

# MATERIAL SAFETY DATA SHEET

Baxel Company Limited

77, 79 Soi Suksawat 31/1, Rajburana, Bangkok 10140 Thailand Tel: 66.2873.1330 | www.baxelcompany.com

## SECTION 1 – PRODUCT AND IDENTIFICATION

**Trade Name:** Engest™

**Name and/or Family or Description:** Bacteria Mixture Concentrated  
(No IUC Name for the mixture is known to exist)

### HEALTH (0 = Maximum Safety) 1

**Always Follow Label Directions and Cautions**

4 Extreme 3 High 2 Moderate 1 Slight 0 Minimal

See Hazards Identification Section of this MSDS for more detailed information

### Reactivity (0 = Maximum Safety) 0

4 May detonate-vacate area if materials are exposed to fire.  
3 Strong shock of heat may detonate-use monitors from behind explosion resistant barriers.  
2 Violent chemical change possible-use hose stream from distance.  
1 Unstable if heated-use precaution.  
0 Normally stable.

### FLAMMABILITY (0 = Maximum Safety) 0

**Susceptibility of Material to Burning**

4 Extremely Flammable  
3 Ignites at normal temperature  
2 Ignites when moderately heated  
1 Must be preheated to burn  
0 Will not burn

### PERSONAL PROTECTION



## SECTION 2 – COMPONENTS / INFORMATION ON INGREDIENTS

This compound is not considered a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration.

### Identity ingredients

Bacteria Complex with amylase and protease  
Wheat bran  
Hydrolyzed protein

### CAS No.

(68920-42-3)  
none assigned  
(9015-54-7)

### WT% Over 3%

Yes  
Yes  
No

@ Among 3 most predominant compounds

## SECTION 3 – HAZARDS IDENTIFICATION

**Emergency overview:** Avoid contact with eyes. Mild skin irritation.

### Potential health effects:

**Eyes:** Contact with eyes can cause irritation.  
**Skin:** Prolonged or repeated contact may cause irritation.  
**Inhalation:** Unknown  
**Ingestion:** Large quantities (more than a few ounces) may cause upset stomach, diarrhea, nausea, and vomiting.

## SECTION 4 – FIRST AID MEASURES

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

**Skin Contact:** Flush skin with large amounts of water. Remove any contaminated clothing and wash before reuse. Seek medical attention if irritation occurs.

**Inhalation:** If symptoms are experienced, remove source of contamination and/or move victim to fresh air. If breathing is difficult, have trained personnel administer oxygen. If respiration stops, have trained personnel administer artificial respiration. Get medical attention immediately.

**Ingestion:** Give large amounts of water. Do not induce vomiting. If spontaneous vomiting is inevitable, prevent aspiration by keeping victim's head below the knees. Get immediate medical attention.

**Engest™**  
**Material Safety Data Sheet**

---

**SECTION 5 - FIRE FIGHTING MEASURES**

---

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| <b>Flash Point:</b>              | None combustible                                                      |
| <b>Extinguishing Media:</b>      | Water, water fog or fine spray, carbon dioxide, dry chemical or foam. |
| <b>Fire fighting Protection:</b> | Wear full protective clothing and self contained breathing apparatus  |

---

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

---

|                                   |                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions:</b>      | Isolate area. Keep unnecessary personnel away. Keep out of low areas. Ventilate closed spaces before entering.                                                                                                                                                                                                                                                                             |
| <b>Environmental Precautions:</b> | Prevent further leakage or spillage if safe to do so.                                                                                                                                                                                                                                                                                                                                      |
| <b>Methods for Containment:</b>   | Prevent entry into waterways, sewers, basements or confined areas.                                                                                                                                                                                                                                                                                                                         |
| <b>Methods for Clean-up:</b>      | Wear appropriate protective equipment and clothing during clean-up.                                                                                                                                                                                                                                                                                                                        |
| <b>Large spill:</b>               | If spilled, the product can be recovered and re-used if contamination does not present a problem. Vacuum or sweep material. If the spilled product is unusable due to contamination, consult state or local agencies for acceptable disposal procedures up the product and place into a container for later disposal. Dispose in accordance with all local, state and federal regulations. |
| <b>Small spill:</b>               | Follow same procedure as above.                                                                                                                                                                                                                                                                                                                                                            |

---

**SECTION 7 – HANDLING AND STORAGE**

---

|                  |                                                                                                                                                                                                                                                         |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling:</b> | Avoid contact with skin and eyes. Wash hands thoroughly after handling.                                                                                                                                                                                 |
| <b>Storage:</b>  | Store this product below 104°F (40°C), preferably at 41°F (5°C), in a cool, dry, well ventilated area away from heat, sparks, flame, oxidizers and out of direct sunlight. For best results, use within 12 months. Do not allow this product to freeze. |

---

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

|                              |                                                                              |
|------------------------------|------------------------------------------------------------------------------|
| <b>Eyes:</b>                 | Safety glasses recommended                                                   |
| <b>Skin:</b>                 | Chemical resistant gloves recommended for prolonged exposure.                |
| <b>Respiration:</b>          | Normally not required.                                                       |
| <b>Engineering Controls:</b> | Mechanical ventilation recommended when handling in enclosed / tight spaces. |

---

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

---

|                              |                                       |
|------------------------------|---------------------------------------|
| <b>Boiling Point:</b>        | Decomposes                            |
| <b>Specific Gravity:</b>     | Not determined                        |
| <b>Density:</b>              | (g/ml)                                |
| <b>Evaporation Rate:</b>     | Not applicable                        |
| <b>Oxidizing Properties:</b> | Not applicable                        |
| <b>Vapor Density:</b>        | Not applicable                        |
| <b>Vapor pressure:</b>       | No applicable                         |
| <b>Solubility in Water:</b>  | Partially soluble                     |
| <b>VOC:</b>                  | Negligible                            |
| <b>pH:</b>                   | 6.5-7.5 (1% Solution)                 |
| <b>Appearance:</b>           | Medium tan powder with white granular |
| <b>Odor:</b>                 | Fermented                             |

---

**SECTION 10 – STABILITY AND REACTIVITY**

---

|                             |                                              |
|-----------------------------|----------------------------------------------|
| <b>Stability:</b>           | Stable                                       |
| <b>Polymerization:</b>      | Will not occur                               |
| <b>Conditions To Avoid:</b> | Excessive heat and contamination of any kind |

---

**SECTION 11 – TOXICOLOGICAL INFORMATION**

---

|                         |                                                                       |
|-------------------------|-----------------------------------------------------------------------|
| <b>Toxicity:</b>        | No acute toxicity                                                     |
| <b>Pathogenic Risk:</b> | Component bacteria are non-pathogenic and generally regarded as safe. |
| <b>Carcinogenicity:</b> | Not applicable                                                        |

**Engest™**  
**Material Safety Data Sheet**

---

**SECTION 12 - ECOLOGICAL INFORMATION**

---

The preparation is biodegradable, which classifies the preparation as "non-dangerous" to the environment.

---

**SECTION 13 – DISPOSAL CONSIDERATIONS**

---

|                                  |                                                                                                                                                                    |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal instructions:</b>    | Dispose in accordance with all applicable regulations. All wastes must be handled in accordance with local, state and federal regulations. Regulations are varies. |
| <b>Disposal of Waste Method:</b> | Small spills flush with plenty of water.<br>Large spills should be collected for disposal.                                                                         |
| <b>Contaminated Packaging:</b>   | Dispose in according with Federal, State and /or current local authority regulations.                                                                              |

---

**SECTION 14 – TRANSPORT INFORMATION**

---

|                             |                |
|-----------------------------|----------------|
| <b>General information:</b> | Non-hazardous. |
|-----------------------------|----------------|

---

**SECTION 15 – REGULATORY INFORMATION**

---

|                               |                                                                                                                        |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>TSCA Inventory Status:</b> | This product and/or of its components are either included on or exempt from the TSCA inventory of Chemical Substances. |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------|

---

**SECTION 16 – OTHER INFORMATION**

---

**ALTHOUGH THE INFORMATION AND RECOMMENDATIONS SET FORTH IN THIS SHEET ARE BELIEVED TO BE CORRECT AS OF THE DATE HEREOF, BAXEL COMPANY LIMITED MAKES NO REPRESENTATION AS TO THE COMPLETENESS OR ACCURACY OF SUCH INFORMATION AND RECOMMENDATIONS. BAXEL COMPANY LIMITED SHALL IN NO EVENT BE RESPONSIBLE FOR ANY DAMAGES OF WHATSOEVER NATURE DIRECTLY OR INDIRECTLY RESULTING FROM THE PUBLICATION OR USE OF OR RELIANCE UPON SUCH INFORMATION AND RECOMMENDATIONS. YOU ARE ENCOURAGED TO ADVISE ANYONE WORKING WITH OR EXPOSED TO SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.**

**NO WARRANTY, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY OR FITNESS OR OF ANY OTHER NATURE WITH RESPECT TO THE PRODUCT OR TO THE INFORMATION AND RECOMMENDATIONS HEREIN MADE HEREUNDER.**

**Read and follow all label directions and precautions before using this product. These products are intended for industrial and institutional use only.**

**KEEP OUT OF REACH OF CHILDREN.**