# Safety Data Sheet (SDS)

| Revision Number: 4.0                   | Last updated 24 July 2019  |  |  |  |
|--|--|--|--|--|
| 1. Product and Company Identification  |  |  |  |  |
| Product Name:                          | MMP Colorimetric Substrate I   |  |  |  |
|  | Ac - PLG X-LG - )-OC2H5  |  |  |  |
|  |  |  |  |  |
| Manufacturer/Supplier:                 | AnaSpec, Inc.  |  |  |  |
|  | www.anaspec.com  |  |  |  |
|  | 34801 Campus Drive   |  |  |  |
|  | Fremont, CA 94555  |  |  |  |
|  | Tel: 510-791-9560  |  |  |  |
|  | Fax: 510-791-9572  |  |  |  |
|  | Email: service@anaspec.com   |  |  |  |
|  | Kaneka Eurogentec SA,  |  |  |  |
|  | Rue du Bois Saint Jean 5 4102 Seraing Belgium  |  |  |  |
|  | Tel. +32-4-3727400   |  |  |  |
|  | Fax. +32-4-3727500   |  |  |  |
|  | E-mail info@eurogentec.com   |  |  |  |
|  | Kaneka Eurogentec Helpdesk   |  |  |  |
|  | Tel. +32-4-3727665   |  |  |  |
| Catalog Number                         | AS-27097; AS-27096   |  |  |  |
| Relevant identified uses of the        | For laboratory use only.   |  |  |  |
| substance/preparation and uses advised |  |  |  |  |
| against Emergency information          | Please contact the regional Eurogentec representation in your  |  |  |  |
| Emergency information                  | country or Kaneka Eurogentee S.A. directly (from 8 am to 6   |  |  |  |
|  |  |  |  |  |
|  | [pm)   |  |  |  |
| 2. Hazards Identification              |  |  |  |  |
|  | ecommend handling all chemicals with caution. Use proper dling chemicals. To our knowledge, the hazards of this material |  |  |  |
|  | angerous substance according to the GHS cards: Not a dangerous substance according to the GHS                            |  |  |  |
| GHS Signal Words: None                 |  |  |  |  |

GHS Hazard Statements: None

GHS Precautionary Statements: None

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: MMP Colorimetric Substrate I

*Ac - PLG - SCH[CH2CH(CH3)2] - CO - LG - OC2H5* 

Molecular formula: NA Molecular weight: 655.9

CAS-No NA EC-No NA

## 4. First Aid Measures

| 7 1 1       | Treat and the state of the stat |
|-------------|--|
| 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:  |
|             | Flush skin and hair with running water (and soap if available).  |
|             | Seek medical attention in event of irritation.   |
| Eyes:       | If this product comes in contact with the eyes:  |
|             | Wash out immediately with fresh running water.   |
|             | Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the  |
|             | eyelids by occasionally lifting the upper and lower lids.  |
|             | If pain persists or recurs seek medical attention.   |
|             |  |
|             |  |

| 77 7                                 | ures   | TVV   |  |  |  |
|--------------------------------------|--|---|--|--|--|
| Extinguishing media:                 |  | Water spray or fog.   |  |  |  |
|                                      |  | Alcohol resistant foam.  Dry chemical powder.   |  |  |  |
|                                      |  | BCF (where regulations permit).   |  |  |  |
|                                      |  | Carbon dioxide  |  |  |  |
|                                      |  | Caroon dioxide  |  |  |  |
| Special firefighting procedures:     |  | 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.<br>Cool fire exposed containers with water spray from a protected location   |  |  |  |
| 1                                    |  | If safe to do so, remove containers from path of fire.  |  |  |  |
|                                      |  | Equipment should be thoroughly decontaminated after use.  |  |  |  |
|                                      |  | Equipment should be thoroughly decontainmated after use.  |  |  |  |
| Unusual fire and explosions hazards: |  | Emits toxic fumes under fire conditions   |  |  |  |
|                                      |  |   |  |  |  |
| 6. Accidental Release                | <u>Measures</u>  |   |  |  |  |
| Spill response                       |  | Remove all ignition sources.  |  |  |  |
|                                      |  | all spills immediately.   |  |  |  |
|                                      |  | tact with skin and eyes.  |  |  |  |
|                                      |  | ersonal contact by using protective equipment.  |  |  |  |
|                                      |  | Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal  |  |  |  |
|                                      | Avoid all personal contact, including inhalation.  |   |  |  |  |
| Containment                          | Avoiu aii  |   |  |  |  |
| Containment                          |  |   |  |  |  |
| Containment                          | Wear prot  | ective clothing when risk of exposure occurs.   |  |  |  |
| Containment                          | Wear prot<br>Use in a w  | ective clothing when risk of exposure occurs.   |  |  |  |
| Containment                          | Wear prot<br>Use in a w<br>DO NOT  | ective clothing when risk of exposure occurs. vell-ventilated area.   |  |  |  |
| Containment                          | Wear prot<br>Use in a w<br>DO NOT<br>DO NOT<br>Avoid con   | ective clothing when risk of exposure occurs.  vell-ventilated area.  enter confined spaces until atmosphere has been checked.  allow material to contact humans, exposed food or food utensils.  ttact with incompatible materials.  |  |  |  |
| Containment                          | Wear prot<br>Use in a w<br>DO NOT<br>DO NOT<br>Avoid con<br>When han   | ective clothing when risk of exposure occurs.  vell-ventilated area.  enter confined spaces until atmosphere has been checked.  allow material to contact humans, exposed food or food utensils.  utact with incompatible materials.  dling, DO NOT eat, drink or smoke.  |  |  |  |
| Containment                          | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont  | ective clothing when risk of exposure occurs.  vell-ventilated area.  enter confined spaces until atmosphere has been checked.  allow material to contact humans, exposed food or food utensils.  ttact with incompatible materials.  dling, DO NOT eat, drink or smoke.  ainers securely sealed when not in use.   |  |  |  |
| Containment                          | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont Avoid phy  | ective clothing when risk of exposure occurs.  vell-ventilated area.  enter confined spaces until atmosphere has been checked.  allow material to contact humans, exposed food or food utensils.  tact with incompatible materials.  dling, DO NOT eat, drink or smoke.  ainers securely sealed when not in use.  vsical damage to containers.  |  |  |  |
| Containment                          | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont Avoid phy Always w   | ective clothing when risk of exposure occurs.  vell-ventilated area.  enter confined spaces until atmosphere has been checked.  allow material to contact humans, exposed food or food utensils.  tact with incompatible materials.  dling, DO NOT eat, drink or smoke.  ainers securely sealed when not in use.  vsical damage to containers.  ash hands with soap and water after handling.   |  |  |  |
| Containment                          | Wear prot Use in a w DO NOT DO NOT Avoid con When han Keep cont Avoid phy Always w Use good                                      | ective clothing when risk of exposure occurs.  vell-ventilated area. enter confined spaces until atmosphere has been checked. allow material to contact humans, exposed food or food utensils. utact with incompatible materials. dling, DO NOT eat, drink or smoke. ainers securely sealed when not in use. vsical damage to containers. ash hands with soap and water after handling. occupational work practice.   |  |  |  |
| Containment                          | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont Avoid phy Always w Use good Empty cor                            | ective clothing when risk of exposure occurs.  vell-ventilated area. enter confined spaces until atmosphere has been checked. allow material to contact humans, exposed food or food utensils.  utact with incompatible materials. dling, DO NOT eat, drink or smoke. ainers securely sealed when not in use.  vsical damage to containers. ash hands with soap and water after handling. occupational work practice.  ntainers may contain residual dust which has the potential to accumulate   |  |  |  |
| Containment                          | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont Avoid phy Always w Use good Empty cor following                  | ective clothing when risk of exposure occurs.  vell-ventilated area. enter confined spaces until atmosphere has been checked. allow material to contact humans, exposed food or food utensils. utact with incompatible materials. dling, DO NOT eat, drink or smoke. ainers securely sealed when not in use. vsical damage to containers. ash hands with soap and water after handling. occupational work practice.   |  |  |  |
| Containment                          | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont Avoid phy Always w Use good Empty cor following source.          | ective clothing when risk of exposure occurs.  vell-ventilated area. enter confined spaces until atmosphere has been checked. allow material to contact humans, exposed food or food utensils.  utact with incompatible materials. dling, DO NOT eat, drink or smoke. ainers securely sealed when not in use.  vsical damage to containers. ash hands with soap and water after handling. occupational work practice.  ntainers may contain residual dust which has the potential to accumulate   |  |  |  |
| Containment PPE                      | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont Avoid phy Always w Use good Empty con following source. Do NOT o | ective clothing when risk of exposure occurs.  vell-ventilated area.  enter confined spaces until atmosphere has been checked.  allow material to contact humans, exposed food or food utensils.  tact with incompatible materials.  dling, DO NOT eat, drink or smoke.  ainers securely sealed when not in use.  vsical damage to containers.  ash hands with soap and water after handling.  occupational work practice.  ntainers may contain residual dust which has the potential to accumulate settling. Such dusts may explode in the presence of an appropriate ignition  |  |  |  |
|                                      | Wear prot Use in a w DO NOT DO NOT Avoid cor When han Keep cont Avoid phy Always w Use good Empty con following source. Do NOT o | ective clothing when risk of exposure occurs.  vell-ventilated area.  enter confined spaces until atmosphere has been checked.  allow material to contact humans, exposed food or food utensils.  tact with incompatible materials.  dling, DO NOT eat, drink or smoke.  ainers securely sealed when not in use.  vsical damage to containers.  ash hands with soap and water after handling.  occupational work practice.  Intainers may contain residual dust which has the potential to accumulate settling. Such dusts may explode in the presence of an appropriate ignition cut, drill, grind or weld such containers |  |  |  |

| 8. Exposure Controls / | Personal Protection   | 1  |   |
|------------------------|---|--|---|
| Engineering controls   | Local exhaust ventile even when particular mutual friction.  Exhaust ventilation particulates in the ward of local exprespiratory protection (a): particle dust respirators (c): fresh-air hoods of Build-up of electros grounding.  Powder handling equadditional protection Air contaminants gein turn, determine the | ation is retes are relation is retes are relation is retes are relationship and the second of the se | equired where solids are handled as powders or crystals; atively large, a certain proportion will be powdered by designed to prevent accumulation and re-circulation of adverse concentration of the substance in air could occur, be considered. Such protection might consist of: an ecessary, combined with an absorption cartridge; orption cartridge or canister of the right type; are on the dust particle, may be prevented by bonding and such as dust collectors, dryers and mills may require as such as explosion venting. The workplace possess varying "escape" velocities which, a velocities of fresh circulating air required to efficiently |
|                        | remove the contamin   |  |   |
| PPE                    | Use personal protect  | tive equip   | ment  |
|                        |   |  |   |
| 9. Physical and Chemic | <u>al Properties</u>  |  |   |
| Physical State         | Solid   |  |   |
| Odour                  | Not available   |  |   |
| Solubility in Water    |   |  |   |
| Specific Gravity       | Not available   |  |   |
| рН                     | 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 Reac | <u>ivity</u>  |  |   |
|                        |   | No data  | available   |
|                        |   |  | available   |
|                        |   |  | Ox when burned  |
|                        | osed in a dry well-ve   |  | ace. Store in -20 °C, dry refrigerator.   |
| 11. Toxicological Info | <u>rmation</u>  |  |   |
| 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   |
| 1 Oleman Hazaras       |   |  | I fot a failable  |

| 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

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.