# **Antioxidant**

# DMTP "YOSHITOMI"

DMTP "yoshitomi" is an effective antioxidant designed for protection of plastics, synthetic fiber, fats and oils, soap, lubricating oil and other petroleum products against deterioration, discoloration and rancidity. This antioxidant is normally used with primary phenolic antioxidants to provide a potent effect as a result of synergy.

## Composition

C<sub>34</sub> H<sub>66</sub> O<sub>4</sub> S M.Wt. 570.97

Dimyristyl Thiodipropionate

# **Specifications**

Appearance:

white powder

Melting Range:

49-54°C

Volatile Matter :

0.1% max.

Ash:

0.05% max.

Acid Value:

0.1 max.

Saponification Value:

190-205

Particle Size :

5 mesh pass 100%

16 mesh pass 95% min.

## Characteristics

- 1. DMTP "yoshitomi" has a compatiability as good as DLTP used in polyolefine, and does not cause blooming.
- When used in polyolefine, DMTP "yoshitomi" exhibits more excellent heat stability than DSTP.
  Heat stability of thiodipropionates on test piece of

polypropyrene.

Thiodipropionates Brittle Point (hours) DLTP 250 DSTP 450 LSTP 470 DMTP 470

Cf. (1) Composition of Test Piece

--- P.P. : 99.7% BHT: 0.1%

Thiodipropionate:

0.2%

Cf. (2) Test Conditions

--- thickness of piece :

gear oven : 150°C

- 3. When used in combination with primary phenolic antioxidants such as YOSHINOX BHT, YOSHINOX BB or YOSHINOX SR\* it has proved more effective. A combination with UV-absorbers is also promising for a synergic action.
- 4. DMTP "yoshitomi" is free from any serious toxic effects. It is permitted by FDA to use this antioxidant at an extractive limitation of less than 0.5mg per sguare inch of finished food-contact articles

## **Application**

As antioxidant for plastics, synthesized fiber, rubber, lubricating oil, fats and oils and so forth.

## Use

In general, the recommended range of concentration is 0.02-1.0%.

## **Package**

20 kg paper bag

<sup>\*</sup> YOSHINOX BHT: 3,5-Di-tert-buty1-4-hydroxytoluene

<sup>\*</sup> YOSHINOX BB : 4,4'-Butylidene-bis(6-tert-buty1-3 methyl phenol)

<sup>\*</sup> YOSHINOX SR : 4,4'-Thio-bis(6-tert-buty1-3 methyl phenol)