



Trading Biodiesel

Recommendations for contractual definitions in purchase contracts concerning quality parameters, documentation requirements, and monitoring

Issued 05 September 2011



With the following information we intend to facilitate the drafting of purchase contracts for Biodiesel in a manner so that

1. a binding and traceable specification for the product quality of Biodiesel can be included and
2. the course of action is laid down conjointly for both contractual parties in case of any actual or alleged deviations.

This information serves as a proposal and needs adjustment in case of real contract drafting.

General Requirements

A clear specification of the product is essential, its characterization as 'Biodiesel' is insufficient. The relevant product Standard must be referred to at least. It is recommended to clearly indicate if the product is meant to be RME (rapeseed methyl ester).

Compliance with DIN EN 14214 is a mandatory element of the contract¹.

As an additional control parameter it is possible to agree upon a fatty acid profile exceeding that of the Standard (determinable according to DIN EN 14103).

The use of oxidation stabilizers is recommended. On request the supplier should name the type of stabilizer. A No-Harm-List of oxidation stabilizers is published on the homepage of AGQM (www.agqm.de).

At the time of purchase the water content of the product should not exceed 220 mg/kg (AGQM's commitment value) when leaving the production plant. The rejection limit must be calculated according to the precision of EN ISO 12937.

Explicit and batch-related Certificates of Analysis (CoA) must be agreed upon which are attached to every delivery and guarantee the traceability of the product (for exemplary CoA please see attachment). Trading companies operating a fuel depot may issue substitute certificates if the product to be delivered consists of batches of various suppliers of original products. In that case the trading company is obliged, however, to retain the relevant original documents in a manner which allows their allocation to the issued substitute certificates at all times.

The supplier is obliged to the one-off supply of the safety data sheet (SDS), additional copies must be forwarded on request.

Quality-Monitoring Procedure

Plausibility inspection of the documents (e.g. for the up-to-dateness of the CoA supplied) on delivery at the latest.

Noticeable problems of the product after delivery should be laid down in writing immediately, preferably in the presences of a witness who also signs the protocol (e.g. truck driver).

The procedure for taking retain samples must be bindingly agreed on. Principally DIN 51750, part 2 (Sampling of liquid petroleum products) applies (e.g. for tankers: all-level sample from the relevant chambers). Deviation from those requirements due to specific local and organizational conditions should be agreed explicitly so that the analysis of the samples can provide reliable results both parties acknowledge.

For additional information on sampling please refer to our info sheet at www.agqm-biodiesel.de.

It has also turned out to be advantageous to make an agreement concerning cost management for expenses arising from sampling and analysis in case of anticipated deviations dependent on the result of the check.

It should be clarified from the very beginning which follow-up action is to be taken in case of poor product properties on receipt of the product.

¹The 10th BImSchV determines the limits for the parameters necessary for the marketing of Biodiesel as fuel in Germany. Limits of certain parameters according to DIN EN 14214 must be met to serve as proof for complying with the Biofuel properties in order to be entitled to any tax relief or eligibility for the biofuel quota act. The Main Customs Office ('Hauptzollamt') is entitled to impose sampling and analysis of a sample (statutory source: 36th BImSchV, Bundesgesetzblatt, page 1105, Nr. 29).

Exemplary CoA including comments

EBC Exemplary Biodiesel Comp Ltd.

The producer/ marketing company must be clearly stated.

13. Biodiesel Street
08151 Ester Town
Fon.: (08 15) 12 34
Fax: (08 15) 12 35

Exemplary Biodiesel Comp Ltd.

Date: 05-09-2011

Product: Biodiesel (Fatty Acid Methyl Ester) acc. to (DIN) EN 14214

Date of Sampling: 05-09-2011

No. of Weighing Cert.: X83-15

This data should specify your delivery unambiguously.

In line with the AGQM QM concept, AGQM producers check at least the following 15 parameters of **every batch**.

If possible, the measuring values should be „real“ figures, and not like “> limit” without figures.

Parameter	Test Method	Measuring Unit		DIN EN 14214	EBC-Biodiesel
Density*	EN ISO 3675 EN ISO 12185	kg/m ³	min max	860 900	884
Sulfur Content*	EN 20846 EN 20884	mg/kg	max	10	5,3
Acid Number	EN 14104	mg KOH/g	max	0,5	0,25
Water Content*	EN ISO 12937	mg/kg	max	500	145
Total Contamination	EN 12662	mg/kg	max	24	5
Free Glycerol*	EN 14105			0,02	0,001
Mono glycerides*	EN 14105	% (m/m)	max	0,8	0,42
Di glycerides*	EN 14105	% (m/m)	max	0,2	0,15
Tri glycerides*	EN 14105	% (m/m)	max	0,2	0,09
Total Glycerol	EN 14105	% (m/m)	max	0,25	0,14
Alkali Content (Na+K)*	EN 14108(9) EN 14538	mg/kg	max	5	0,73
Earth Alkali Content (Ca+Mg)*	EN 14538	mg/kg	max	5	0,93
Phosphorus Content*	EN 14107	mg/kg	max	4,0	0,1
Limit of Filterability (CFPP)*	EN 116	°C	max	- 20	-22
Iodine No.*	EN 14111	g Iodine/100g	max	120	113

Due to seasonal conditions the national Standards stipulate different permissible cold property limits.

* Parameter to be inspected according to 36th BImSchV

Assurance of „FAME“ and use of oxidation stabilizer

The fatty acid methyl ester (FAME) supplied is fitted with an oxidation stabilizer. The CoA at hand is provided for customer information only and refers exclusively to the batch delivered. It is only permissible to pass it on for reasons of product labeling if the batch is forwarded in unaltered condition, i.e. especially without any mixing or blending with other substances, and passed on to the next trading step without any transport or storage damage.

(Signature)
A. Tester
Head of Laboratory

Person responsible for issuing the CoA.

Publisher:

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Picture:

AGQM, UFOP e.V.