

Products Information

FOAMEND® Series (Fatty Alcohol & Mineral Oil based Defoamers)

1. Introduction

Fatty alcohol defoamers are an effective non-silicone type defoamer which has been found to be extremely effective in controlling foaming and various industries.

Mineral oil based defoamers are designed mineral oil and hydrophobic materials. These products can apply to a field of synthetic resins, paint, Dyeing etc. what need high temperature, high pressure and high alkalinity.

2. Products List

Products Name	Composition(a)	Appearance(b)	Active Contents	Ionic Activity(c)	Specific Gravity	pH [25℃]	Suitable Diluent	Application
CS-506	FA	MWE	30%	WA	0.98 ± 0.02	9.5±1.5	Water	Water Treatment
CS-612	FA	MWE	30%	WA	0.98 ± 0.02	9.5±1.5	Water	Papermaking Processing
CPA-1012	MO	LYL	100%	NI	0.90 ± 0.02	-	Water	Chemical Manufacturing
CPA-1012S	MO	LYL	100%	NI	0.90 ± 0.02	-	Water	PVA Manufacturing
CS-100	MO	LYL	100%	NI	0.87 ± 0.05	-	Water	Dyeing Processing

(a) FA = Fatty Alcohol Complex, MO = Mineral Oil Complex (b) MWE = Milky White Emulsion, LYL = Light Yellowish Liquid

(c) WA = Weak Anionic, NI = Nonionic

3. Products Description

3.1 FOAMEND® CS-612

FOAMEND® CS-Series are good defoamer & deaerator

Features :

- High durability
- High bio-degradable
- Excellent exclusion of foam over the surface
- Easily dispersible in water

Application :

- Papermaking process
- Waste-water process

3.2 FOAMEND® CPA-1012(S)

FOAMEND® CPA-1012(S) is made from Mineral oil, Fatty acid esters & Hydrophobic materials

Features :

- High durability and quick defoaming performance
- Excellent dilution stability
- Long term foam inhibition
- High efficiency – low usage levels
- Balances effective foam control and good surface appearance
- Excellent of thermal & alkalinity resistance
- Good emulsion stability of high temperature and high pressure

Application :

- Latex emulsion paints
- EPS manufacturing & applications
- PVA manufacturing & applications (CA-1012S)
- Adhesive systems
- EVA applications

3.3 FOAMEND® CS-100

FOAMEND® CS-100 is made from mineral oil & hydrophobic materials

Features :

- High durability and quick antifoaming performance
- Good emulsion stability of high temperature & high pressure
- Stable and effective in alkaline solution
- High efficiency – low usage levels

Application :

- VAT Dyeing process
- Paint manufacturing & applications

4. Fatty Alcohol based defoamer vs Mineral Oil based defoamer for Papermaking Processing

4.1 Comparison merits and demerits about each type defoamer

	Fatty Alcohol based defoamer	Mineral Oil based defoamer
Effect of Sizing	No Effect	Adverse Effect on Sizing
	Reduce the Rosin/Alum Consumption (20-40%)	Increase the Rosin/Alum Consumption
Dehydration Time	Reduce the dehydration time because of the low air in stock	Retard the dehydration time use dehydration facilitator
Oil Spot	No Effect	Effect
Retention Rate	Increase	Decrease
Cellulose Recovery Rate	Increase	Decrease
Antifoamer consumption in Sewage treatment	Decrease 20% consumption	Increase Antifoamer consumption because of high air volume in stock
COD & BOD	Decrease	Increase
Sheet Quality	Increase	Decrease

4.2 Comparison efficiency & effect which it causes in paper quality.

	Fatty Alcohol Type	Mineral Oil Type
Head box air-contents(%)	0.1	1.6
Head box concentration(g/l)	7.8	9.2
Head box ash(%)	32	37
White water concentration(%)	2.7	3.7
White water ash(%)	51	57
White water concentration after fiber recovery(g/l)	46.5	45
Porosity(ml/min.)	Before calendering	245
	After calendering	25
Smoothness after calendering(sec/20min.Hg)	1,110	700

Conditions :

- paper type: 60 g/m² (coating paper) - Ph: 6.8 - Roll speed: 700 m/min.

Results :

- Basically, Though after it is solved the mechanic problems, it seem to be of help to quality control, paper machine reduce for hours of operation that exclusion of bubble for durability with use defoamer.

5. Additional Information

Company	Cheongsan Chemical co., ltd	
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Stoage	When stored at room temperature in the original unopend containers, this products has a usable life 6 Months from the date of production.	
	If subjected to low temperatures, allow to warm to room temperature and mix well before using	
Packing	This product is available in 20kg, 200kg and 1,000kg PE container, net weight.	
Limitations	This product is neither tested nor represented as suitable for medical or pharmaceutical uses.	