Wellgo Chemical Technology Co., LTD

Polyglycerol fatty acid ester (PGFE)

# PRODUCT NAME

WELLGO PGFE-Series

## PRODUCT TYPE

Emulsifier, food grade

# COMPOSITION AND DESCRIPTION

	Chemical Name	Appearance	Physical and chemical indicators			
Name of name			Acid value (mgKOH/	Saponification value (mgKOH/g)	Iodine Value, (gI2/100g)	HLB values
1	Polyglyceryl-3 stearate	yellow waxy powder	≪6.0	100~130	≪3.0	7.0
2	Polyglyceryl-2 oleate	Oily liquid	≤6.0	40~50	≪3.0	15.5
3	Polyglyceryl-6 stearate	Light yellow soft solid	≤6.0	80~110	≪3.0	9.0
4	Polyglyceryl-10 stearate	Oily liquid	≪6.0	50~80	≤3.0	13.5
5	Polyglyceryl-10 Caprylate	Oily liquid	≪6.0	40~70	15~35	16.0
6	Other Polyglycerol fatty acid ester according to customer demand					

Polyglyceryl-3 stearate	CAS No.:27321-72-8; 26855-43-6; 67784-82-1	
Polyglyceryl-2 oleate	CAS No.:49553-76-6	
Polyglyceryl-6 stearate	CAS No.:95461-65-7	
Polyglyceryl-10 stearate	CAS No.:79777-30-3	
Polyglyceryl-10 Caprylate	CAS No.:51033-41-1	



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### APPLICATION AREAS:

Polyglyceryl esters can exist in different forms such as powder, solid, or viscous liquid, and their colors range from white to yellow. They have low water sensitivity and exhibit good thermal stability as well as resistance to acid and salt. The higher the degree of polymerization for polyglyceryl in the polyglyceryl esters, the shorter the fatty acid chain, the lower the degree of esterification, and the higher the hydrophilicity; conversely, their lipophilicity increases.

### Typical HLB values for polyglyceryl esters range from 1 to 18:

The HLB values above 7 can be used as O/W emulsifiers. Their emulsifying capacity is significantly stronger than that of monoglycerides and propylene glycol esters under neutral conditions. Under acidic conditions, especially when the pH is below 5, their emulsifying and stabilization properties are significantly superior to sucrose esters, and they are commonly used in water-based dairy products. Polyglycerol esters with HLB values below 6 can be used as W/O emulsifiers, which can be used alone or in combination with other emulsifiers, commonly used in the fields of cream and puff pastry.

▲ used in food ice cream, emulsifying flavor, flour products, chocolate, candy, margarine, shortening, dairy products and meat products, can play a very good emulsification, stability, dispersion, defoaming, quality improvement, oil crystallization adjustment, prevent protein condensation denaturation and antibacterial preservation.

▲ In cosmetics, can be used as emulsifier, dispersing agent, can replace solvent and pearlescent agent, and has the role of stability, conditioning and control viscosity.

▲used in medicine, washing, adhesives, plastics, oil mining, textile printing and dyeing, leather protection, etc.

#### PACKAGING, STORAGE AND TRANSPORTATION

Storage :should be stored at 25 /77  $^{\circ}$ C max and 80% relative humidity max, Away from sunlight and odorous products. It has a shelf life of 24 months in original package.

Packaging : liquid 25 kg/barrel, 200 kg/barrel.

Solid: 25kgs/ carton Powder: 25kgs/bag

Customized packages are available .

Transportation: Storage and transportation by general chemicals.

#### LEGAL STATU

Polysorbates meets the specifications laid down by the FAO/WHO, the EU, and the Food Chemicals Codex.

### ADDITIONAL SAFETY INFORMATION

A Material Safety Data Sheet is available on request.

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