

ALKYLPHENOLS

Product range

Sasol Performance Chemicals



About us

Sasol's Performance Chemicals business unit markets a broad portfolio of organic and inorganic commodity and speciality chemicals. Our business employs about 1300 people in four key business divisions: Organics, Inorganics, Wax and PCASG (Phenolics, Carbon, Ammonia and Speciality Gases). Our offices in 18 countries serve customers around the world with a multi-faceted portfolio of state-of-the-art chemical products and solutions for a wide range of applications and industries.

Our key products include surfactants, surfactant intermediates, fatty alcohols, linear alkyl benzene (LAB), short-chain linear alpha olefins, ethylene, mineral oil-based and synthetic paraffin waxes, cresylic acids, high-quality carbon solutions as well as high-purity and ultrahigh-purity alumina. Our speciality gases sub-division supplies its customers with high-quality ammonia, hydrogen and CO2 as well as liquid nitrogen, liquid argon, krypton and xenon gases.

Our products are as individual as the industrial applications they serve, with tailor-made solutions creating real business value for customers. Ongoing research activities result in a continuous stream of innovative product concepts that help our customers position themselves successfully in future markets.

Our products are used in countless applications in our daily lives to add value, security and comfort. Typical examples include detergents, cleaning agents, personal care, construction, paints and coatings, leather and metal processing, hot-melt adhesives, bitumen modification and catalyst support for automotive catalysts and other diverse specialty applications including oil and gas recovery, aroma production, plastic stabilisation, and polymer production. Every day, our researchers explore ways to improve our products and develop innovations that improve the quality of people's lives.



Introduction

Sasol Performance Chemicals alkylphenols are produced on a large scale by the acid-catalysed alkylation of phenol with olefins. Consistent product quality is guaranted due to modern plants using longstanding processing techniques.

The alkylphenols are predominatly used in the

- plastics and rubber additive industry
- lubricant and motor oil industry
- synthesis of herbicides, fungicides, flavours and antioxidants
- resin and paint industry
- production of surfactants
- production of fragrances and stabilizers

The foregoing table supplies you with various details about our current product range. Furtherinformation about each individual alkylphenol can be obtained from our product informationand the safety data sheet, which we will be happy to provide.



Product range alkylphenols

Product	Formula	Molar mass [g/mol]	Appearance [at 20 °C]	Colour no. [mg Pt/l]	Purity by GC EN 1557 [% by mass]
o-tert-butylphenol	OH CH ₃ C-CH ₃	C ₁₀ H ₁₄ O 150.22	liquid, clear	≤ 50	≥99
p-tert-butylphenol	CH ₃ -C-CH ₃ CH ₃	C ₁₀ H ₁₄ O 150.22	white flakes	≤ 15 (50 % in meth. soln.)	≥99
2,4-di-tert-butylphenol	OH CH ₃ C-CH ₃ C+CH ₃ CH ₃ CH ₃ CH ₃ CH ₃	C ₁₄ H ₂₂ O 206.32	solid pale-coloured crystalline (tends to turn yellow)	≤ 100 melt	≥99
o-tert-amylphenol	OH CH ₃ C-C ₂ H ₅ CH ₃	C ₁₁ H ₁₆ O 164.24	liquid, clear	≤ 100	≥ 98
p-tert-amylphenol	OH CH ₃ -C-CH ₃ C ₂ H ₅	C ₁₁ H ₁₆ O 64.24	white flakes (tends to turn yellow)	≤ 50	≥99
2,4-di-tert-amylphenol	OH CH ₃ C-C ₂ H ₅ CH ₃ CH ₃ -C-CH ₃ C ₂ H ₅	C ₁₆ H ₂₆ O 234.4	liquid/solid (tends to turn yellow)	≤ 100	≥98

Product	Formula	Molar mass [g/mol]	Appearance [at 20 °C]	Colour no. [mg Pt/l]	Purity by GC EN 1557 [% by mass]
Octylphenol PT	$\bigcap_{C_{\vartheta}H_{17}}^{OH}$ isometric mixture	C ₁₄ H ₂₂ O 206.32	white flakes	≤ 50 melt at 90° C	≥ 99 Isomeric monooctylphenols ≥ 90 p-(1,1,3,3-tetra- methylbutyl)phenol
Octylphenol PT High purity	OH H ₃ C-C-CH ₃ CH ₂ H ₃ C-C-CH ₃	C ₁₄ H ₂₂ O 206.32	white flakes	≤ 50 melt at 90° C	≥ 99 Isomeric monooctylphenols ≥ 98 p-(1,1,3,3-tetra- methylbutyl)phenol
Nonylphenol	C_9H_{19} isometric mixture	C ₁₅ H ₂₄ O 220.34	liquid, clear	≤ 50	≥ 99 Nonylphenols ≤ 10 o-nonylphenols ≥ 90 p-nonylphenols
p-nonylphenol 95	OH C ₉ H ₁₉ isometric mixture	C ₁₅ H ₂₄ O 220.34	liquid, clear	≤ 50	≥ 99 Nonylphenols ≤ 5 o-nonylphenols ≥ 95 p-nonylphenols
Dodecylphenol T (base tetrapropylene)	$\bigcap_{C_{12}H_{25}}^{OH}$ isometric mixture	C ₁₈ H ₃₀ O 262.4	liquid, clear	≤ 5 iodine colour no. mg l/100ml	≥ 99 Dodecylphenol of which p-alkylphenols ≥ 95 o-alkylphenols ≤ 5
p-cumylphenol	СН ₃ ОН	C ₁₅ H ₁₆ O 212.28	white flakes	≤ 50 (50 % in meth. soln.)	≥ 99







At your service

Sasol Performance Chemicals

Organics Division

Anckelmannsplatz 1, 20537 Hamburg, Germany

Italy

sasol.italy@it.sasol.com Telephone +39 025 8453-1 Fax +39 025 8453-285

Spain/Portugal

carlos.cabeza@de.sasol.com Telephone +34 934 876 092 Fax +34 934 876 485

United Kingdom

info.uk@sasol.com Telephone +44 1564 78 3060 Fax +44 1564 78 4088

Germany/Benelux

michael.peters@de.sasol.com Telephone +49 2365 49 2216 Fax +49 2365 49 6145

France

jean-francois.petit@fr.sasol.com Telephone +33 1 44 01 05 37 Fax +33 1 47 662 425

Poland/Baltic States

janusz.duda@pl.sasol.com Telephone +48 22 860 6146 Fax +48 22 860 6148

Slovakia

sloveca.sk@sloveca.sk Telephone +421 2 544 30 219 Fax +421 2 544 30 315

North America

info@us.sasol.com Telephone +1 281 588 3000

South America

alvanei.martins@us.sasol.com Telephone +55 11 4612 8199

Middle East

abbas.haroon@sasol.com Telephone +97 14 8086 300 Fax +97148086400

Pacific Region

jackson.ding@cn.sasol.com Telephone +852 3971 5988 Fax + 852 2530 4660

P. R. China

liangbo.lu@cn.sasol.com Telephone +86 (21) 510 86 747 Fax +86 (21) 583 65 602

Japan

yoshihiro.ito@jp.sasol.com Telephone +81 (3) 3248 6711 Fax +81 (3) 3248 6715

Russia

anna.kogut@de.sasol.com Telephone +7 495 221 5142 Fax +7 495 926 4807