**Technical Data Sheet**

**Product name:** UV-765  
**Chemical name:** Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate + 1-(methyl)-8-(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate  
**Synonym:** Tinuvin® 765  
**CAS No:** 41556-26-7 and 82919-37-7

**Chemical Structure:**

![Chemical Structure Diagram]

**Quality norm:** technical grade  
**Specification:**

- **Appearance:** Pale yellow liquid  
- **Transmittance (%):**  
  - 425 nm: 95 min.  
  - 450 nm: 97 min  
  - 500 nm: 98 min.  
- **Purity (%):** 96.0 min  
- **Diester (%):** 92.0 min.  
- **Monoester (%):** 4.0 min.  
- **Ash (%):** 0.1 max.

**Package:** 20/200/1000kgs plastic drum on pallets,  

**Applications**  
TINUVIN 765 is a highly effective liquid stabilizer used for a wide range of polymers and applications including polyurethanes, sealants, adhesives, elastomers, unsaturated polyesters, acrylics, vinyl polymers (PVB, PVC), styrene homo- and copolymers, polyolefins, liquid color concentrates, and other organic substrates.
Features/benefits
TINUVIN 765 provides outstanding performance and its liquid form provides ease of handling and incorporation. It is compatible in a wide array of substrates. TINUVIN 765 has low volatility and is thermally stable.

Guidelines for use
Use levels for TINUVIN 765 range between 0.1% and 1.0%, depending on the substrate and performance requirements. Synergistic performance may be obtained when TINUVIN 765 is used with a ultraviolet light absorber. Performance data are available in many substrates. For optimum effectiveness, adequate base stabilization (e.g. antioxidants/processing stabilizers) of the polymer is necessary to prevent thermal oxidation. Sulfur containing stabilizers such as thioesters have sometimes been found to have a negative effect on the performance of TINUVIN 765. Such influences should be evaluated in specific customer testing. TINUVIN 765 may crystallize during storage below 0°C, however the product can be easily liquefied by slight warming.

Physical Properties
Melting Range not applicable
Flashpoint 92 °C
Specific Gravity (20 °C) 0.993 g/cm3
Vapor Pressure (20 °C) 1 E-4 Pa
Solubility (20°C) % w/w
Water < 0.01
Acetone > 50
Chloroforme > 50
Cyclohexane > 50
Ethanol > 50
Ethyl acetate > 50
n-Hexane > 50
Methanol > 50
Methylene chloride > 50
Toluene > 50

Volutility Pure substance; TGA, heating rate 20 °C/min in air
Weight loss (%) Temperature (°C)
1.0 225
3.0 250
10.0 275

Registration
The registration status for TINUVIN 765 is derived from the single components. The components are registered in:
Australia
Canada
China
Europe
Japan
Korea
Philippines
USA.