



BUTENE

Higher Olefins

Issued: November 2015

SICC Product Code: V1379

Description:

BUTENE Linear Alpha Olefin is polymer grade 1-butene produced via the Shell Higher Olefins Process (SHOP), the key stage of which is the oligomerisation of ethylene.

Typical Chemical Properties ^a	Specifications	Unit	Value	Method
	C2	%m/m	< 1.5	SGC 1053
	C4	%m/m	> 98.0	SGC 1053
	C6 & Higher	%m/m	< 0.5	SGC 1053
	1-Butene	%m/m	> 95.0	SGC 1053
	cis-2 Butene	%m/m	< 1.5	SGC 1053
	trans-2 Butene	%m/m	< 1.5	SGC 1053
	Total Butanes	%m/m	< 0.4	SGC 1053
	Water	mg/kg	< 20	SCG 1050

a: An official sales specification is available from your local Shell Chemicals representative.

Typical Properties ^a	Typical Properties, max	Unit	Value
	Acetylene	mg/kg	1
	Alcohols as ethanol	mg/kg	5
	Benzene	mg/kg	1
	Butadiene	mg/kg	5
	Carbon Dioxide	mg/kg	1
	Carbon Monoxide	mg/kg	1
	Carbonyls as Acetaldehyde	mg/kg	1

Typical Properties, max	Unit	Value
Isobutene	%m/m	1
Methylacetylene	mg/kg	1
MTBE	mg/kg	1
Nonvolatile residue	mg/100ml	1
Organic chlorides as Cl	mg/kg	0.5
Oxygen	mg/kg	1
Peroxides as O	mg/kg	5
Propadiene	mg/kg	0.5
Propylene	mg/kg	1
Sulfur	mg/kg	1
Toluene	mg/kg	1

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Property	Unit	Value
Density @ 20 °C	kg/l	0.601
Boiling point	°C	-6
Flashpoint	°C	-79
Freezing point	°C	-185
Dynamic viscosity @ 20 °C	mPas	0.16

Storage and Handling

Advice on the storage and handling of NEODENE® can be found in the Safety Data Sheet on our website at www.shell.com/business-customers/chemicals/safe-product-handling-and-transportation/safety-data-sheets or by contacting your local Shell Chemicals Representative.

Hazard Identification

BUTENE is highly flammable; everyone concerned with handling it must be conversant with the nature of the hazards and trained in the recommended handling procedures for both normal and emergency situations. Before handling the product refer to the Safety Data Sheet that is available on our website at www.shell.com/business-customers/chemicals/safe-product-handling-and-transportation/safety-data-sheets or by contacting your local Shell Chemicals Representative.

Emergency Helpline

For emergency telephone numbers refer to the Safety Data Sheet relevant for your company's country and language.

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