

Reference Fuels for Rubber Testing

Below is a list of reference fuels often cited in rubber specifications. While most test fuels are associated with the automotive sealing market, these reference fuels are often found on rubber specifications in a variety of industries to create a reference point for fluid resistance. It is best to consult an experienced [rubber technologist](#) to explain the implications, value, and limitations of these and other reference fuels. Please consult the original specification documents for the most recent updates and confirmation of composition.

Name / Reference	Composition	% by Volume
Reference Fuel A / ASTM D 471	Iso Octane	100

Name / Reference	Composition	% by Volume
Reference Fuel B / ASTM D 471	Iso Octane	70
	Toluene	30

Name / Reference	Composition	% by Volume
Reference Fuel C / ASTM D 471	Iso Octane	50
	Toluene	50

Name / Reference	Composition	% by Volume
Reference Fuel D / ASTM D 471	Iso Octane	60
	Toluene	40

Name / Reference	Composition	% by Volume
Reference Fuel E / ASTM D 471	Toluene	100

Name / Reference	Composition	% by Volume
Reference Fuel F / ASTM D 471	#2 Diesel Fuel	100

Name / Reference	Composition	% by Volume
Reference Fuel G / ASTM D 471	Reference Fuel D	85
	Ethanol	15

Name / Reference	Composition	% by Volume
Reference Fuel H / ASTM D 471	Reference Fuel C	85
	Ethanol	15

Name / Reference	Composition	% by Volume
Reference Fuel I / ASTM D 471	Reference Fuel C	85
	Methanol	15

Name / Reference	Composition	% by Volume
Reference Fuel K / ASTM D 471	Reference Fuel C	15
	Methanol	85

Name / Reference	Composition	% by Volume
FAM A / DIN 51 604	Toluene	50
	Iso Octane	30
	Di-Isobutylene (2,4,4,-Trimethyl 1-Pentene)	15
	Ethanol	5

Name / Reference	Composition	% by Volume
FAM B / DIN 51 604	FAM A	84.5
	Methanol	15
	Water	0.5

Name / Reference	Composition	% by Volume
FAM C / DIN 51 604	FAM A	40
	Methanol	58
	Water	2

Name / Reference	Composition	% by Volume
Ford Base Fuel / AZ 105-01	Reference Fuel C	80
	Methanol	15
	T Butyl Alcohol (2-Methyl Propan- 2-ol)	5

Name / Reference	Composition	% by Volume
PN 90 (Peroxide Number)	Ford Base Fuel	97.76
	70% T Butyl Hydroperoxide	1.24
	Copper Ion Solution	1

Name / Reference	Composition	% by Volume
PN 180 (Peroxide Number)	Ford Base Fuel	96.52
	70% T Butyl Hydroperoxide	2.48
	Copper Ion Solution	1

For questions about your high performance sealing application, please contact us at the telephone or website below. We are located in New Jersey, USA.

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