

Biofuels in Standardization Committees

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- Structure Standard Organizations
- Overview developments related to Biofuels

Organization

ISO

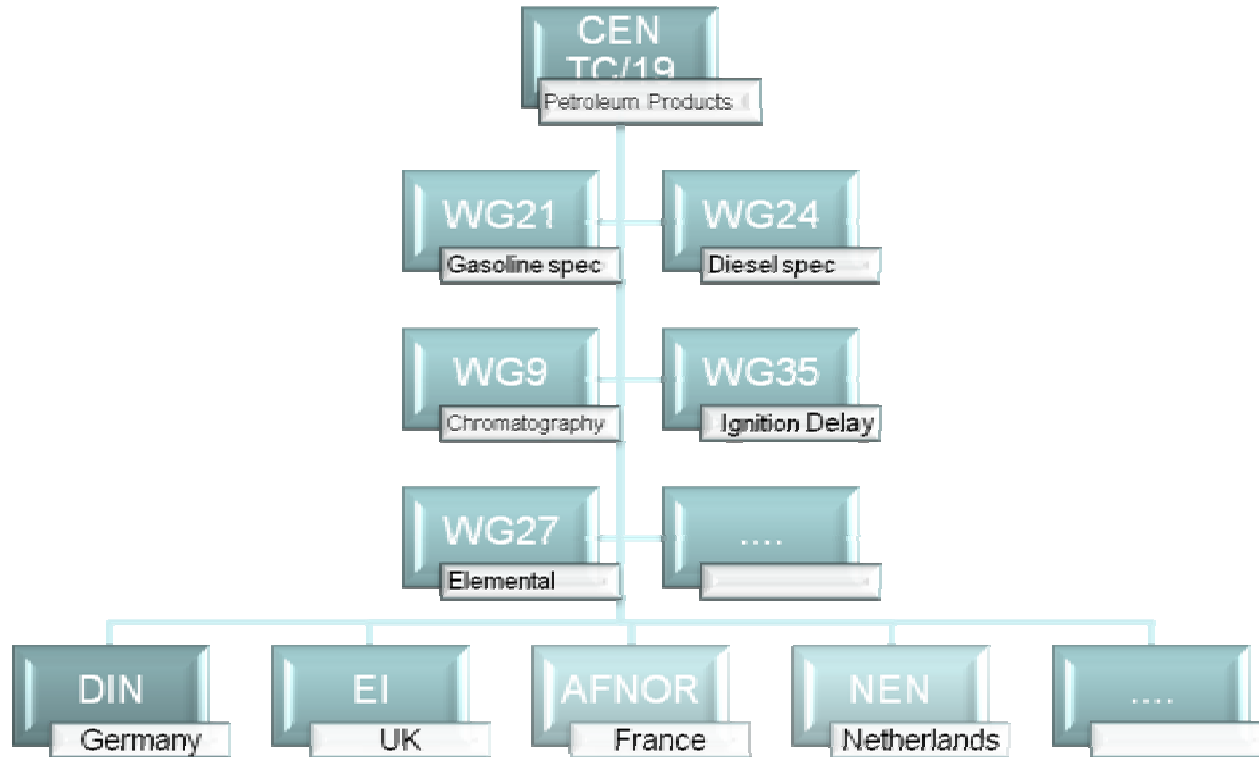
- Global coverage
- Initiates Test method development
- Methods implemented in participating Standard organizations

CEN

- European Normalization
- Representatives from National Standard Bodies
- Drives EU fuel specs & test method developments

ASTM

- US organization
- Fuel test method developments
- Methods worldwide accepted



CEN (European Standardization Committee):

- Participation by country representatives
- Drives European Fuel specifications
 - WG21: Gasoline
 - WG24 : Diesel
- Test method developments done in Expert groups (WG9, WG35 etc).
- Experts in WG's are nominated by countries

National Standard Bodies

DIN; EI; AFNOR; NEN; (and others...)

- Responsible for local (national) standardization
- Implementation ISO & CEN specs & test methods
- Develop local methods
- Nomination experts in CEN & ISO committees

Developments in Biofuels

Biofuels

Specifications

- Ethanol
- FAME
- Gasoline
- Diesel

Test method

- Impurities in Ethanol
- GC methods for FAME
- FAME in Jet
- Oxygenates in Gasoline
- Simdis

Specifications & test methods

Ethanol

- EN 15376 Ethanol spec for blending with Gasoline
- EN 15721 impurities in Ethanol (capillary GC method)
- EN 15486 Total Sulfur by UVF

Specifications & test methods

Gasoline

- EN 228 gasoline specification
 - E5 → E10
 - E85 (blends of 50% - 85% Ethanol in gasoline)
- EN ISO 22854 (Reformulyzer)
 - Referee for Olefins, Aromatics & oxygenates
- EN ISO 20846: Sulfur by UVF

Specifications & test methods

Biodiesel

- EN 14214 specification
 - FAME for blending with diesel
 - Ester content by EN 14103
 - Monoglycerides by EN 14105
 - Glycerol/glycerides by EN 14105
 - Sulfur by UVF EN ISO 20846

Specifications & test methods

Diesel

- EN 590 Diesel specification
 - Fame blending B7 → B10 → B30
 - Cold Flow operability issues
 - Monoglyceride limits
 - Derived Cetane Number
- EN ISO 3924 (Simdis)

Specifications & test methods

Jet Fuel

- DefStan 91-91 Jet Fuel spec
- EN ISO 3924 (Simdis) accepted as alternate to D86
- 5 ppm FAME limit
- Test method GC-MS
- New application developed by PAC:
 - GC using heart-cut technique

Questions

