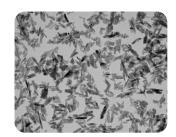


New functional material

Activated Iron Oxide for Combustion Catalyst [TIC™]



OVERVIEW

Iron oxide is used as a combustion additive since it has catalytic activity which makes other substances oxidize. The combustion catalyst "TIC™" is enhanced the catalytic activity to the maximum.

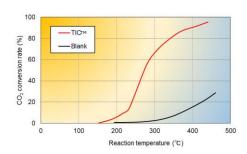
FEATURES

TIC[™] promotes efficient combustion and makes even waste with high moisture content combust completely.

TIC[™] is effective in decreasing dioxins generation by complete combustion.

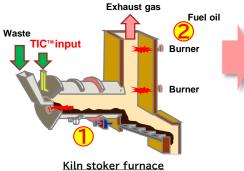
CHARACTERISTICS

TIC $^{\text{\tiny{TIC}}}$ is an active powder based on α -FeO(OH) that exhibits extremely high catalytic activity even at low temperatures. The conversion rate of carbon monoxide to carbon dioxide is shown in the right figure as data demonstrating its characteristics.



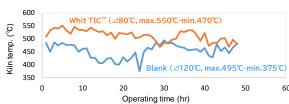
[Demonstration test using kiln stoker furnace]

The combustion promotion effect was evaluated by inputting TIC™ into a kiln stoker furnace.



(Waste processing capacity: 200t/day)

1 The effect of stabilizing kiln temperature was observed.



Fuel oil consumption has been reduced by more than 70%, which lead to reduce greenhouse gas emissions.



(Expected effects when operated 300 days/year)

APPLICATIONS

- Combustion additive for waste incinerators
- Combustion additive for coal/biomass power generation

TODA KOGYO CORP. TOKYO OFFICE

