

INEOS Isoamylene

Key Building Block for the Synthesis of Specialty Chemicals

INEOS Oligomers' Isoamylene is used in the synthesis of many chemicals or chemical intermediates, with a wide range of applications from flavours and fragrances, to pesticides and herbicides, pharmaceuticals and healthcare products, catalysts, peroxides, phenolic resins, hot melt adhesives, stabilizers, photo developers, etc.

Isoamylene is produced by a unique process at INEOS' facility in Köln (Cologne), Germany. It contains two methylbutene isomers in a ~85/15 molar ratio: 2-Methyl 2-Butene (CAS 513-35-9) and 2-Methyl 1-Butene (CAS 563-46-2). Careful control of the process and the raw materials ensures high purity, clear and colourless product. INEOS Isoamylene has full Kosher accreditation

Applications

INEOS Isoamylene is used in the production of a wide range of chemical intermediates or specialty chemicals. For example:

- t-Amyl benzene a specialty solvent and a chemical intermediate used in the synthesis of fine chemicals or catalysts for the hydrogen peroxide production
- t-Amyl phenols used either as such or as an intermediate in disinfectants (bactericide), photo chemicals, fragrances, pharmaceuticals, phenolic resins or chemicals for the rubber industry
- Pinacolone, an important chemical derivative used in the synthesis of conazole fungicides, herbicides and anti-pruritics
- Organic peroxides, like DTAP (di-t-amyl peroxide) used to depolymerise polypropylene leading to moulded parts with better organoleptics, or like peroxyesters used as LDPE polymerisation catalysts
- Anti-aging additives like DTHAQ phenolic anti-oxidants and BZT UV-absorber
- Polycyclic ethers used extensively as musk fragrance extenders in cosmetics, perfumes and detergents.

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INEOS Oligomers web site: <http://www.ineosoligomers.com>

Technical documents can be downloaded directly from our technical services site (see hydrocarbons). By logging on, additional documents specific to your industry may be available: <http://www.innovene.com/technicalservices>

SALES SPECIFICATION

Parameter	Units	Value	Test Method
Sum of isoamylenes	% by wt.	99 min	3002-0501903-96D calculation
Methanol	% by wt.	0.2 max	3002-0201405-01D GC method
Dimethyl ether	% by wt.	0.2 max	3002-0201405-01D GC method
Residual hydrocarbons	% by wt.	0.25 max	3002-0501903-96D calculation
Water	mg/kg	300 max	3002-0300101-95D Karl Fischer titration
APHA colour value		30 max	3002-0600902-99D DIN 53995

TYPICAL PHYSICAL PROPERTIES

Parameter	Conditions	Units	Value
Molecular weight			70.1
Boiling point	1013 mbar	°C	38
Boiling range of the 2-MB-2/2-MB-1 mixture		°C	34.5 - 36
Solidification point		°C	-134
Density	20 °C	kg/l	0.66
Vapour pressure	18 °C	mbar	477
Viscosity	20 °C	mPas	0.27

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HEALTH AND SAFETY

A Material Safety Data Sheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on the handling precautions and emergency procedures. This must be consulted fully before handling, storage and use.

EXCLUSION OF LIABILITY

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