MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name : Thermo Plastic Starch Product code : 2100 STPS (GBP) Product use : For thermoforming of packages Manufacturer : Global Biopolymers Co., Ltd. 194 Lard Proa 80 yak 14 Wangthonglang, Bangkok 10310 Thailand Tel. +662-995-3066 Fax. +662-995-3070 E-mail : info@globalbiopolymers.com

2. COMPOSITION INFORMATION ON INGREDIENTS

This product contains modified tapioca starch and plastic materials. Other additives to improve the performance and appearance of the products are color pigments and impact modifiers.

3. HAZARDS IDENTIFICATION

Experience in use this product is no hazardous. Skin contact may cause mechanical irritation of skin. Eye contact with fibre dust may cause irritation or scratch the surface of the eyes.

4. FIRST AID MEASURES

Eye Contact : Flush eyes with water if irritation occurs. Skin Contact : If contact with molten product occurs, treat as for thermal burn Ingestion : Not ordinarily required. Inhalation : Not ordinarily required.

5. FIRE FIGHTING MEASURES

Extinguishing Media : Use water, foam, dry chemical or Carbon dioxide. Special Protective Equipment for Fire Fighters : Burnt material may create smoke or thermal decomposition products. Wear self-contained breathing apparatus meeting NIOSH standards.

6. ACCIDENTAL RELEASE MEASURES

Method for Cleaning Up : Wastages or debris from rolled sheet can be cleaned up by sweeping or vacuum up and place in a waste disposal container.

7. HANDLING AND STORAGE

Handling : Treat as a solid that can burn. Adequate ventilation and/or engineering controls must be employed in high temperature processing to prevent exposure to potential toxic/irritating fumes.

Storage : Store away from oxidizing materials, in cool, dry place with adequate ventilation. Aviod direct exposure to strong heat . Aviod storing in conditions which are vunerable to growth of molds and bacteria.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection : Not ordinarily required. Protective Clothing : Not ordinarily required

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : natural color of modified starch Specific Gravity : 1.1 g/cm3 Odor : natural odor Solubility : Insoluble in water Resistance to heat : to 140 degree C (can be used as microwavable food containers) Resistance to freezing : to – 40 degree C without deforming (can be used as deep frozen food containers, frozen seafoods) Others : Compliance with food safety regulations. Compostable and classified under biobased materials.

10. STABILITY AND REACTIVITY

Stability : Stable in the atmoshere. Biodegradable in wet soil and activated sludge where microorganism exist.

Harzadous Decomposition : At processing temperature, some degree of thermal degradation will occur.

Materials to Avoid : Strong oxidizing agents, acid or alkaline. Condition to Avoid : Temperature above 300 degree C

11. TOXICOLOGICAL INFORMATION

This product is non toxic.

12. ECOLOGICAL INFORMATION

This product is ecological friendly.

13. DISPOSAL CONSIDERATIONS

All waste material should be packed, labelled, transported and disposed or reclaimed in conformance with applicable law and regulations and in conformance with good engineering practices.

14. TRANSPORT INFORMATION

Ensure that rolls are protected from crushing with each other, sharp objects, rain or sea water. High stacking of rolls should be well secured to prevent accident.

15. REGULATORY INFORMATION

Not Applicable

16. OTHER INFORMATION

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.