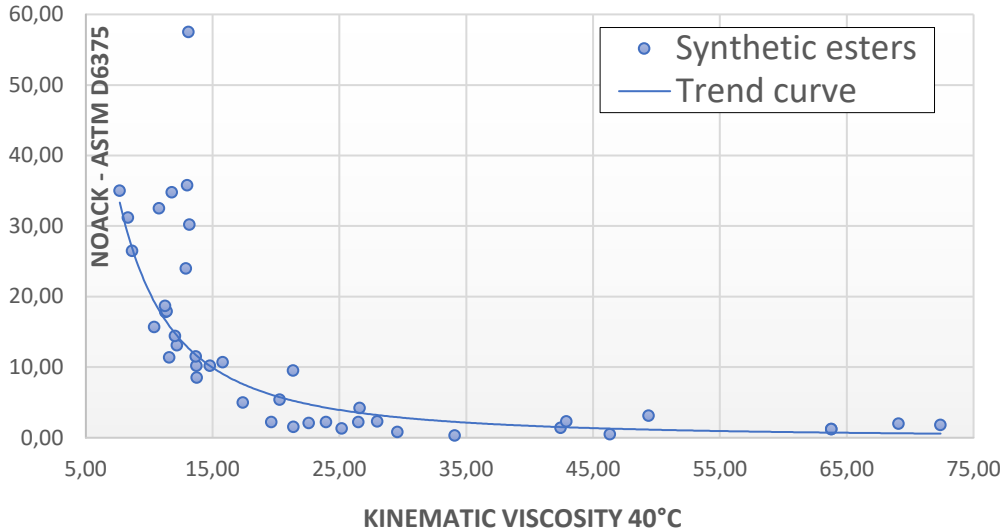


Synthetic esters are:

- High purity, well defined products
- Clean products, free from undesirable components
- Designed from a variety of possible raw materials

They are group V, high performance fluids








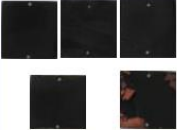
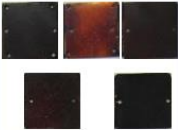
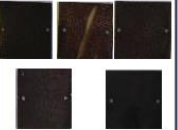
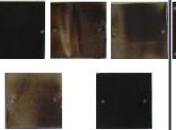
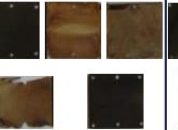
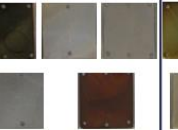
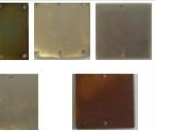











- Synthetic esters show excellent volatility/viscosity ratios
- Evaporation loss remains very low, even at extreme temperatures

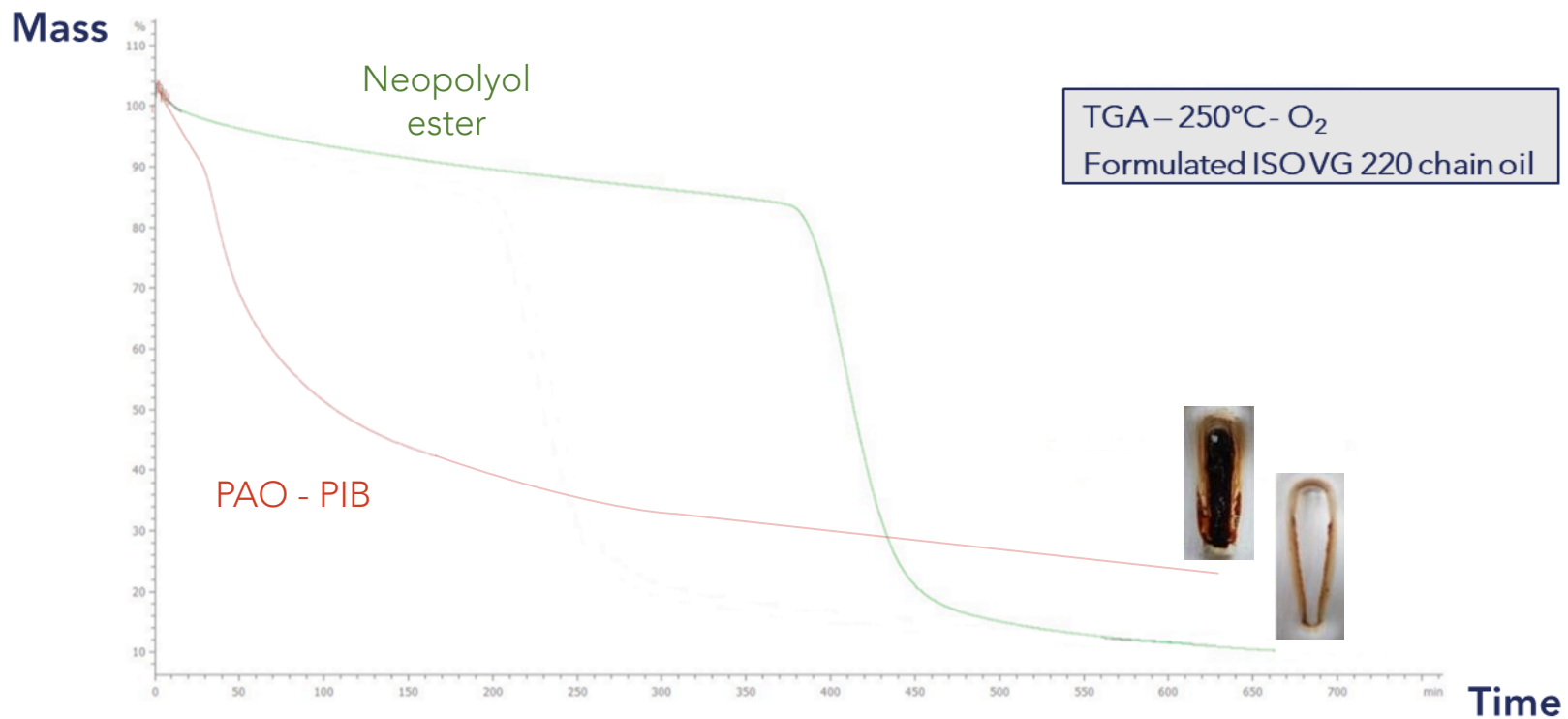
| Product | KV40 | KV100 | Evaporation % 6h – 200°C ASTM D972 |
|-----------------|------|-------|--|
| Nycobase® 8210 | 8.3 | 2.5 | 39 |
| Nycobase® 7300 | 13.8 | 3.4 | 5.3 |
| Nycobase® 8311 | 22.6 | 4.9 | 1.5 |
| Nycobase® 1040X | 94.1 | 10.3 | 1.7 |

Oxidation and corrosion test (ASTM D4636) – 204°C, 72h, 5 l/h

| | Gr I | Gr III | PAO | AN | Diester | Neopolyol ester A | Neopolyol ester B |
|--------------------------------------|---|---|---|--|---|---|---|
| Test tube |  |  |  |  |  |  |  |
| Metal Specimens Fe Ag Al Mg Cu |  |  |  |  |  |  |  |
| Deposits |  |  |  |  |  |  |  |

[All fluids are formulated with AO/AW/CI system – 4 to 5 mm²/s @ 100°C]

- Neopolyol ester based formulations typically show 3-phase profile
 1. *Evaporation and degradation slowed down by anti-oxidant*
 2. *Quick degradation into volatile fractions...*
 3. *...leaving little residue*



Neopolyol esters show outstanding features when exposed to high temperatures:

- Low volatility
- Excellent resistance to thermo-oxidation
- High level of cleanliness

which makes them high performance base fluids in applications like high temperature/high pressure air compressor oils, engine oils, and high temperature chain oils