

Functional adsorption material



# Heat Retention Material for Agricultural Polyolefin Film [Hydrotalcite]

## FEATURES

TODA KOGYO's hydrotalcite (Mg and Al layered compound) have excellent infrared absorption property and transparency. They can enhance heat retention when mixed into a polyolefin film for agricultural greenhouses. Consequently, hydrotalcite contribute to the protection of the global environment by reducing the energy.

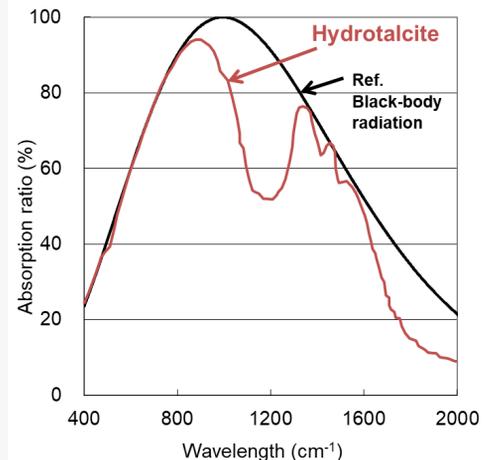
## CHARACTERISTICS

- 1 Excellent heat retention**  
The reduction of temperature can be effectively suppressed in agricultural greenhouses with excellent infrared absorption property in the range of 400-2000  $\text{cm}^{-1}$ .
- 2 High transparency**  
They show high transparency since they have a refractive index close to polyolefin resin which is the base material of agricultural films.
- 3 Excellent adsorption**  
Resin deterioration can be prevented since they adsorb various anions (halogen ions, etc.).

## SPECIFICATIONS

### 【Specifications】

Type	Dispersibility improvement type	Anti-forming type
MgO/Al <sub>2</sub> O <sub>3</sub>	5.4	4.8
Specific surface area (m <sup>2</sup> /g)	9~11	9~12
Refractive index	1.48~1.51	
SEM image		



【Heat retention performance (infrared absorption rate)】

Resin: LLDPE(CX-2001), Content rate: 16wt%

## APPLICATIONS

- Agricultural polyolefin film (enhancement of heat retention)
- Various anion adsorbents (i.e. PVC stabilizers, catalyst residue stabilizers, dyes)

