MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE

Product name: Er(TMOD)3 Product code: T6885 Manufacturer/Supplier: Toshima MFG Co.,Ltd. Materials System Division 1414 Shimonomoto Higashimatsuyama-shi, Saitama 355-0036 Japan Phone +81-493-24-6774 Fax +81-493-24-6715 E-mail office@material-sys.com

2. CHEMICAL IDENTIFICATION

CAS.No.: Not determined Chemical Name: Tris[2,2,6,6-tetramethyl-3,5-octanedionato]erbium Molecular Formula: C36H63ErO6

3. HAZARDS IDENTIFICATION

Harmful. Harmful by inhalation, in contact with skin and if swallowed.

Irritant. Irritating to eyes, respiratory system and skin.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4. FIRST-AID MEASURES

In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes and seek medical advice.

In case of contact, immediately wash skin with soap and copious amounts of water.

If inhaled, removed to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

If swallowed, wash out mouth with water provided person is conscious.

Call a physician.

Wash contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

EXTINGUISH MEDIA: Carbon dioxide, Dry chemical powder or Appropriate form.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS: Emits toxic fumes under fire conditions.

6. ACCIDENTIAL RELEASE MEASURES

Evacuate area.

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Sweep up, place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Refer to section 8.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear chemical-resistant gloves, eye/face protection, and NIOSH/MSHA-approved respirator. Set up a Safety shower, eye bath, and mechanical exhaust.

Do not breathe dust.

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Keep tightly closed.

Store in a cool, dry and dark place.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: solid

Color: pink

Melting point: 109°C

Solubility in water: insoluble

Stability in air: stable

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

Toxic fumes of: carbon monoxide, carbon dioxide

10. STABILITY AND REACTIVITY

Incompatible with strong oxidizing agents and reducing agents.

11. TOXICOLOGICAL INFORMATION

Data has not yet available.

12. ECOLOGICAL INFORMATION

Data has not yet available.

13. DISPOSAL CONSIDERATIONS

Burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all national and local environmental regulations.

14. TRANSPORT INFORMATION

IACO/IATA class: 4.1 UN No.1325 Packing group II

15. REGULARTORY INFORMATION

The following regulatory information are based on self-assessment of risks and safety advises, as the substance has not been totally tested yet.

Code letter and hazard designation of the product Xn Harmful F Highly flammable

- R 36/37/ 38 Irritating to eyes , respiratory system and skin.
- S 16 Keep away from sources of ignition No smoking.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 33 Take precautionary measures against static discharges
- S 36/37 Wear suitable protective clothing and gloves.
- S 46 If swallowed, seek medical advice immediately and show this container or label.

Warning, substance not yet tested completely.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Toshima shall not be held liable for any damage resulting from handling or from contact with the above product.