

AkzoNobel



Group 1 - Alex, Ben, Eleanor and Emily

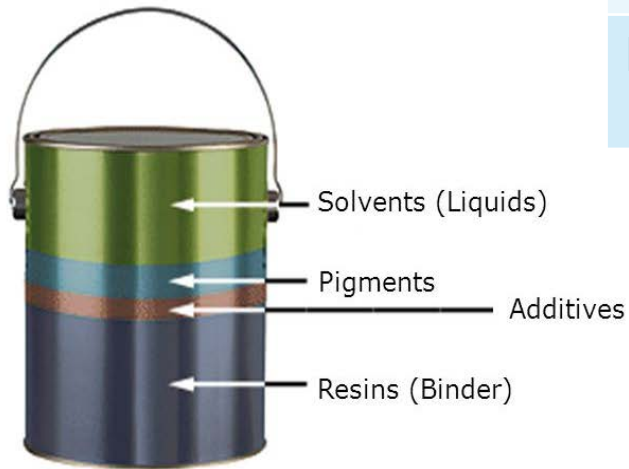
What we did while we were at AkzoNobel:

- Learnt how to make paint
- Fire proofing
- Analytical chemistry
- Marine
- Yachts



How to make paint

- Resin
- Solvent
- Additives
- Pigment



1K paint	2K paint
Auto oxidises to dry	A and B need to be mixed so a chemical reaction occurs for the paint to dry
Less hard wearing	More suitable for heavy access areas
Dry faster	Up to 8 hours between A and B



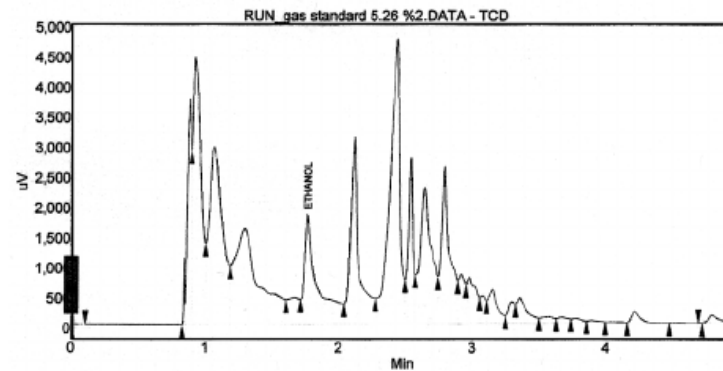
Fire proofing

- Paint slows down heat transfer - maintains steel structure
- Hydrocarbon paint - fibrous, oil and gas fires
- Cellulose paint - wood and paper, hotels and shops
- Passive fire protection
- 1000°C furnace
- Liquid nitrogen



Analytical chemistry

- Deformulation of competitors paints - centrifuge, chromatography, spectroscopy
- NMR
- Dealing with complaints - SEM



Marine and yachts

- Marine - more practical paint, less high quality finish
- Yacht - more aesthetically pleasing finish for the yacht
- Marine boats want paint that doesn't allow organism to stick to the hull as this increases drag and uses more petrol
- Currently marine boats use biocides that kill organisms and pollutes the oceans but in the future they want to reduce biocides and use hydrophobic paint so the organisms don't stick to the boat
- Pin needle for adhesion, dolly test for pressure, and gloss units



What we didn't expect

1646

Bofors forge founded in Sweden

1871

KemaNobel established in Sweden. Later, in 1984, KemaNobel merged with Bofors to form Nobel Industries, which in turn was acquired by Akzo in 1994 to create Akzo Nobel

1895

Alfred Nobel founded Elektrokemiska Aktiebolaget, known as Eka. Today, Eka is part of our Pulp and Performance Chemicals business

1969

Akzo formed following the merger of Dutch companies AKU and KZO

1998

UK company Courtaulds, whose products include hi-tech industrial coatings, acquired by Akzo Nobel

2008

Akzo Nobel acquired ICI and changed its name to AkzoNobel

2013

New strategy launched focused on leading market positions delivering leading performance



We didn't expect the company to be so established. The site was 46 acres and there were 800 staff members on site at a time.

They made 25 million litres of paint a year.

What we didn't expect

- Sustainability - using waste products from other companies such as oil from cashew nuts
- Eco premium program - the development of products with lower toxicity, improved energy efficiency, use of natural resources and reduced emissions waste
- Testing facilities all over the world to test the paint in different oceans - Sweden, Brazil, Singapore

