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Biodiesel Vehicle and Infrastructure Codes and Standards Chart

Many standards development organizations (SDOs) are working to develop codes and standards needed for the utilization of alternative fuel vehicle technologies. This chart shows the SDOs responsible for leading the support and development of key codes and standards for biodiesel.

Vehicles

CONTROLLING AUTHORITIES:
DOT/NHTS (crashworthiness)
EPA (emissions)

Engine Testing:
SAE

Fuel Systems:
SAE

Fuel Lubricants:
SAE

Powertrain Systems:
SAE

Dispensing

CONTROLLING AUTHORITIES:
State and Local Government
(zoning, building permits)

Containers:
ASME UL

Dispensing Operations:
NFPA

Dispensing Components:
UL CSA STANDARDS

Storage

CONTROLLING AUTHORITIES:
State and Local Government
(zoning, building permits)

Containers:
ASME energy API NFPA

Transfer Operations:
NFPA

Container Components:
ASME UL

Container Siting:
NFPA

Infrastructure

CONTROLLING AUTHORITIES:
DOT/PHMSA (over-road transport, pipeline safety)

Test Methods and Specifications for Fuels:
ASTM INTERNATIONAL

Pipeline and Piping Infrastructure:
ASME NFPA

Building and Fire Code Requirements:
ICC INTERNATIONAL CODE COUNCIL NFPA

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Key for Standards Development Organizations (SDOs)

This key provides the acronyms, names, and standards development areas that correspond with the standards development organization logos in the chart above.

Organization Name			*Standards Development Areas*
	AGA	American Gas Association	Materials testing standards
	API	American Petroleum Institute	Equipment standards for petroleum production, storage and handling
	ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers	Promoting sustainability through research, standards writing, publishing, and education
	ASME	American Society of Mechanical Engineers	Mechanical and multidisciplinary engineering, design codes and standards
	ASTM	American Society for Testing and Materials	Technical test standards for materials, products, systems
	CGA	Compressed Gas Association	Equipment design and performance standards for compressed gas systems and components
	CSA	CSA Standards	US and Canadian equipment standards
	DOT	Department of Transportation	Federal transportation regulatory agency
	FERC	Federal Energy Regulatory Commission	Regulates interstate transmission of electricity, gas, and oil
	GTI	Gas Technology Institute	Supplies technical support and training for the energy industry
	ICC	International Code Council	Family of model building codes, including the International Fire Code
	IEEE	Institute of Electrical and Electronics Engineers	Electrical standards
	NERC	North American Electric Reliability Corporation	Produces standards for electric grid operation
	NFPA	National Fire Protection Association	Model codes and standards, including the National Electric Code
	NIST	National Institute of Standards and Technology	Measurement standards
	SAE	Society of Automotive Engineers	Vehicle standards
	NARUC	National Association of Regulatory Utility Commissioners	Represents state public service commissions
	UL	Underwriters Laboratory	Equipment and performance testing standards

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