Safety Data Sheet (SDS)

| Revision Number: <b>3.0</b>           |   | Last updated                                       | March 12, 2021 |  |  |  |
|---------------------------------------|---|--|----------------|--|--|--|
| 1. Product and Company Identification |   |  |                |  |  |  |
| Product Name:                         | Boc - β - cy                                  | Boc - β - cyclohexyl - L – alanine; Boc - Cha – OH |                |  |  |  |
| Manufacturer/Supplier:                | AnaSpec, Ir                                   | ic.  |                |  |  |  |
|                                       | www.anasp                                     | www.anaspec.com                                    |                |  |  |  |
|                                       | 34801 Cam                                     | 34801 Campus Drive                                 |                |  |  |  |
|                                       | Fremont, C                                    | Fremont, CA 94555                                  |                |  |  |  |
|                                       | Tel: 510-79                                   | Tel: 510-791-9560                                  |                |  |  |  |
|                                       | Fax: 510-791-9572                             |  |                |  |  |  |
|                                       | Email: service@anaspec.com                    |  |                |  |  |  |
|                                       | Kaneka Eur                                    | ogentec SA,  |                |  |  |  |
|                                       | Rue du Bois Saint Jean 5 4102 Seraing Belgium |  |                |  |  |  |
|                                       | Tel. +32-4-3727400                            |  |                |  |  |  |
|                                       | Fax. +32-4-3727500                            |  |                |  |  |  |
|                                       | E-mail info                                   | @eurogentec.com                                    |                |  |  |  |
|                                       | Kaneka Eur                                    | ogentec Helpdesk                                   |                |  |  |  |
|                                       | Tel. +32-4-3                                  | Tel. +32-4-3727665                                 |                |  |  |  |
| Catalog Number                        | AS-26242-I                                    | 35   |                |  |  |  |

### 2. Hazards Identification

*Emergency Overview:* We do recommend handling all chemicals with caution. Use proper protective equipment when handling chemicals. To our knowledge, the hazards of this material have not been thoroughly investigated.

GHS Hazard Classification: Not a hazardous substance or mixture

GHS Physical Hazards: Not a hazardous substance or mixture

GHS Health and Environmental Hazards: Not a hazardous substance or mixture

GHS Signal Words: N/A

GHS Hazard Symbol/Pictogram: N/A

GHS Hazard Statements: N/A

GHS Precautionary Statements:

P302, P340 May be respiratory irritant if inhaled. May cause respiratory tract

irritation.

Potential Health Effects for:

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Good hygiene practice requires that exposure be kept to a minimum and that suitable control

measures be used in an occupational setting.

*Ingestion:* If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Skin: In case of contact, immediately wash skin with soap and copious amount of water.

Eyes: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Chronic Exposures: No information available. We recommend limiting prolonged exposure.

Target Organs: No information available

HMIS Classification

Health hazard: 0

Chronic Health Hazard: 0

Flammability: 0
Physical hazards: 0

NFPA Rating

Health hazard: 0

Fire: 0

Reactivity Hazard: 0

## 3. Composition

Ingredients/Components:

Chemical Name: Boc - β - cyclohexyl - L – alanine; Boc - Cha – OH

Molecular formula: C14H25NO4

Molecular weight: 271.4 CAS-No 37736-82-6

EC-No N/A

### 4. First Aid Measures

| Inhalation: | If dust is inhaled, remove from contaminated area.   |  |  |
|-------------|--|--|--|
|             | Encourage patient to blow nose to ensure clear passage of breathing.   |  |  |
|             | If irritation or discomfort persists seek medical attention.   |  |  |
| Ingestion:  | If swallowed do <b>NOT</b> induce vomiting.  |  |  |
|             | If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. |  |  |
|             | Observe the patient carefully.   |  |  |
|             | Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably  |  |  |
|             | drink.   |  |  |
|             | Seek medical advice.   |  |  |
| Skin:       | If skin or hair contact occurs:  |  |  |

| 1                                    |                    |  | running water (and soap if available).   |  |
|--------------------------------------|--------------------|--|--|--|
|                                      |                    | Seek medical attention in event of irritation.   |  |  |
| Eyes:                                |                    | s product comes in contact with the eyes:  |  |  |
| E                                    |                    | Wash out immediately with fresh running water.   |  |  |
|                                      |                    | Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the  |  |  |
|                                      |                    | by occasionally lifting the upper and lower lids.  |  |  |
|                                      | If pain persis     | ersists or recurs seek medical attention.  |  |  |
|                                      |                    |  |  |  |
| 5. Fire Fig                          | hting Measures     |  |  |  |
| Extinguishing media:                 |                    |  | Water spray or fog.  |  |
|                                      |                    |  | Alcohol resistant foam.  |  |
|                                      |                    |  | Dry chemical powder.   |  |
|                                      |                    |  | BCF (where regulations permit).  |  |
|                                      |                    |  | Carbon dioxide   |  |
|                                      |                    |  |  |  |
| Special fire                         | fighting procedure | s:   | Alert Emergency Responders and tell them location and nature of  |  |
|                                      |                    |  | hazard.  |  |
|                                      |                    |  | Wear breathing apparatus plus protective gloves.   |  |
|                                      |                    |  | Prevent, by any means available, spillage from entering drains or water  |  |
|                                      |                    |  | course.  |  |
|                                      |                    |  | Use water delivered as a fine spray to control fire and cool adjacent  |  |
|                                      |                    |  | area.  |  |
|                                      |                    |  | <b>DO NOT</b> approach containers suspected to be hot.   |  |
|                                      |                    |  | Cool fire exposed containers with water spray from a protected   |  |
|                                      |                    |  | location.  |  |
|                                      |                    |  | If safe to do so, remove containers from path of fire.   |  |
|                                      |                    |  | Equipment should be thoroughly decontaminated after use.   |  |
| Unusual fire and explosions hazards: |                    | azards:  | Emits toxic fumes under fire conditions  |  |
| 6 Acciden                            | tal Release Meası  | IPOC   |  |  |
|                                      |                    |  | re es  |  |
| Spill respon                         | ise                |  | l ignition sources.  |  |
|                                      |                    |  | ll spills immediately.   |  |
|                                      |                    | TAVOID CONF  | tact with skin and eyes.   |  |
|                                      |                    |  |  |  |
|                                      |                    | Control per  | rsonal contact by using protective equipment.  |  |
|                                      |                    | Control per<br>Use dry cle   | rsonal contact by using protective equipment. ean up procedures and avoid generating dust.   |  |
|                                      |                    | Control per<br>Use dry cle<br>Place in a s   | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal  |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p  | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal personal contact, including inhalation.  |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote  | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal personal contact, including inhalation. ective clothing when risk of exposure occurs.  |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we   | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal personal contact, including inhalation. sective clothing when risk of exposure occurs. eell-ventilated area.   |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we<br>DO NOT e   | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal personal contact, including inhalation. ective clothing when risk of exposure occurs. ell-ventilated area. enter confined spaces until atmosphere has been checked.  |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we<br>DO NOT e<br>DO NOT a   | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal personal contact, including inhalation. ective clothing when risk of exposure occurs. ell-ventilated area. enter confined spaces until atmosphere has been checked. ellow material to contact humans, exposed food or food utensils.   |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we<br>DO NOT e<br>DO NOT a<br>Avoid cont   | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal bersonal contact, including inhalation. ective clothing when risk of exposure occurs. ell-ventilated area. enter confined spaces until atmosphere has been checked. ellow material to contact humans, exposed food or food utensils. etact with incompatible materials.  |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we<br>DO NOT e<br>DO NOT a<br>Avoid cont<br>When hand  | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal personal contact, including inhalation. ective clothing when risk of exposure occurs. ell-ventilated area. enter confined spaces until atmosphere has been checked. ellow material to contact humans, exposed food or food utensils. etact with incompatible materials. elling, DO NOT eat, drink or smoke.  |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we<br>DO NOT e<br>DO NOT a<br>Avoid cont<br>When hand<br>Keep conta                            | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal bersonal contact, including inhalation. ective clothing when risk of exposure occurs. ell-ventilated area. enter confined spaces until atmosphere has been checked. ellow material to contact humans, exposed food or food utensils. etact with incompatible materials. elling, DO NOT eat, drink or smoke. enters securely sealed when not in use.  |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we<br>DO NOT e<br>DO NOT a<br>Avoid cont<br>When hand<br>Keep conta<br>Avoid phys              | rsonal contact by using protective equipment. ean up procedures and avoid generating dust. suitable, labeled container for waste disposal personal contact, including inhalation. sective clothing when risk of exposure occurs. sell-ventilated area. senter confined spaces until atmosphere has been checked. sellow material to contact humans, exposed food or food utensils. stact with incompatible materials. dling, DO NOT eat, drink or smoke. siners securely sealed when not in use. sical damage to containers.   |  |
| Containmen                           | nt                 | Control per<br>Use dry cle<br>Place in a s<br>Avoid all p<br>Wear prote<br>Use in a we<br>DO NOT e<br>DO NOT a<br>Avoid cont<br>When hand<br>Keep conta<br>Avoid phys<br>Always wa | rsonal contact by using protective equipment.  ean up procedures and avoid generating dust.  suitable, labeled container for waste disposal  bersonal contact, including inhalation.  sective clothing when risk of exposure occurs.  ell-ventilated area.  enter confined spaces until atmosphere has been checked.  sillow material to contact humans, exposed food or food utensils.  tact with incompatible materials.  dling, DO NOT eat, drink or smoke.  siners securely sealed when not in use.  sical damage to containers.  sish hands with soap and water after handling.   |  |
| Containmen                           | nt                 | Control per Use dry cle Place in a se Avoid all p Wear prote Use in a we DO NOT a Avoid conte When hand Keep conta Avoid physe Always was Use good of                              | rsonal contact by using protective equipment.  ean up procedures and avoid generating dust.  suitable, labeled container for waste disposal  bersonal contact, including inhalation.  ective clothing when risk of exposure occurs.  ell-ventilated area.  enter confined spaces until atmosphere has been checked.  ellow material to contact humans, exposed food or food utensils.  tact with incompatible materials.  elling, DO NOT eat, drink or smoke.  eniners securely sealed when not in use.  esical damage to containers.  esh hands with soap and water after handling.  eccupational work practice.  |  |
| Containmen                           | nt                 | Control per Use dry cle Place in a se Avoid all p Wear prote Use in a we DO NOT a Avoid cont When hand Keep conta Avoid phys Always wa Use good of Empty con                       | rsonal contact by using protective equipment.  ean up procedures and avoid generating dust.  suitable, labeled container for waste disposal  bersonal contact, including inhalation.  ective clothing when risk of exposure occurs.  ell-ventilated area.  enter confined spaces until atmosphere has been checked.  ellow material to contact humans, exposed food or food utensils.  etact with incompatible materials.  elling, DO NOT eat, drink or smoke.  enters securely sealed when not in use.  esical damage to containers.  esh hands with soap and water after handling.  eccupational work practice.  tainers may contain residual dust which has the potential to accumulate   |  |
| Containmen                           | nt                 | Control per Use dry cle Place in a se Avoid all p Wear prote Use in a we DO NOT a Avoid cont When hand Keep conta Avoid phys Always wa Use good of Empty con                       | rsonal contact by using protective equipment.  ean up procedures and avoid generating dust.  suitable, labeled container for waste disposal  bersonal contact, including inhalation.  ective clothing when risk of exposure occurs.  ell-ventilated area.  enter confined spaces until atmosphere has been checked.  ellow material to contact humans, exposed food or food utensils.  tact with incompatible materials.  fling, DO NOT eat, drink or smoke.  miners securely sealed when not in use.  sical damage to containers.  esh hands with soap and water after handling.  eccupational work practice.  tainers may contain residual dust which has the potential to accumulate settling. Such dusts may explode in the presence of an appropriate |  |

|                                     | Do NOT cut, d   | rill, grind or weld such containers    |  |
|-------------------------------------|---|--|--|
| PPE                                 | Use personal n  | rotective equipment                    |  |
| IIL                                 | Osc personar p  | rotective equipment                    |  |
|                                     |   |  |  |
| 7. Handling and Stora               | абе   |  |  |
|                                     |   | ight. Store away from oxidizing agent. |  |
| Store at 4 C desiceate              | ed and protected from n   | ght. Store away from oxidizing agent.  |  |
| 8. Exposure Controls                | / Personal Protection   |  |  |
| Engineering controls                | Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.  Exhaust ventilation should be designed to prevent accumulation and re-circulation of particulates in the workplace.  If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered. Such protection might consist of:  (a): particle dust respirators, if necessary, combined with an absorption cartridge;  (b): filter respirators with absorption cartridge or canister of the right type;  (c): fresh-air hoods or masks  Build-up of electrostatic charge on the dust particle, may be prevented by bonding and grounding.  Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.  Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to efficiently remove the contaminant. |  |  |
| PPE                                 | Use personal protect  | Use personal protective equipment      |  |
|                                     |   |  |  |
| 9. Physical and Chemi               |   |  |  |
| Physical State                      | N/A   |  |  |
| Odour                               | Not available   |  |  |
| Solubility in Water                 | Not available   |  |  |
| Specific Gravity                    | Not available   |  |  |
| pH                                  |   | Not available                          |  |
| Boiling Point                       | Not available   |  |  |
| Melting Point                       | Not available   |  |  |
| Flash Point                         | N/A   |  |  |
| Vapor Pressure:                     |   | N/A                                    |  |
| Vapor Density:                      | N/A   |  |  |
| 10. Stability and Read              | <u>etivity</u>  |  |  |
| Thermal Decomposition               |   | No data available                      |  |
| Dangerous Products of Decomposition |   | No data available                      |  |
| Dangerous Reactions                 |   | COx, NOx when burned                   |  |
| Dangerous Reactions                 |   | COA, MOA WHOH DUINGU                   |  |

Keep container tightly closed in a dry well-ventilated place. Store in 4°C refrigerator.

### 11. Toxicological Information

| RTECS Number                              | N/A   |
|---|---|
| Toxicity                                  | No information available.   |
| Health Hazards                            | Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern. |
| Potential Hazards                         | Not available   |
| Carcinogenicity:                          | No significant acute toxicological data identified  |
| OSHA Permissible Exposure Limit(PEL) Data | N/A   |
| ACGIH Threshold Limit Values (TLV)        | N/A   |

Reproductive Toxicity:

No information available

### 12. Ecological Information

No information available.

## 13. Disposal Considerations

All waste must be handled in accordance with local, state and federal regulations. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

### 14. Transport Information

| Hazard Class               | N/A |
|----------------------------|-----|
| Identification Number      | N/A |
| Packing Group              | N/A |
| Proper Shipping Name (DOT) | N/A |

# 15. Regulatory Information

California Proposition 65: N/A

US TSCA (Toxic Substance Control Act): N/A

US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act: N/A

US SARA Title III (Superfund Amendments and Reauthorization Act: N/A

US Other: N/A

EC EINICS (European Inventory of Existing Commercial Chemical Substances) Number: N/A

### AnaSpec Inc.

EC Risk Statements: N/A

Other Country Regulations: N/A

### 16. Other Information

It is not intended for food, drug, household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should make independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be held liable for any damage resulting from handling or from contact with the above product.