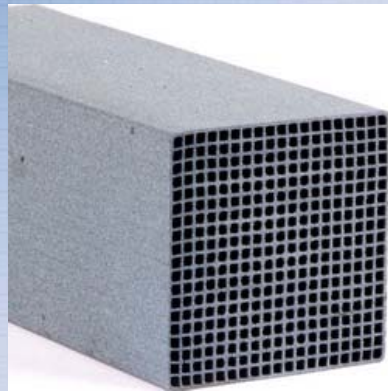
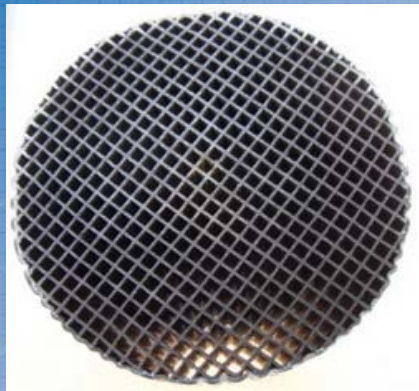


LT Oxidation Catalysts



PURESPHERE CO., LTD.



LT Oxidation Catalyst

Specification of LT oxidation catalysts

Subject	Content
Catalyst	Purelyst PH-400, 401
Active metal	Pt
Shape	Honeycomb
Honeycomb material	Cordierite, Metal, SiC

Features

- Oxidation of CO around 110 °C
- Oxidation of hydrocarbons at low temperature.
- Resistant to HCl, SO₂, etc.

Application

- Oxidation of CO from LNG boiler
- Oxidation of CO and hydrocarbons from kerosene heater



Catalyst installed into kerosene heater.

CO Oxidation Test



Test unit



CO analyzer

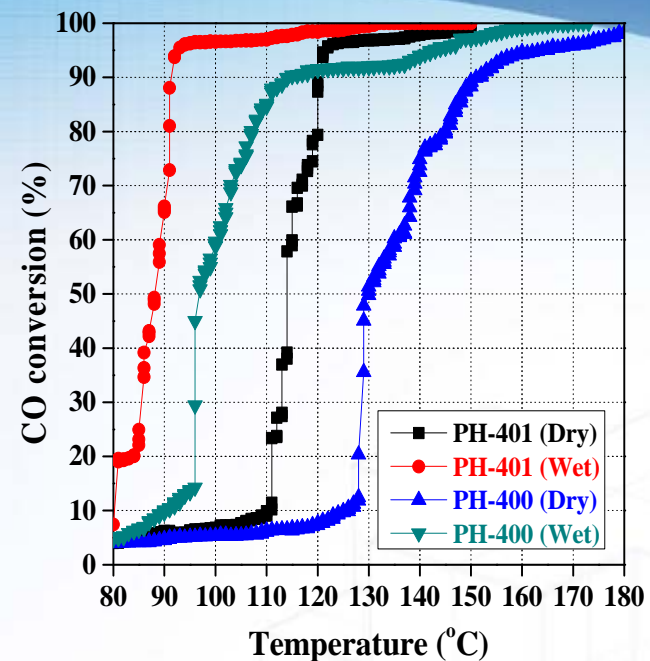


CO gas

CO Oxidation Test

Test condition

Subject	Content
Catalyst	Purelyst PH-400, 401
Honeycomb cell density (cells/in ²)	200
Temp. (°C)	80 ~ 180
SV (h ⁻¹)	35,000
CO (ppmv)	1,000 (75 cm ³ /min)
Air	Balance
H ₂ O (%)	0 (Dry)/5 (Wet)



CO conversion

No.	Purelyst PH-401 (dry)		Purelyst PH-401 (wet)		Purelyst PH-400 (dry)		Purelyst PH-400 (wet)	
	Temp. (°C)	Conversion (%)	Temp. (°C)	Conversion (%)	Temp. (°C)	Conversion (%)	Temp. (°C)	Conversion (%)
1	80	4.8	80	7.4	80	4	80	4.8
2	90	6.2	90	66.2	90	4.7	90	10.1
3	100	6.7	100	96.5	100	5.3	100	59.7
4	110	9.2	110	97	110	6.3	110	84.9
5	120	89.1	120	98.4	120	7.7	120	91.5
6	130	96.9	130	99.5	130	51.4	130	92
7	140	98.1	140	100	140	74.9	140	94
8	150	100	150	100	150	89.3	150	97.1
9	-	-	-	-	160	94.7	160	99.2
10	-	-	-	-	180	98.2	170	100