

**Highly volatile hydrocarbons** (kerosene, petrol, distillates)

<i>behaviour</i>	<i>impact</i>
<ul style="list-style-type: none"> <li>- low viscosity</li> <li>- complete evaporation in 1 or 2 days</li> <li>- very rapid spreading</li> <li>- tendency to naturally disperse</li> </ul>	<ul style="list-style-type: none"> <li>- high capacity to penetrate/infiltrate substrates</li> <li>- very high toxicity in the water column and on the foreshore (very high proportion of soluble aromatic fractions)</li> </ul>

**Light hydrocarbons** (diesel, domestic fuel, marine diesel, light crude oil)

<i>behaviour</i>	<i>impact</i>
<ul style="list-style-type: none"> <li>- low to moderate viscosity</li> <li>- relatively rapid evaporation, can concern 2/3 of the initial volume after a few days</li> <li>- rapid spreading</li> <li>- moderate solubility</li> </ul>	<ul style="list-style-type: none"> <li>- variable capacity to penetrate substrates</li> <li>- high persistence</li> <li>- variable toxicity according to the proportion of soluble aromatic fractions but can be high to very high</li> <li>- possible chronic effects in the long term</li> </ul>

**Moderate hydrocarbons** (most crudes, light lubricating oil, refined residues)

<i>behaviour</i>	<i>impact</i>
<ul style="list-style-type: none"> <li>- moderate to high viscosity</li> <li>- moderate evaporation (1/3 in 24 hours)</li> <li>- moderate spreading</li> <li>- low solubility</li> <li>- high tendency to form stable emulsions (chocolate mousse)</li> <li>- tendency to flow after weathering or adherence to fine particles</li> </ul>	<ul style="list-style-type: none"> <li>- variable capacity to penetrate substrates according to the porosity and particle size</li> <li>- very high persistence</li> <li>- high impact (direct toxicity, smothering, oiling)</li> <li>- possible chronic effects</li> </ul>

**Heavy hydrocarbons** (heavy crude oil, heavy fuel oil, heavy residue, weathered emulsion)

<i>behaviour</i>	<i>impact</i>
<ul style="list-style-type: none"> <li>- viscous to highly viscous</li> <li>- little to no evaporation</li> <li>- little to very little spreading</li> <li>- very low solubility</li> <li>- potential emulsification</li> <li>- very slow alteration</li> <li>- possible reliquidation in the sun</li> </ul>	<ul style="list-style-type: none"> <li>- major accumulations on the foreshore</li> <li>- high to very high persistence on the upper foreshore</li> <li>- high impact (smothering, oiling) but low toxicity to non-toxic for semi-solid products</li> </ul>

*Classification of hydrocarbons according to their behaviour and impact on the coastline*