | >98.0%(HPLC) | |
| CAS RN: | 10420-63-0 | |
| Synonyms: | Dnp-Ala-OMe , N-Dnp-L-alanine Methyl Ester | |
| Chemical Formula: | C10H11N3O6 | |
| | | |
| | | |

| SECTION 4: First aid measures | |
|---------------------------------------|---|
| 4.1 Description of first aid measures | |
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. |
| Skin contact: | Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. |
| Eye contact: | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| Ingestion: | Get medical advice/attention if you feel unwell. Rinse mouth. |
| Protection of first-aiders: | A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles. |

- **4.2 Most important symptoms and effects, both acute and delayed** No data available
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

| SECTION 5: Firefighting measures | |
|--|---|
| 5.1 Extinguishing media Suitable extinguishing media: | Dry chemical, foam, water spray, carbon dioxide. |
| 0 0 | |
| 5.2 Special hazards arising from the | Explosion risk in case of fire. Fight fire remotely due to the risk of explosion. |
| substance or mixture | Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume |
| | Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx) |
| 5.3 Advice for firefighters | Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according |
| 3 | to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of |
| | fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if |
| | safe to do so. When extinguishing fire, be sure to wear personal protective equipment |
| SECTION 6: Accidental release mea | asures |
| 6.1 Personal precautions, protective | Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to |
| equipment and emergency procedures | non-involved personnel should be controlled around the leakage area by roping off, etc |
| -1 | |
| 6.2 Environmental precautions | Prevent product from entering drains |
| | |
| 6.3 Methods and materials for | Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected |
| containment and cleaning up | material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use |
| | spark-proof tools and explosion-proof equipment. |
| | spark-proor tools and expresion-proor equipment. |
| 6.4 Reference to other sections | For disposal see section 13. |
| SECTION 7: Handling and storage | |
| 7.1 Precautions for safe handling | Handling is performed in a well ventilated place. Wear suitable protective equipment. Be careful not to |
| | cause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. Keep away from |
| | heat/sparks/open flame/hot surfacesNo smoking. Take measures to prevent the build up of |
| | electrostatic charge. Use explosion-proof equipment. Avoid shock and friction. Wash hands and face |
| | before breaks and immediately after handling the product. Use a local exhaust if dust or aerosol will be |
| | generated. Avoid contact with skin, eyes and clothing. |
| 7.2 Conditions for safe storage, | Keep container tightly closed. Store in a cool and dark place. Be sure not to give the container |
| including any incompatibilities | unexpected impacts, such as falling down or falling off. Store away from incompatible materials such |
| | as oxidizing agents. |
| 7.3 Specific end use(s) | No further relevant information available. |
| | |
| SECTION 8: Exposure controls/per | |
| 8.1 Control parameters | No data available |
| 8.2 Exposure controls | Install a closed system or local exhaust. Also install safety shower and eye bath. |
| Respiratory protection: | Dust respirator. Follow local and national regulations. |
| Hand protection: | Protective gloves. |
| Eye protection: | Safety glasses. A face-shield, if the situation requires. |
| Skin and body protection: | Protective clothing. Protective boots, if the situation requires. |
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| | |
| D0105 | |

| D2135 | N-(2,4-Dinitrophenyl)-L-alanine | Page 2 of 5 |
|-------|---------------------------------|-------------|
| | Methyl Ester | |

SECTION 9: Physical and chemical properties

| 9.1 Information on basic physical and chemical | |
|--|----------------------|
| Physical state (20°C): | Solid |
| Form: | Crystal - Powder |
| Colour: | Pale yellow - Yellow |
| Odour: | No data available |
| pH: | No data available |
| Melting point/freezing point: | 82°C |
| Boiling point/range: | No data available |
| Flash point: | No data available |
| Evaporation rate(Butyl Acetate=1): | No data available |
| Flammability(solid, gas): | No data available |
| Flammability or explosive limits: | |
| Lower: | No data available |
| Upper: | No data available |
| Vapour pressure: | No data available. |
| Vapour density: | No data available |
| Relative density: | No data available |
| Solubility(ies): | |
| [Water] | No data available |
| [Other solvents] | |
| Soluble: | Hot methanol |
| Partition coefficient: | No data available |
| n-octanol/water: | |
| Autoignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Dynamic Viscosity: | No data available |
| Kinematic viscosity: | No data available |
| 9.2 Other safety information | No data available |

| SECTION 10: Stability and reactivity | / |
|--|--|
| 10.1 Reactivity | No data available |
| | |
| 10.2 Chemical stability | Stable under proper conditions. |
| 10.3 Possibility of hazardous reactions | May explosively decompose on heating, shock, friction, etc. |
| 10.5 Possibility of flazardous reactions | way explosively decompose of fleating, shock, filetion, etc. |
| 10.4 Conditions to avoid | Heat, Spark, Open flame, Static discharge, Shock, Friction |
| | |
| 10.5 Incompatible materials | Oxidizing agents |
| | |

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

SECTION 11: Toxicological information 11.1 Information on toxicological effects

| 1.1 Information on toxicological effects | |
|--|-------------------|
| Acute Toxicity: | No data available |
| Skin corrosion/irritation: | No data available |
| Serious eye damage/irritation: | No data available |
| Respiratory or skin sensitization: | No data available |
| Germ cell mutagenicity: | No data available |
| Carcinogenicity: | |
| IARC = | No data available |
| NTP = | No data available |
| Reproductive toxicity: | No data available |
| STOT-single exposure: | No data available |
| STOT-repeated exposure: | No data available |
| Aspiration hazard: | No data available |
| | |

| N-(2,4-Dinitrophenyl)-L-alanine |
|---------------------------------|
| Methyl Ester |

| 12.1 Toxicity Fish: | No data available | |
|---|--|--|
| Crustacea: | No data available | |
| Algae: | No data available | |
| 12.2 Persistence and degradability | No data available | |
| 12.3 Bioaccumulative potential | No data available | |
| 12.4 Mobility in soil | | |
| Log Pow: | No data available | |
| Soil adsorption (Koc): | No data available | |
| Henry's Law (PaM ³/mol): | No data available | |
| 12.5 Results of PBT and vPvB assess | ment | |
| PBT: | Not applicable | |
| vPvB: | Not applicable | |
| | No data available | |
| 2.6 Other adverse effects | No data available | |
| | | |
| 12.6 Other adverse effects <u>SECTION 13: Disposal considera</u> 13.1 Waste treatment methods Pocycle to process if possible. Con | tions | |
| SECTION 13: Disposal considera 13.1 Waste treatment methods Recycle to process, if possible. Con with a combustible solvent and little of the substance is burned at a time | tions sult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount an explosion may occur. Observe all federal, state and local regulations when disposing of the substance | |
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Marine pollutant

14.6 Special precautions for user No data available

SECTION 15: Regulatory information

 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Substance of Very High Concern (SVHC) according to the Not listed REACH Regulations (EC) No.1907/2006

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

| SECTION 16: Other information | |
|-------------------------------|-----------------|
| Prepared by: | TCI EUROPE N.V. |
| Issue date: | 10/02/2018 |

This SDS was prepared sincerely on the basis of the information we could 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, sufficient care should be taken, in addition to the safety measures suitable for the 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.

End of Safety Data Sheet