



sasol



SASOL BASE CHEMICALS

Industrial Chemicals Division
Sub-Saharan Africa

Overview

SASOL AT A GLANCE

Sasol is an international integrated chemicals and energy company that leverages technologies and the expertise of our 30 100 people working in 33 countries. We develop and commercialise technologies, and build and operate world-scale facilities to produce a range of high-value product stream, including liquid fuels, chemicals and low-carbon electricity.

SASOL CHEMICALS

Sasol Chemicals produces and markets a range of commodity chemicals based on the Fischer Tropsch (FT) and natural gas value chains including feedstocks of ethane, ethylene, propylene and ammonia.

Final products include explosives, fertilisers, polymers (polyethylene, polypropylene, and polyvinyl chloride), mining reagents (Sodium cyanide), chloro-alkali chemicals and a range of alcohols, ketones, acrylate monomers, and other oxygenated solvents. Other Sasol Chemicals products, available through Performance Chemicals SBU include Organics, Inorganics & Catalyst, Wax and PCASG (Phenolics, Carbon, Ammonia and Speciality Gases).

Our products are used in countless applications in our daily lives to add value, security and comfort.

Typical applications include aerosols, cosmetics, fragrances, packaging, paints, adhesives, pharmaceuticals, polishes, printing, plastics, mining (particularly in gold extraction), pulp and paper, steel, textiles, water treatment and purification, agricultural fertilisers and chemicals. Our commercial explosives products and opencast services are employed by all of Southern Africa's leading mining houses.

SASOL INDUSTRIAL CHEMICALS OVERVIEW

Solvents products are manufactured in world-class plants situated in Secunda and Sasolburg (South Africa) and Marl (Germany), which have a combined production capacity of ~1.2 million tons a year.

Products are supplied to customers in over 80 countries through a network of sales offices in the Americas, Europe, Middle East and Asia and Sub-Saharan Africa.

The products of our Industrial Chemicals Division are important to a wide range of applications:

Acrylate monomers (Ethyl acrylate and Butyl acrylate)

Emulsions for surface coating, adhesives, textile, pulp and paper, water treatment and super absorbent polymer.

Chloro-alkali Chemicals

With a wide range of industrial applications including pH control, resin bed and carbon regeneration, mining, textiles, pulp and paper, and soap and detergents.

Ethanol

Pharmaceuticals, cosmetics, fragrances and surgical procedures.

C₃, C₄ and other Alcohols (n-Propanol, n-Butanol, iso-Butanol, mixed Alcohols and Alcohol blends)

Printing and inks, antiseptics, fungicides, cosmetic preparations and other personal care applications, lacquer thinners, derivative manufacture such as plasticizers, alkylated glycol ethers, esters, acrylates, antifreeze and screen wash.

Esters (Ethyl acetate)

Formulations for adhesives and cosmetic, solvent for urethane resins, as process and extraction medium, printing and inks, lacquer thinners and coatings.

Glycol ethers

With applications in coatings and mining industry.

Hydrocarbon Blends

Solvents in enamels, other paints, varnishes, laquer thinners, degreasers, polishes and hand cleaners.

Ketones (Acetone, MIBK and MEK)

Solvent in paints, rubber additives and anti-oxidants, degreasing of metal surfaces, refinery de-waxing, pharmaceuticals, flavours and fragrances.

Mining Chemicals and Reagents

Customised frother blends used as flotation/separation reagents in mineral processing. Sodium cyanide employed in the extraction and elution of gold. Sasfroth 200 into platinum mining industry.

Product specifications

Product	Description	CAS No.	Molar Mass in g/mol	Boiling point in °C @ 1013 hPa	Density in g/ml @20 °C	Flash point in °C	Water, mass% max	Explosion limit in % by volume of air	Selected applications
Alcohols									
Ethanol 99.9 UN/DB	Ethyl alcohol of 99.99 % volume purity	64-17-5	46.08	78	0.79	12	0.15	3.5 - 15.0	Raw material for adhesives, binders, fuels or fuel additives, aerosol propellants, anti-freezing agents, cleaning agents, dis-infectants, cosmetic agents, fragrances, pharmaceuticals, toiletries, printing inks and printing ink additives.
Ethylol 99	Ethyl alcohol of 99.0 % mass purity	64-17-5	46.08	78	0.79	16	1.5	3.3 - 19	Raw material for adhesives, binders, fuels or fuel additives, aerosol propellants, anti-freezing agents, cleaning agents, dis-infectants, cosmetic agents, fragrances, toiletries, printing inks and printing ink additives.
Ethylol 95	Ethyl alcohol of 95 % mass purity	64-17-5 71-23-8	Mixture	78	0.79	12	0.4	3.3 - 19	Used as a solvent in lacquers, lacquer thinners, etch primers, liquid printing inks, foundry dressings and stain removers. A raw material for the manufacture of xanthates, acetates and mixed alkylated glycol ethers.
n-Propanol	Normal propyl alcohol of 99.90 % mass purity	71-23-8	60.09	97	0.80	26	0.1	2.1 - 13.5	Used as a solvent in antiseptics applications, pharmaceutical preparations, drug synthesis, cosmetic preparations and flexographic inks. Raw material for the manufacture of normal propyl amines, normal propyl paraben, di-normal propyl phthalate and normal propyl acetate.
n-Butanol	n-Butanol of 99.8 % mass purity	71-36-3	74.12	117	0.81	35	0.03	1.4 - 11.3	Used as a solvent in lacquers, lacquer thinners, etch primers, liquid printing inks, foundry dressings and stain removers. Raw material for the manufacture of acetates, xanthates, glycol ethers and butylated resins.
Isobutanol	iso-Butyl alcohol of 99.5 % mass purity	78-83-1	74.12	108	0.80	31	0.1	1.7 - 10.9	Used as a solvent in lacquers, lacquer thinners, etch primers, liquid printing inks, foundry dressings and stain removers. Raw material for the manufacture of acetates, xanthates, glycol ethers and butylated resins.
Methanol	Methyl alcohol of 99.90 % mass purity	67-56-1	32.04	64	0.79	12	0.1	6.0 - 36.5	Used as a solvent in adhesives, paint strippers and industrial detergents. Used in the production of MTBE.
Technical Grade Methanol	Methyl alcohol of 98.5 % mass purity	67-56-1	32.04	65	0.79	12	0.1	6.0 - 36.5	Used as a solvent in adhesives, paint strippers and industrial detergents.
Mixed Alcohols									
Ethanol 95E5	Ethyl alcohol of 99.9% purity denatured with 5% (volume) ethyl acetate.	64-17-5 141-78-6	Mixture	77	0.79	13	0.3	3.3 - 19	Used in preparation of liquid printing inks for flexographic and gravure printing.
Ethylol 78 eM	C2 / C3 alcohol distillation cut denatured with 1g / hectoliter denatonium benzoate	64-17-5 67-63-0	Mixture	79	0.79	12	1	2.0 - 15.0	Raw material for pesticides, photochemicals, material for printing inks and printing ink additives. Solvent for industrial use. Also used as an automotive screen wash additive.
Ethyl alcohol (Precut)	Ethyl alcohol of 92.1% min volume purity	64-17-5	Mixture	77	0.79	< 10	0.4	3.2 - 18.3	Used as a solvent in domestic burners, cleaning agent, as a solvent in lacquers and varnishes. Can also be used as a fuel additive.
Isopropylol	C3 alcohol distillation cut	67-63-0 64-17-5 78-93-2	Mixture	82	0.79	26	0.1	3.3 - 19	Raw material for pesticides, photochemicals, material for printing inks and printing ink additives. Solvent for industrial use. Also used as an automotive screen wash additive.
Prop-BH	C3 /C4 alcohol distillation cut	Mixture	Mixture	97	0.8	26	0.2	2.1 - 13.5	Used as a solvent in lacquers, lacquer thinners, etch primers, liquid printing inks, disinfectants, fungicides, latex rubber production, foundry dressings, stain removers and as a fountain solution in lithographic printing. Raw material for the manufacture of xanthates, acetates and mixed alkylated glycol ethers.
Sabutol	C4 / C5 alcohol distillation cut	71-36-3 71-41-0	Mixture	117	0.81	32	0.1	1.4 - 11.2	Used as a solvent in paints, lacquer thinners, liquid printing inks, inline flexographic printing and dyes. Raw material for the manufacture of butylated resins, acetate and xanthates.
Pentylol	C5 alcohol distillation cut	Mixture	Mixture	124	0.82	43	0.1	1.4-16	Used as a solvent in the slow-drying latent solvent in lacquer thinners. Raw material for the manufacture of xanthates, other mining chemicals, insecticides, plasticisers and amyl acetate.

Product	Description	CAS No.	Molar Mass in g/mol	Boiling point in °C @ 1013 hPa	Density in g/ml @20 °C	Flash point in °C	Water, mass% max	Explosion limit in % by volume of air	Selected applications
Mixed Alcohols									
Hexylol	C5/C6 alcohol distillation cut	Mixture	Mixture	131	0.85	57	1	1.2 - 10	Used in plasticizer manufacturing. It is also a customised alcohol based frother blend used as flotation separation reagent in mineral processing for specific applications.
Sabutol Bottoms	A mixture containing pentyl and higher alcohols	Mixture	Mixture	139	0.83	43	0.1	1.2 - 10	Raw material for the manufacture of xanthates, acetates, plasticisers and mining chemicals.
Ketones									
Acetone	Acetone of 99.90 % mass purity	67-64-1	58.08	56	0.79	-17	0.3	2.5 - 13.0	Used as a chemical intermediate in Methyl Methacrylate (MMA), Bis-Phenol A (BPA), MIBK, DAA, and MIBC production. Used as a solvent in paints, inks, nail polish removers, acetylene cylinders, adhesives. Also used as a solvent in the manufacture of pharmaceuticals, vitamins and cosmetics.
MEK	Methyl ethyl ketone of 99.75 % mass purity	78-93-3	72.11	79	0.81	-6	0.05	1.5 - 11.5	Used in nitro-cellulose, polyester and most alkyl and phenolic resins, in degreasing of metal surfaces, and in the extraction of fats, oils and waxes.
MIBK	Methyl isobutyl ketone of 99.5% mass purity	108-10-1	100.16	117	0.80	14	0.05	1.2 - 8.0	Used in nitro-cellulose and other natural and synthetic resins, adhesives, herbicides, and plastics. Also used as an extractant for certain metals, and antibiotics and dewaxing of mineral oils. Other applications are production of synthetic leather, transparent paper, aluminium foil and degreasing of metal surfaces.
Esters									
Ethyl Acetate	Ethyl acetate of 99.80 % mass purity	141-78-6	88.11	77	0.90	-4	0.03	2.1 - 11.5	Used as a solvent in surface coatings, inks and as a process and extraction medium. Good solvent for a variety of resins including epoxies, urethanes, cellulosics acrylics and vinyl in applications such as coatings for wood furniture and fixtures, containers and closures, auto refinishing, for wood maintenance and marine. General solvent in formulations for products such as adhesives and cosmetics.
Acrylates									
Ethyl Acrylate	Ethyl acrylate of 99.5 % mass purity.	140-88-5	100.11	99	0.92	9	0.05	1.7 - 13.0	A versatile monomer to provide performance characteristics to polymer formulations for latex and solution copolymers, copolymer plastics and cross-linkable polymer systems. Major markets include surface coatings, textiles, adhesives and plastics.
Butyl Acrylate	n-Butyl acrylate of 99.5 % mass purity.	141-32-2	128.17	147	0.90	41	0.05	1.5 - 9.9	A versatile monomer which provides performance characteristics in polymer formulations for latex and solution co-polymers, copolymer plastics and cross-linkable polymer systems. Major markets include surface coatings, textiles, adhesives and plastics.
Glacial Acrylic Acid	Glacial acrylic acid of 99.5% purity	Acrylic acid	72.06	140.9 °C	1.05	53.5	0.1	No data available	Used as a feedstock for manufacturing acrylates. Also used as an intermediate in the production of super absorbent polymers and carbomer for the personal care industry, as well as water treatment chemicals. Other applications include pulp and paper, clay, textiles and surface coatings.
Glycol Ethers									
Butyl Glycol Ether (BGE)	Butyl glycol ether of 99% mass purity	Butyl glycol ether	111-76-2	118.18	0.9	62	0.1	No data available	Used widely in the surface coating industry as a solvent. BGE reduces the viscosity in alky resin varnishes and acts as a property regulator, coalescer and flow improver in water based paints. Other applications include printing inks, cleansers and mineral oil emulsions, where BGE is used as a solubiliser. BGE has outstanding solvent power for many natural and synthetic resins as well as cellulose derivatives.
Butyl Triglycol Ether (BTGE)	Butyl triglycol ether of 70% mass purity	Butyl triglycol ether	143-22-6	277	0.98	138	0.2	No data available	Butyl triglycol ether (BTG) has high dissolving power for cellulose nitrate, many synthetic, natural resins and dyestuffs. BTG is used typically in cutting and hydraulic oils, particularly in brake fluids.

Product	Description	CAS No.	Molar Mass in g/mol	Boiling point in °C @ 1013 hPa	Density in g/ml @20 °C	Flash point in °C	Water, mass% max	Explosion limit in % by volume of air	Selected applications
Chloro-alkali and Mining Reagents									
Caustic Soda (Membrane Cell)	Strength (% m/m NaOH), 47.0 -51.5	1310-73-2	39.997	Approx 145	1.52	-	48.5 - 53	-	The major applications include water treatment, agricultural chemicals, ion exchange resin regeneration, the manufacture of soap and detergents, the pulp and paper industry, metal processing (e.g. gold elution from activated carbon) and refining, and the textile industry.
Caustic Soda (Diaphragm Cell)	Strength (% m/m NaOH), 47.0 -51.5	1310-73-2	39.997	Approx 145	Approx 1.52	-	48.5 - 53	-	The major applications include water treatment, agricultural chemicals, ion exchange resin regeneration, the manufacture of soap and detergents, the pulp and paper industry, metal processing (e.g. gold elution from activated carbon) and refining, and the textile industry.
Hydrochloric Acid Industrial	Strength (% m/m HCl), 30.0 - 33.0	7647-01-0	36.46	Approx 97	1.16	-	67 - 70	-	Strong acid with wide range of industrial applications in mining / steel pickling / swimming pools/ etc.
Hydrochloric Acid Chemically pure (CP)	Strength (% m/m HCl), 30.0 - 33.0	7647-01-0	36.46	Approx 97	1.16	-	67 - 70	-	Strong acid with wide range of industrial applications in mining / steel pickling / swimming pools/ etc.
Calcium Chloride	Strength (% m/m CaCl ₂), 32.0% minimum	10043-52-4	110.98	-	1.30 - 1.33	-	Balance	-	Calcium chloride is supplied in solution form to the steel industry for alkali removal, to the construction and mining industries as a concrete accelerator and as a dust suppressant for road management.
Sodium Cyanide Solution	Strength (% m/m NaCN), 28 - 34%	143-33-9	49.01	112	1.15	-	66 - 72	-	Used in gold & metal extraction processes.
Sulphuric Acid	78 % Sulphuric acid	Mixture	Mixture	327	-	-	-	-	Used in the production of fertilizers and chemicals, e.g. hydrochloric acid, nitric acid, sulfate salts, synthetic detergents, dyes and pigments, explosives, and processing metals.
Blends									
Alcohol blends									
Alcosol E5	Blend consisting of Ethanol and Ethyl acetate	Mixture	Mixture	77	0.79	-4	0.4	3.3 - 19	An ethanol based blend used in the paint and printing industry.
Alcosol E21	Blend consisting of Ethylol 95 and Ethyl acetate	Mixture	Mixture	77	0.8	-4	0.4	3.3 - 19	An ethanol based blend used in the paint and printing industry.
Alcosol EM	Blend consisting of Ethanol and Methyl ethyl ketone	Mixture	Mixture	78	0.8	-4	0.5	3.3 - 19	An ethanol based blend used in the paint and printing industry.
Alcosol PI	Blend consisting of Ethanol and Ethyl acetate	Mixture	Mixture	76	0.8	-4	0.4	3.3 - 19	Used as a solvent in the following applications: Paint and lacquers; printing inks; dyes; industrial detergents; polishes; degreasers and rust removers.
Coloured Ethylol	Sasol ethanol denatured with 6 % isopropanol and further denatured according to Schedule 6 (part 1D) of the Customs and Excise Act	64-17-5 71-23-8	Mixture	77	0.79	14	0.4	3.3 - 19	Used as a solvent in domestic burners, cleaning agent, lacquers and varnishes
Foundry Spirits	Sasol ethanol denatured with isopropanol according to Formula 4 prescribed in the Customs and Excise Act.	Mixture	Mixture	77	0.79	18	0.4	3.3 - 19	Used as a solvent in foundry dressing, domestic burners, cleaning agent, in lacquers and varnishes.

Product	Description	CAS No.	Molar Mass in g/mol	Boiling point in °C @ 1013 hPa	Density in g/ml @20 °C	Flash point in °C	Water, mass% max	Explosion limit in % by volume of air	Selected applications
Blends									
Hydrocarbon blends									
Aromasol 22	A 22 % aromatic hydrocarbon blend	Mixture	Mixture	166	0.77	46	0.4	1.1 - 7.0	Used as a solvent in enamels, other paints, degreasers, polishes, hand cleaners, dry cleaning and as a wash-up solvent in litho and silkscreen printing applications.
Paintsol Aero	Aerosol Lacquer thinner	Mixture	Mixture	60	0.82	-8	0.7	-	Customized solvent for high gloss aerosol paint applications.
Paintsol H3D	Aerosol Lacquer thinner	Mixture	Mixture	56	0.8	-20	0.7	-	Customized solvent for high gloss aerosol paint applications.
Turposol	Customized boiling point aliphatic hydrocarbon solvent containing essentially branched and straight chain paraffins and cycloparaffins	Mixture	Mixture	150	0.76	46	0.5	-	Used as a solvent in enamels, other paints, degreasers, polishes, hand cleaners, dry cleaning and as a wash-up solvent in litho and silkscreen printing.
Turposol 17	A 17 % aromatic hydrocarbon blend	Mixture	Mixture	132	0.77	44	0.03	-	Used as a solvent in enamels, other paints, degreasers, polishes, hand cleaners, dry cleaning and as a wash-up solvent in litho and silkscreen printing.
Turposol ASK	A 17 % aromatic hydrocarbon blend	Mixture	Mixture	156	0.76	42	0.05	1.1 - 7.0	Customized solvent for enamels, other paints, degreasers, polishes and varnishes.
Thinsol 110	Standard economical lacquer thinner	Mixture	Mixture	67	0.8	-6	0.08	1.1 - 12.7	Used as an economical gloss thinner in the surface coatings industry.
Thinsol 160	Standard lacquer thinner	Mixture	Mixture	82	0.81	-9	0.5	1.1 - 12.7	Used as a standard gloss thinner in the surface coatings industry.
Thinsol Aktol	Oxygenated solvent blend	Mixture	Mixture	65	0.81	-13	0.25	1.1 - 12.7	Customized raw material for high gloss thinner in the surface coatings industry.
Thinsol P2	Lacquer thinner cocktail blend	Mixture	Mixture	58.5	0.81	-14	0.25	-	Customized raw material for high gloss thinner in the surface coatings industry.
Oxysol BE (Butyl Glycol Ether)	Butyl glycol ether of 99% mass purity	111-76-2	Mixture	118.18	0.9	62	0.1	-	Used widely in the surface coating industry as a solvent. It reduces the viscosity in alky resin varnishes and acts as a property regulator, coalescer and flow improver in water based paints. Other applications include printing inks, cleansers and mineral oil emulsions, where it is used as a solubiliser. It has outstanding solvent power for many natural and synthetic resins as well as cellulose derivatives.
Mining Chemicals									
SASFROTH 5	A mixture containing pentyl and higher alcohols	Mixture	Mixture	139	0.83	43	0.1	-	Customised alcohol based frother blend used as flotation separation reagent in mineral processing for specific applications.
SASFROTH 10	Alcohol frother blend	Mixture	Mixture	131	0.85	57	1	-	Customised alcohol based frother blend used as flotation separation reagent in mineral processing for specific applications.
SASFROTH 200	Blend based frother	Mixture	Mixture	278	0.99	131	1	-	Customised frother blend used as a flotation /separation agent in mineral processing for specific applications.
SASFROTH 2004	Blend based frother	Mixture	Mixture	>200	1.03	>100	-	-	Customised frother blend used as a flotation/ separation agent in mineral processing for specific applications.
SASFROTH 2040	Blend based frother	Mixture	Mixture	158	0.88	45	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.
SASFROTH 205	Blend based frother	Mixture	Mixture	>200	1.05	130	-	-	Customised frother blend used as a flotation/ separation agent in mineral processing for specific applications.
SASFROTH 206	Blend based frother	Mixture	Mixture	92	0.86	46	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.
SASFROTH 225	Blend based frother	Mixture	Mixture	158.8	0.86	63	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.
SASFROTH 26	Alcohol blend based frother	Mixture	Mixture	137	0.85	59	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.

Product	Description	CAS No.	Molar Mass in g/mol	Boiling point in °C @ 1013 hPa	Density in g/ml @20 °C	Flash point in °C	Water, mass% max	Explosion limit in % by volume of air	Selected applications
Mining Chemicals									
SASFROTH 39	Alcohol blend based frother	Mixture	Mixture	137	0.85	58	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.
SASFROTH 40	Alcohol blend based frother	Mixture	Mixture	133	0.82	42	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.
SASFROTH G41	Alcohol blend based frother	Mixture	Mixture	156	0.87	61	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.
NF 119	Alcohol blend based frother	Mixture	Mixture	148	0.94	62	-	-	Customised alcohol based frother blend used as a flotation/separation agent in mineral processing for specific applications.

DISCLAIMER

This publication contains information provided in good faith and is indicative, based on Sasol's current knowledge on the subject. No guarantee or warranty is intended or implied. We reserve the right to make changes as a result of technological progress or development. Any information, including suggestions for use of products, should not preclude experimental testing and verification, to ensure the suitability of a product for each specific application. Users must also abide by local and international laws and obtain all necessary permits when required to do so. Prior to handling a hazardous product, consult the safety data sheet. In case of questions or queries, please contact Sasol through our customer service channels. All products purchased or supplied by Sasol Chemicals are subject to the terms and conditions set out in the contract, order confirmation and/or bill of lading.

SALES ENQUIRIES

Global footprint: Sasol Chemicals, has locations and representation in South Africa, Botswana, Lesotho, Namibia, Zambia, West Africa, the United States, Brazil, the United Kingdom, France, Belgium, Germany, Italy, the United Arab Emirates, Singapore, Hong Kong, China and Japan.

Sub Saharan enquiries

Address:

Sasol Place , 50 Katherine Street Sandton, Gauteng RSA

E mail: Joko.Khoboi@sasol.com

Telephone number: +27112800101 (Office)

