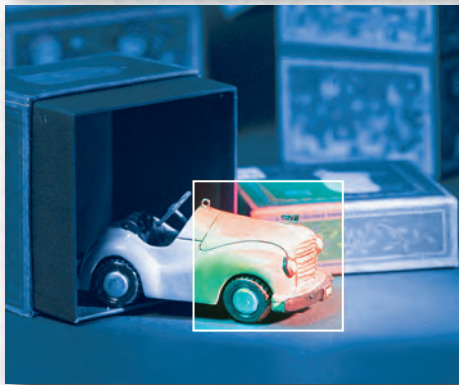
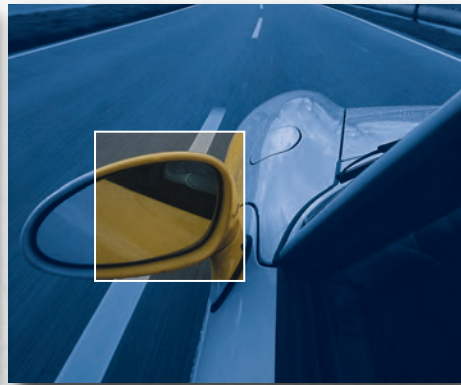


FACI ASIA PACIFIC PTE LTD







FACI.

Guaranteed Quality, Respect for the Environment



FACI Group is a global company which still retains its family owned status. This assures focus and commitment on cost competitiveness, prompt decisions, resiliency to economic cycles and allows flexibility in adapting a business model that follows the evolving market needs without compromising either quality or the fundamental values of sustainable business.



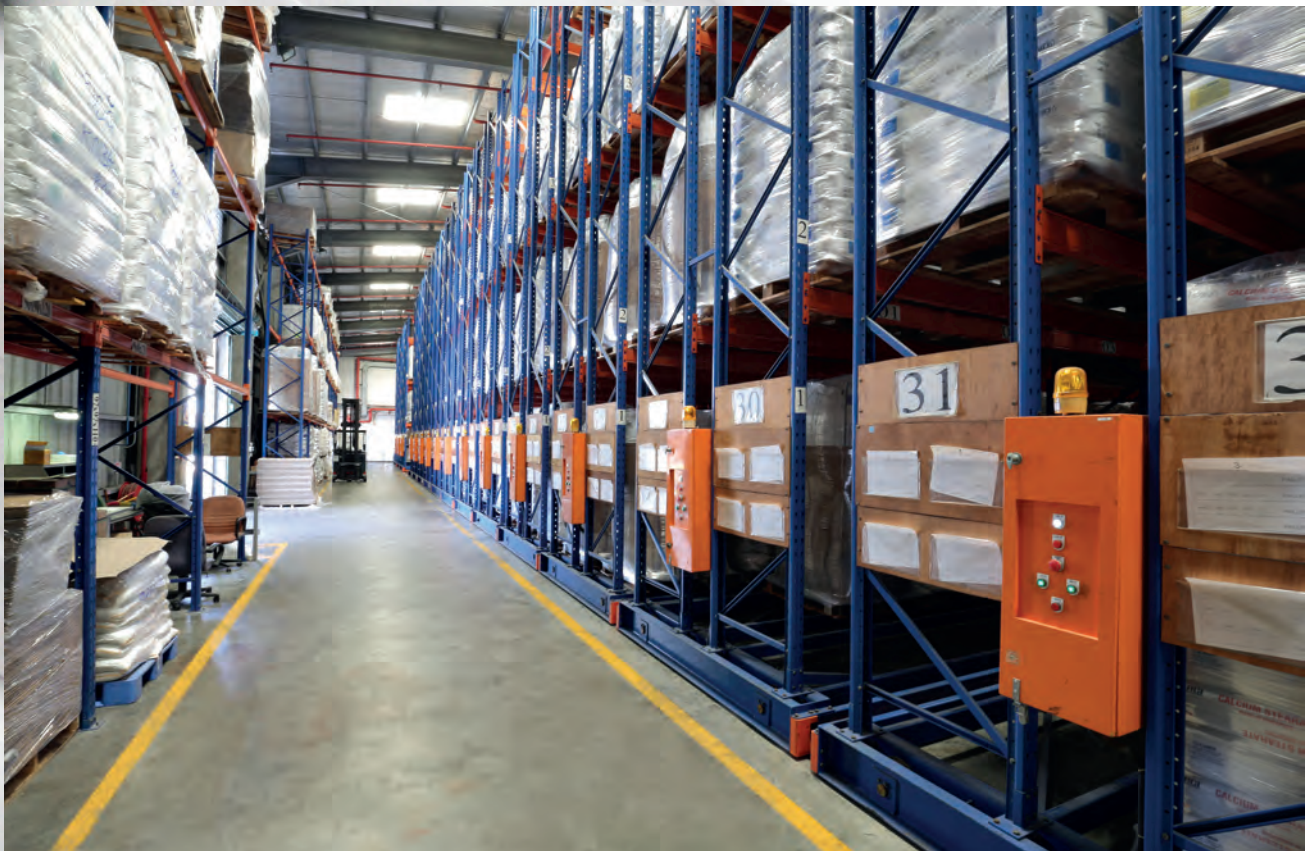


FACI Group has had deep roots in the bio based economy since its foundation. All FACI products and processes comply with the latest standards of sustainability and are sourced from renewable feedstock.



Calcium Stearate

GRADE	MELTING POINT	OXIDE	FREE FATTY ACIDS	MOISTURE	TYPICAL SOLUBLE SALTS	TYPICAL BULK DENSITY	SIEVE RESIDUE % MAX		Description
	°C	%	% max	% max	% max	g/l	200 mesh	325 mesh	
S	150-160	9.2-10	1	3	0.1	≤260	1	-	Typical particle size
S (High Density)	150-160	9.2-10	1	3	0.1	-	-	-	High density grade
SW	150-160	9.2-10	1	3	0.1	≤260	-	1	Finer particle size
BS	165-175	10-11	0.5	3	0.1	≤260	1	-	Typical particle size, Higher oxide
DW	145-155	9.2-10.0	0.5	3	0.1	≤230	-	0.1	Finer particle size, Better thermal stability
DW (High Density)	145-155	9.2-10.0	0.5	3	0.1	-	-	-	High density grade
WLC	145-155	9.2-9.8	0.5	3	0.1	≤230	-	0.1	Finer particle size, Superior thermal stability
WLC (High Density)	145-155	9.2-9.8	0.5	3	0.1	-	-	-	High density grade
SP	145-160	9.2-10.0	1	3	0.1	400-600	non dusting microbeads		Non dusting
PLC	145-160	9.2-10.0	0.5	3	0.1	400-600	non dusting microbeads		Non dusting, Better thermal stability
EPH	-	9.0-10.3	-	4	0.1	-	-	-	Pharma grade
E	145-160	9.0-10.5	1.5	4	0.1	≤260	1	-	Food grade
EW	145-160	9.0-10.5	1.5	4	0.1	≤260	-	1	Food grade Finer particle size



“

The continuous desire and propensity for finding the best balance between quality, competitiveness and sustainability is the driver of our daily activities and has existed in the company's culture since its foundation.

”



Zinc Stearate

GRADE	MELTING POINT	OXIDE	FREE FATTY ACIDS	MOISTURE	SOLUBLE SALTS	TYPICAL BULK DENSITY	SIEVE RESIDUE % MAX		Description
	°C	%	% max	% max	% max	g/l	200 mesh	325 mesh	
TM	118-122	13.5-14.2	1	1	0.1	260-360	0.5	-	Typical particle size
TW	118-122	13.5-14.2	1	1	0.1	260-360	-	1	Typical particle size
TB	118-128	16.0-18.0	0.5	1	0.1	-	0.5	-	Typical particle size, High oxide
TMD	118-122	13.5-14.2	1	1	0.1	260-360	0.5	-	Typical particle size
SP	118-122	13.5-14.2	1	1	0.1	450-600	non dusting microbeads		Non dusting
EPH	-	12.5-14.0	-	-	0.1	260-360	0.5	-	Pharma grade

Magnesium Stearate

GRADE	MELTING POINT	OXIDE	FREE FATTY ACIDS	MOISTURE	TYPICAL BULK DENSITY	SIEVE RESIDUE % MAX		Description
	°C	%	% max	% max	g/l	200 mesh	325 mesh	
S	130-145	7.2-8.0	1.5	4	140-180	2	-	Typical particle size
SW	130-145	7.2-8.0	1.5	4	140-200	-	1	Finer particle size
SP	140-160	7.2-8.0	-	4	400-600	non dusting microbeads		Non dusting grade
EPH	-	6.65-8.3	-	4	-	-	-	Pharma grade
E	-	6.8-8.3	2	4	-	-	-	Food grade

Sodium Stearate

	MELTING POINT	SULPHATED ASHES	FREE FATTY ACIDS	MOISTURE	TYPICAL BULK DENSITY	SIEVE RESIDUE % MAX	Description
GRADE	°C	%	%	% max	g/l	100 mesh	
APS	210-220	-	2 max	2	200-260	0.5	
APT	210-220	-	2 max	2	200-320	0.5	Tallow like
APH	-	-	-	2	200-320	0.5	
E	210-220	-	1.5 max	2	200-320	1	Food grade

Potassium Stearate

	MELTING POINT	OXIDE	FREE FATTY ACIDS	MOISTURE	SULPHATED ASH	TYPICAL BULK DENSITY	SIEVE RESIDUE % MAX	Description
GRADE	°C	%	% max	% max	%	g/l	60 mesh	
APS	210	-	2	2	27-29.5	200-350	-	Typical particle size
E	210	13-16.2	2	2	-	200-350	30	Food grade

Laurate Others

	MELTING POINT	OXIDE	FREE FATTY ACIDS	MOISTURE	METAL CONTENT	ASH	TYPICAL BULK DENSITY	SIEVE RESIDUE % MAX		Description
GRADE	°C	%	% max	% max	%	%	g/l	200 mesh	325 mesh	
Calcium Laurate	160-170	12.7-13.2	1.5	3	-	-	-	1	-	Typical particle size
Zinc Laurate	125-135	-	2	1	13.5-15.2	17-19	140-250	-	1	Finer particle size
Zinc Laurate SP	125-135	-	2	1	13.5-15.2	17-19	450-600	non dusting microbeads		Non dusting

Polymer Additives: mainly used as lubricant and mould release agent for Rubber - ABS- Polycarbonate-Polyamide

	MELTING POINT	IODINE VALUE	ACID VALUE	SAP. VALUE	HYDROXYL VALUE	MOISTURE	COLOUR LOVIBOND 5" 1/4		Description
GRADE	°C	glz/100g max	mgKOH/g max	mgKOH/g	mgKOH/g	% max	R max	Y max	
PEDS AP	46-52	1	2	175-185	105-135	0.5	5	35	
PETS AP	58-65	1	5	188-202	≤35	0.5	4	25	
PETS APS	-	1	2.0	188-202	≤12	0.3	4	25	Low HV
PETS AHS	-	1	1.5	188-202	≤25	0.3	4	25	High stability
PETS ATHS	-	1	1.5	190-197	≤25	0.3	4	25	Tallow like

Microbeads, flakes, pastilles and molten



The keys of our success are continuous technical development, close attention to the quality standards of our chemicals and their production process, an open-minded approach to local and international markets, a close cooperation with our customers and adhering to a long-term business view which goes beyond a generation.



Calcium-Zinc Stearate

	ASHES	FREE FATTY ACIDS	MOISTURE	SIEVE RESIDUE % MAX	Description
GRADE	%	% max	% max	200 mesh	
55/45 Blend	11.2-12.2	1	2	1	Typical particle size

Liquid Stearates Dispersions

	DRY CONTENT	TYPICAL BULK DENSITY	SIEVE RESIDUE % MAX	Description
GRADE	%	g/l	325 mesh	
Fluocast AT	49-51	1000-1050	0.1	Tallow like
Fluocast FG1	23.5-36.0	1000-1050	0.1	
Fluocast FG2	36.5-50.0	1000-1050	0.1	

Mono, Di and Triglycerides

	MONO GLYCERIDES	FREE GLYCEROL	ACID VALUE	IODINE	MELTING POINT	SOAPS	COLOUR LOVIBOND 5" 1/4		Description
GRADE	%	% max	mgKOH/g max	gl/100g max	°C	%	R max	Y max	
GMS AP 40	40 min	2	2	2	55-60	-	6	40	Low mono glyceride grade
GMS AT 40	40 min	2	2	2	57-62	-	6	40	Low mono glyceride grade tallow like
GMS AP 50	50 min	2	2	2	56-60	-	6	40	Medium mono glyceride grade
GMO AP	-	3	2	70-90	-	-	15	80	Medium mono glyceride grade from Oleic Acid
GMO E	35-52	6	6	58-80	-	-	15	80	Food Grade
GDO AP	-	3	2	78-100	-	-	15	80	Diglyceride from Oleic Acid
GMS AP/SE	40 min	2	2	2	56-60	4-6	6	40	Self emulsifying
GMS AT/SE	40 min	2	2	2	56-60	4-6	6	40	Self emulsifying Tallow like
GMS E	40 min	7	6	-	-	-	-	-	Food Grade
GMS SE E	40 min	7	6	-	-	4-6	-	-	Food grade Self emulsifying
GMS EPH Type I	-	6	3	3	-	-	6	40	Pharma grade
GMS EPH Type II	40-55	6	3	3	-	-	6	40	Pharma grade

Microbeads, flakes, pastilles and molten





FACI is a global Group of Companies, active in the production and marketing of bio based (oleo) chemical additives since 1943.



Regulations

	Kosher	Halal	USP	NF	EP	CHP	JPXIII	BP	FCC	E470a	E470b	NSF	JHOSPA
Calcium Stearate													
S	■	■										■	■
SW	■	■											
BS	■	■											
DW	■	■											
WLC	■	■											
SP	■	■										■	■
PLC	■	■											
Eur-Phar	■	■	■	■	■	■	■						
E	■	■							■	■			
EW	■	■							■	■			
Calcium Laurate	■	■											
Magnesium Stearate													
S	■	■											■
SP	■	■											
Eur-Phar	■	■	■	■	■	■	■	■					
E	■	■							■		■		
SW	■	■											
Zinc Stearate													
TM	■	■											■
TMD	■	■											■
TW	■	■											■
TB	■	■											■
SP	■	■											■
Eur-Phar	■	■	■	■	■	■	■	■					
Zinc Laurate	■	■											
Sodium Stearate													
APT	■	■											
APS	■	■											
APH	■	■	■	■	■	■	■	■					
E	■	■								■			
Potassium Stearate													
E	■	■								■			
APS	■	■											■
Calcium/Zinc Stearate	■	■											
Calcium/Zinc Stearate 55:45 blend	■	■											



Regulations

	Kosher	Halal	USP	NF	EP	JPXIII	FCC	E470	E471	JHOSPA
Mono, Di and Triglycerides										
GMS AP40										
GMS AT40										
GMS AP50										
GMS AP/SE										
GMS AT/SE										
GMO AP										
GMO E										
GDO AP										
GMS E										
GMS SE E										
GMS EPH Type I										
GMS EPH Type II										
Pentaerythritol Esters										
PEDS AP										
PETS AP										
PETS APS										
PETS AHS										
PETS ATHS										
PEDS AT										
PETS Y850										
Ethylene Glycol Esters										
EGDS AP										
EGDS AT										
EGDP										
Others										
CETS AP										
CETS AT										
Stearates Liquid Dispersions										
Floucast AT										
Fluocast FG1										
Fluocast FG2										

FACI L series - Regulations

	Food Contact Approval by EU Law	Kosher	Halal	JHOSPA
FACI L100				
FACI L 102				
FACI L107				
FACI L201				
FACI L329				
FACI L349				
FACI L347				
FACI L348				
FACI L348A				
FACI L521				
FACI L522				
FACI L611				
FACI L612				
FACI L614				
FACI L626				
FACI L651				
FACI L711				
FACI L751				

Lubricants / Additives - General Table

FUNCTION	Product*	Chemical Composition	Lubricant Effect in PVC						Transparent Articles	Physical Form	Melting Range (°C)	
			Internal			External						
LUBRICANTS - ANTISTATICS	L100	Fatty Acids Ester of Polyol	■	■	■	■	■	■	●	Solid	62-70	
	L102	Fatty Acids Ester of Polyol from vegetable sources (with tallow composition)	■	■	■	■	■	■	●	Solid	67.5-70.5	
	L107	Fatty Acids Ester of Polyol from vegetable sources	■	■	■	■	■	■	●	Solid	67-72	
	L201	Fatty Acids Ester of Polyol from vegetable sources					■	■	■	■	Solid	54-64
	L329	Fatty Acids Ester of Polyol from vegetable sources		■	■	■	■	■	■	●	Solid	46-52
	L349	Fatty Acids Ester of Polyol from vegetable sources									Solid	58-65
	L347	Fatty Acids Ester of Polyol from vegetable sources									Solid	62-68
	L348	Fatty Acids Ester of Polyol from vegetable sources									Solid	≥ 60
	L521	Linear Solid Fatty Acids Ester from vegetable sources					■	■	■		Solid	51-57
	L522	Linear Solid Fatty Acids Ester from vegetable sources (with tallow composition)					■	■	■		Solid	51-60
	L611	Fatty Acids Ester of Polyol from vegetable sources		■	■	■	■	■	■	●	Solid	55-60
	L612	Fatty Acids Ester of Polyol from vegetable sources (with tallow composition)		■	■	■	■	■	■	●	Solid	57-62
	L614	Fatty Acids Ester of Polyol from vegetable sources		■	■	■	■	■	■	●	Liquid	-
	L626	Fatty Acids Ester of Polyol from vegetable sources		■	■	■	■	■	■	●	Liquid	-
	L651	Fatty Acids Ester of Polyol from vegetable sources		■	■	■	■	■	■	●	Solid	56-60
	L711	Fatty Acids Ester of Polyol from vegetable sources with strong antistatic effect		■	■	■	■	■	■	●	Solid	65-70
	L751	Fatty Acids Ester of Polyol from vegetable sources								●	Solid	65-70

ALL FACI products are REACH registered or preregistered

* Other products are available, for the full FACI L product list please refer to a FACI representative or to L series brochures

Lubricants and Additives for Plastic Applications

FUNCTION	Product*	Chemical Composition	P-PVC	U-PVC	PE	PP	PS	PC	ABS	PC/ABS	PET/PBT	PA	PMMA
LUBRICANTS - ANTISTATICS	L100	Fatty Acids Ester of Polyol		■									
	L102	Fatty Acids Ester of Polyol from vegetable sources (with tallow composition)		■									
	L107	Fatty Acids Ester of Polyol from vegetable sources		■									
	L201	Fatty Acids Ester of Polyol from vegetable sources							■	■	■		
	L329	Fatty Acids Ester of Polyol from vegetable sources		■								■	
	L349	Fatty Acids Ester of Polyol from vegetable sources							■	■	■	■	
	L347	Fatty Acids Ester of Polyol from vegetable sources							■	■	■	■	
	L348	Fatty Acids Ester of Polyol from vegetable sources							■	■	■	■	
	L521	Linear Solid Fatty Acids Ester from vegetable sources		■		■			■	■	■		
	L522	Linear Solid Fatty Acids Ester from vegetable sources (with tallow composition)		■		■			■	■	■		
	L611	Fatty Acids Ester of Polyol from vegetable sources		■	■				■	■	■		
	L612	Fatty Acids Ester of Polyol from vegetable sources (with tallow composition)		■	■				■	■	■		
	L614	Fatty Acids Ester of Polyol from vegetable sources	■					■					
	L626	Fatty Acids Ester of Polyol from vegetable sources	■										
	L651	Fatty Acids Ester of Polyol from vegetable sources	■										
L711	Fatty Acids Ester of Polyol from vegetable sources with strong antistatic effect	■											
L751	Fatty Acids Ester of Polyol from vegetable sources			■	■								

ALL FACI products are REACH registered or preregistered



Personal Care: oil in water emulsifier, pearling agent in shampoos

	MELTING POINT	IODINE VALUE	ACID VALUE	SAP. VALUE	HYDROXYL VALUE	COLOUR LOVIBOND 5" 1/4		Description
GRADE	°C	gl:/100g max	mgKOH/g max	mgKOH/g	mgKOH/g	R max	Y max	
EGDS AP	60-70	0.75	3	195-215	≤15	3	20	
EGDS AT	-	0.75	3	190-200	≤10	3	20	Tallow like
EGDP	67-72	1	1	-	≤10	5	20	

Product available liquid in tanks or in non dusting form: microbeads and pastilles



Other Esters

	MOISTURE	IODINE VALUE	FREE FATTY ACIDS	SAP. VALUE	COLOUR LOVIBOND 5" 1/4		Description
GRADE	%	gl:/100g max	%	mgKOH/g	R max	Y max	
CETS AP	≤0.5	1	≤0.8	105-115	3	15	
CETS AT	≤0.5	1	≤0.8	102-110	3	15	Tallow like

Product available in non dusting form: microbeads, flakes, pastilles and molten



Other products available from the FACI Group

With its seven manufacturing locations (four in Europe, two in the Far East and one in USA), FACI Group is a main supplier of non-toxic stearates, esters, oleochemicals and additives to a multitude of companies operating in different industries around the world. Our main chemistry has been traditionally focused on products derived from stearic acid, both of animal and vegetable origin. While this business continues to be the core activity of our Group, the acquisition of existing production units in Europe and the USA has considerably increased the portfolio of both our chemicals and our customers.

Our growth has always been driven by a forward-thinking attitude, backed up by a strong technical, marketing and development ethos which is associated with a close cooperation with our customers

Products availability:

FACI S.p.A. - Carasco - Italy

Fatty acid, glycerine and their derivatives, metallic soaps and their dispersions, esters, stearamides and epoxydized soya bean oil. Stearic acid and derivatives available on both animal and vegetable basis.

FACI Metalest - Sucursal en España de FACI corporate S.p.A. - Zaragoza - Spain

Fatty acid derivatives, metallic soaps, their dispersions and liquid fatty acids esters.

FACI UK Chemicals Ltd - Knowsley - UK

Fatty acid derivatives predominantly metallic soaps.

FACI Asia Pacific Pte Ltd - Jurong Island - Singapore

Fatty acid derivatives predominantly metallic soaps and their dispersions, fatty acids esters.

FACI Chemicals Co Ltd - (Zhangjiagang) - PRC

Fatty acid derivatives predominantly metallic soaps and esters.

eChem Ltd - Leeds - UK

Fatty acid derivatives, metallic soaps dispersions and esters.

American eChem, Inc. - Lufkin TX - USA

Fatty acid derivatives predominantly metallic soaps dispersions.

Applications



PRODUCT	PVC	STABILISERS	POLYOLEFINS PE	POLYOLEFINS PP-LDPE	POLYCARBONATE	ABS	PC-ABS BLEND	POLYSTYRENE	POLYAMIDE	POLYESTERS SMC-BMC	OTHER PLASTICS	RUBBER	PAPER	ABRASIVES	BUILDING	COSMETIC	PHARMACEUTICAL	FOOD AND FEED	ADHESIVES	MINERAL COATING	PAINTS	FIRE-FIGHTING	METALLURGY	DETERGENT	LUBRICANTS
Stearic Acid																									
Oleic Acid																									
Glycerine																									
Aluminum Stearate																									
Calcium Stearate DW-WLC																									
Calcium Stearate S																									
Calcium Stearate SP																									
Magnesium Stearate																									
Sodium Stearate																									
Zinc Stearate TM-TMD-TW-EPH																									
Zinc Stearate SP																									
Fluocast																									
Fluozinc																									
Fluowax																									
Sodium Oleate																									
Canastol																									
Edistol																									
Lithium Stearate																									
Potassium Stearate																									
Potassium Myristate																									
Magnesium Myristate																									
Calcium Laurate Zinc Laurate																									
Calcium 12 H St. - Zinc 12 H Stearate																									
Glycerilmonostearate (GMS)																									
GMS/SE																									
Glycerildistearate (GDS)																									
Glycerilmonooleate (GMO)																									
Glycerilmonooleate (GMO E)																									
Pentaerythritol Esters																									
Ethyleneglycoldistearate (EGDS)																									
Ethyleneglycolmonostearate (EGMS)																									
Cetyl Stearate																									
EBS SP-N																									
EBS W-WH																									
Epoxol																									

The information contained in this publication is based on the present state of our knowledge and experience, given without obligation.

The product properties given in the publication are not specifications.

Our technical advice and recommendations, whether verbal, in writing, or by way of trials, are given for information purposes without commitment. The customer is strongly advised, due to the many outside influences which may affect the product use and application, to carry out his or her own testing and trials.

- Corporate Headquarters
- Production sites
- Commercial offices

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Texas

USA

FACI US DISTRIBUTION LLC
Texas

USA

eChem Ltd
Leeds

UK

FACI UK CHEMICALS Ltd
Merseyside

UK

FACI METALEST
Zaragoza

Spain

Paris

France

AMBROGIO PAGANI
Bergamo

Italy

Italy FACI S.p.A.
Carasco - GE

Italy FACI Corporate
Carasco - GE

FACI ASIA PACIFIC Pte Ltd
Singapore

Singapore

FACI CHEMICALS Co Ltd
(ZHANGJIANG)
Jiangsu

China





With seven fully owned manufacturing units:

- Carasco (Italy)
- Zaragoza (Spain)
- Knowsley (UK)
- Leeds (UK)
- Jurong Island (Singapore)
- Zhangjiagang (China)
- Lufkin (USA)

The FACI Group today is a leading supplier of

- Non toxic metallic soaps and dispersions
- Fatty esters and a wide range of oleochemicals derived additives

To a large variety of industries WORLD WIDE







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