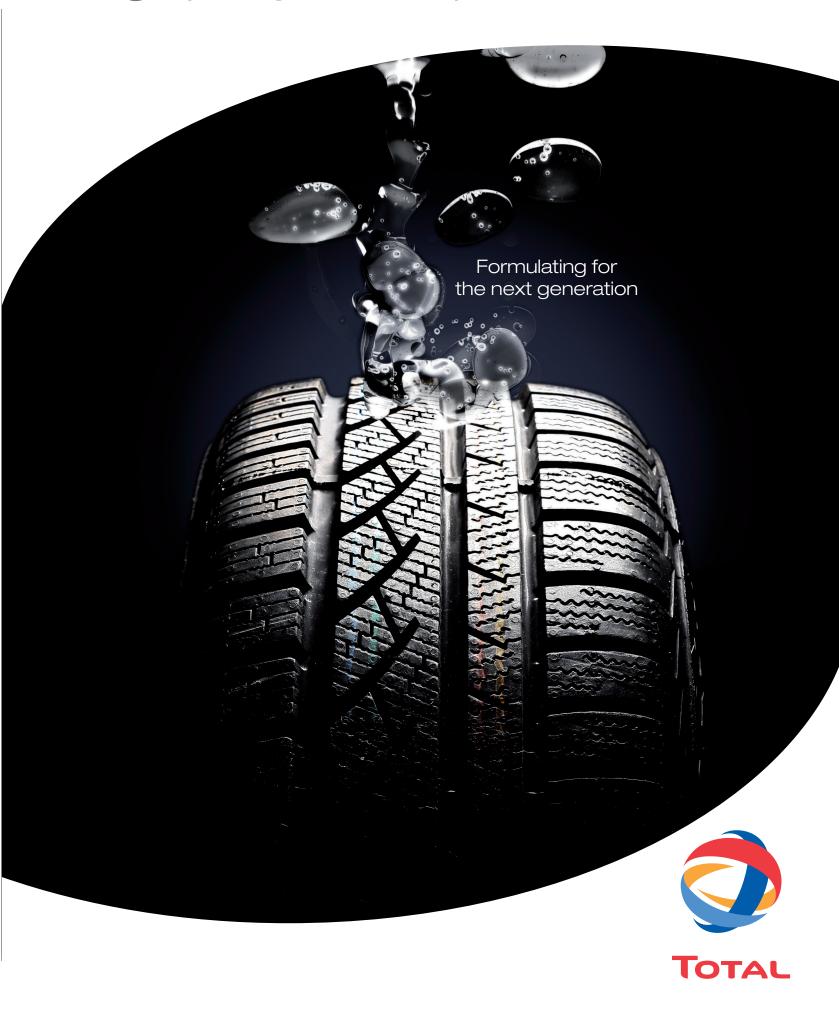
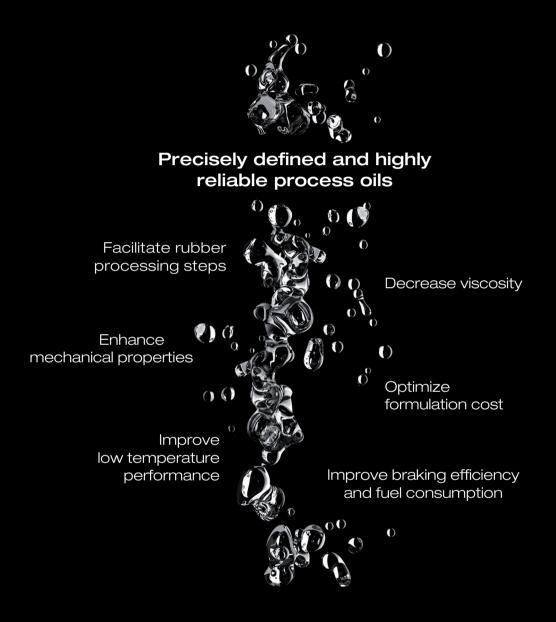
Plaxene & Plaxolene

High purity rubber process oils



What if you could ask more from your additives?





Making a swift change

towards high performance, responsible products

The ban of Distillate Aromatic Extracts (DAE) in most markets may be the right time to redefine what to expect from rubber process oils. While allowing manufacturers to address the new regulatory challenges, the Special Fluids division of Total has developed high quality process oils designed to enhance your processes, optimize your product performances and control your costs.

With the support of Total unique expertise

Rubber formulation is a complex balance integrating different and sometimes conflicting set of constraints. In order to help shifting to new generation additives, TOTAL plasticizers have been thoroughly tested and studied and thus come with highly valuable formulation insights. Replacing DAE thus can prove a fairly simple operation and only requires minor adjustments.

With the comfort of high compatibility plasticizers

Highly stable, with a relative inertness towards curing additives, Total rubber oils have shown remarkable compatibility with rubber and rubber blend, a decisive parameter for the quality of the formulation and the properties of the final compound.

The degree of compatibility indeed plays a central role in the adjustment and control of oil migration and crystallization, helping to minimize and prevent exudation phenomena. The compatibility of Total process oils is given for a variety of rubbers and elastomers in the table opposite.

| | | Plaxene Paraffinic | Plaxolene Aromatic |
|----------------------|--------------------------------|-----------------------|-----------------------|
| RUBBER TYPE | Solubility parameter | 7.5 - 7.8 | 8.0 - 8.5 |
| NR | 7.8 - 8.3 | ••• | •••• |
| S.B.R. | 8.1 - 8.5 | ••• | •••• |
| Polybutadiene | 8.6 | ••• | •••• |
| NBR | 9.2 - 9.5 | • | ••• |
| Polycholoroprene | 9.2 | • | •••• |
| PU | 9 | • | • |
| Butyl | 7.7 | ••••• | ••• |
| EPDM | 8 | ••••• | ••• |
| Silicone | 7.5 | •• | • |
| ••••• Very good •••• | Moderate | •• Poor | |
| •••• Good ••• | Unsultable | | |



SPECIAL FLUIDS DIVISION

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