MELAMINE
Melamine was originally manufactured by heating dicyandiamide under pressure. Currently, melamine is produced by the decomposition of urea into cyanic acid and ammonia in an endothermic reaction. Cyanic acid is then polymerised to form melamine and carbon dioxide.

Its most important reaction is that with formaldehyde, forming resinous compounds of high molecular weight. The construction and automotive industries figure high in driving melamine growth. Container and coil coatings, laminates and flame retardant uses have all experienced growth in recent years. Melamine is used in the production of moulding powder to make dinner ware, coatings in cars, fan coils and appliances. Other uses include adhesive resins, which are used in the making of wood panels for the construction of kitchens, bathrooms, furniture and flooring. Melamine is produced by heating urea, ammonia (NH₃) and carbon monoxide, of which the resulting mixture of isocyanic and ammonia reacts over a solid catalyst at about 400°C. Melamine is moderately toxic by ingestion and a skin and eye irritant.

ICIS pricing quotes melamine in **Europe, Asia-Pacific** and the **USA**.

**Frequency:**
Published weekly on Wednesdays

**Melamine (EUROPE)**
**Weekly Price Assessment:**
*Melamine Quarterly Contract Prices*
- FD NWE (EUR/MT & conversion to US CTS/LB)

*Melamine Spot prices*
- FD NWE (EUR/MT & US CTS/LB)
- T1 CIF EUROPEAN MAIN PORT (USD/MT & conversion to US CTS/LB)

**Melamine (Asia-Pacific)**
**Weekly Price Assessments:**
*Melamine Spot Prices*
- CFR N.E.ASIA (USD/MT & conversion to US CTS/LB)
- FOB CHINA (USD/MT & conversion to US CTS/LB)
- CFR S.E.ASIA (USD/MT & conversion to US CTS/LB)

**Melamine (USA)**
**Quarterly Price Assessments** (quoted in US CTS/LB and USD/MT):
*Melamine Contract Prices*
- FOB BULK (US CTS/LB & conversion to USD/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 London, Singapore and Houston.

**Specification:** Asian produced melamine assessed is of a minimum purity of 99.5% or 99.8%. The European standard is 99.8% of purity. US-produced melamine is of a minimum purity of 99.8%, according to MSC-TIS 002 test method, having a maximum color of 25, according to MSC-TIS 014 test method.

**Timing:** Cargoes loading or delivered four-six weeks forward from the date of publication.

**Terms:** 30-60 days after bill of lading date.

**Standard cargo size:** Price assessments in Asia and the US include trades on a container basis of 20-40 tonnes. Within Europe, bulk melamine is delivered by 20 tonne trucks but also can be delivered in 25 kg bags. Asian imports into Europe are delivered in 1 tonne jumbo bags by cargoes.

**Assessment Basis:** Price ranges in ICIS pricing melamine reports for Asia and Europe include spot transactions reported as physical deals and concluded between buyers and sellers during the previous week. In the absence of business, the price spread can also move based on the majority of market sentiment.

In Europe, the quarterly contract price is quoted with reference to material sold from northwest Europe. The spot quotations refer to material sold from or into northwest Europe on a euro free delivered basis, and material sold into the European market from the rest of the world on a US dollar CIF duty unpaid basis. Europe consumes the most melamine in the world but is a relatively mature market, albeit one marking strong growth. The region has built new capacity in recent years but remains a net importer. Feedstocks, such as urea, have limited impact on prices in Europe as most production sites are integrated.

In Asia, the CFR NE Asia price quote represents deals (excluding Chinese cargoes) into northeast Asian countries, mainly Taiwan and Korea. The CFR SE Asia quote represents transactions (excluding Chinese cargoes) to southeast Asian countries. The FOB China quote represents export trades out of China.

Occasional updates on the Australian market are also available.

In the US, assessments represent quarterly contracts concluded by medium-to-large buyers who consume a minimum of 3m lb/year.

All regional reports offer market commentary that includes details of traced transactions, news on the supply/demand balance, export/import information, contract price negotiations and general sentiment for price direction. Where applicable there is product information, comments on up and downstream market developments and general market intelligence.

11 July 2013