

Fatty Acids Methodology

Fatty acids are largely derived from vegetable oils such as palm and coconut oil. Most fatty acid production originates from southeast Asia, particularly Malaysia, Indonesia and the Philippines. In Malaysia and Indonesia, palm oil is the raw material used in the production of fatty acids while in the Philippines it is primarily coconut oil. The major applications for fatty acids are cosmetics and toiletries such as shampoos, liquid detergents and body lotions. They are also used as lubricants and plasticisers in rubber and polymer processing.

North America has fatty acid production using renderer-grade and packer-grade bleachable fancy tallow (BFT) as feedstock with some addition of lower-priced choice white grease (CWG) also being used in the feedstock mix. Many formula-based buyers use the renderer-grade BFT, packer-grade BFT and CWG average for the previous month and an adder number as a key component for the monthly contract calculation. The basic acids from this production are the C18 Stearic acids. These fatty acids are always non-kosher.

North America also produces C18 Tall Oil Fatty Acid (TOFA) from the distillation of crude tall oil (CTO) that is made from the wood pulping process. TOFA is derived from the distillation of the CTO, with further processing to remove rosin (a wood resin). Lesser rosin results in a higher purity product.

There is no glycerine co-product from TOFA production.

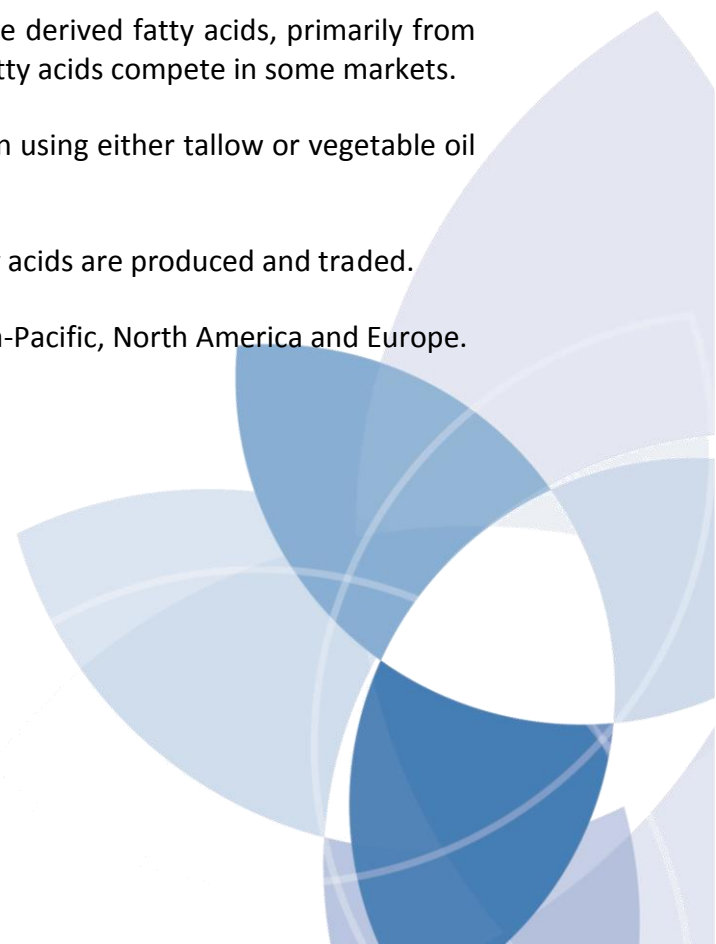
North America imports the majority of vegetable derived fatty acids, primarily from Asia. Tallow-based and vegetable derived C18 fatty acids compete in some markets.

Glycerine is a co-product of fatty acid production using either tallow or vegetable oil as feedstock.

In Europe, both tallow and vegetable based fatty acids are produced and traded.

ICIS pricing covers fractionated fatty acids in Asia-Pacific, North America and Europe.

Frequency: Published weekly on Wednesdays



Fatty Acids – Fractioned (ASIA-PACIFIC)

Weekly Price Assessments:

C8 Caprylic Acid Spot Prices

- FOB S.E. ASIA (USD/MT & conversion to US CTS/LB)
- CFR JAPAN (USD/MT & conversion to US CTS/LB)
- CFR N.E. ASIA (USD/MT & conversion to US CTS/LB)

C10 Capric Acid Spot Prices

- FOB S.E. ASIA (USD/MT & conversion to US CTS/LB)
- CFR JAPAN (USD/MT & conversion to US CTS/LB)
- CFR N.E. ASIA (USD/MT & conversion to US CTS/LB)

C8-10 Caprylic-Capric Acid Spot Prices

- FOB S.E. ASIA (USD/MT & conversion to US CTS/LB)

C12 Lauric Acid Spot Prices

- FOB S.E. ASIA (USD/MT & conversion to US CTS/LB)
- CFR JAPAN (USD/MT & conversion to US CTS/LB)
- CFR N.E. ASIA (USD/MT & conversion to US CTS/LB)

C14 Myristic Acid Spot Prices

- FOB S.E. ASIA (USD/MT & conversion to US CTS/LB)
- CFR JAPAN (USD/MT & conversion to US CTS/LB)
- CFR N.E. ASIA (USD/MT & conversion to US CTS/LB)

C16 Palmitic Acid Spot Prices

- FOB S.E. ASIA (USD/MT & conversion to US CTS/LB)
- CFR JAPAN (USD/MT & conversion to US CTS/LB)
- CFR N.E. ASIA (USD/MT & conversion to US CTS/LB)

C18 Oleic Acid Spot Prices

- FOB S.E. ASIA (USD/MT & conversion to US CTS/LB)
- CFR JAPAN (USD/MT & conversion to US CTS/LB)
- CFR N.E. ASIA (USD/MT & conversion to US CTS/LB)

C18 – Stearic Acid – Triple Pressed Spot Prices

- FOB S.E.ASIA (USD/MT & conversion to US CTS/LB)
- CFR JAPAN (USD/MT & conversion to US CTS/LB)
- CFR N.E. ASIA (USD/MT & conversion to US CTS/LB)

C18 – Stearic Acid – Rubber Grade Spot Prices

- FOB S.E.ASIA (USD/MT & conversion to US CTS/LB)

Fatty Acids (North America)

Weekly Price Assessments:

Fatty Acids Bulk Delivered Monthly Contract Prices

- DEL STEARIC ACID-TRIPLE PRESSED (US CTS/LB & conversion to USD/MT)
- DEL STEARIC ACID-RUBBER GRADE (US CTS/LB & conversion to USD/MT)
- DEL C18 : 1 OLEIC ACID (US CTS/LB & conversion to USD/MT)
- DEL C16 PALMITIC ACID (US CTS/LB & conversion to USD/MT)
- DEL C18 TALL OIL FATTY ACID (TOFA) 2-6% rosin (US CTS/LB & conversion to USD/MT)

Fatty Acids (Europe)

Weekly Price Assessments:

Fatty Acids Bulk Delivered

- FD NWE: DISTILLED STANDARD TALLOW OLEIC (EUR/MT)
- FD NWE: FULLY HYDROGENATED TALLOW STEARIC (EUR/MT)
- FD NWE: C18 TRIPLED PRESSED PALM STEARIC (EUR/MT)
- FD NWE: STANDARD PALM OLEIC (EUR/MT)

General Information:

Assessment window: Price assessments are based on information supplied by market participants through the week up to close of business on Wednesdays at 1700 hours in Singapore and Houston.

Specifications: The Asia-Pacific report lists a total of 22 quotes from eight chemically specified groups.

Fractions	Specifications	Physical form	Packaging
C8 caprylic acids	Heat stable; 98-99%	Liquid	Drummed and in full container load (20ft-container). Each 20ft container can carry 14-15 tonnes.
C10 capric acids	Heat stable; 98-99%	Liquid	Drummed and in full container load (20ft-container). Each 20ft container can carry 14-15 tonnes.
Blended C8-10 caprylic-capric acids	Heat stable, standard blend containing C8:50-55%.	Liquid	Drummed and in full container load (20ft-container). Each 20ft container can carry 14-15 tonnes.
C12 lauric acids	98-99%	Bead/flakes/pastilles	Bags (25 kg laminated paper bags or PP polywoven bags) and on a full container load (20ft-container) basis. Each 20ft container can carry around 16-18 tonnes. *materials in loose bags without pallets
C14 myristic acids	98-99%	Bead/flakes/pastilles	Bags (25 kg laminated paper bags or PP

			<p>polywoven bags) and on a full container load (20ft-container) basis.</p> <p>Each 20ft container can carry around 16-18 tonnes.</p> <p>* materials in loose bags without pallets</p>
C16 palmitic acids	95-98%	Bead /flakes	<p>Bags (25 kg laminated paper bags or PP polywoven bags) and on a full container load (20ft-container) basis.</p> <p>Each 20ft container can carry around 16-18 tonnes.</p> <p>* materials in loose bags without pallets</p>
C18:1 oleic acid	72-75% purity	Liquid	Drummed
C18:0 triple pressed stearic acids	C18:38-42% purity	Bead/flakes/pastiles	<p>Bags (25 kg laminated paper bags or PP polywoven bags) and on a full container load (20ft-container) basis.</p> <p>Each 20ft container can carry around 16-18</p>

			tonnes. * materials in loose bags without pallets
C18 rubber grade stearic acids		Bead/flakes/pastiles	Bags (25 kg laminated paper bags or PP polywoven bags) and on a full container load (20ft-container) basis. Each 20ft container can carry around 16-18 tonnes. * materials in loose bags without pallets

The North America report quotes bulk delivered monthly contract prices on C18 Stearic Rubber Grade, C18 Stearic Triple Pressed, C18:1 Oleic, C16 Palmitic and C18 Tall Oil Fatty Acids (TOFA).

The Europe report covers C18 distilled standard tallow oleic and C18 fully hydrogenated tallow stearic.

6 August 2015

