

# Taking Retain Samples

The aim of taking retain samples is the documentation of the current quality status of the product. As a rule, certain causes of problems with the product can be identified and complaints about their accuracy can be checked. The informative value of a retain sample depends largely on the circumstances during the sampling.

This leaflet describes the key points about organization and requirements for sampling.

## Requirements for sampling

In principle, the requirements of **DIN EN ISO 3170**<sup>1</sup> - *Petroleum Liquids - Manual sampling* must be adhered to when sampling liquid fuels.

Take a representative sample (draw a flow quantity dependent on the sampling point to ensure that actual fuel is freshly withdrawn from the tank). If taken directly from tanks, use the prescribed draft method or make a mixed sample from the start, middle and end of the discharge (for example, for vehicles with bottom-only loading).

The **sample containers** must be suitable, clean and dry. Never use test tubes intended for use with food. Fill the vessels as completely as possible and with as little air entrapment as possible. For biodiesel and mineral diesel fuel tin canisters with press-fit lids are well-proven.

Take a **sufficient sample quantity** (at least 1 l) to ensure that all tests can be carried out in accordance with standards.

## Organisation of Sampling

Sampling should always be recorded in a sampling protocol. A special form is not defined for this purpose. Nevertheless, the following minimum information should be included:

- Reason of sampling
- Place of sampling
- Date of sampling
- Type of sampling (outlet, put-through, bottom sample, etc.)
- Name of the sampler
- Sample taken (also divided in different vessels)
- Special circumstances when taking samples (weather, statements from other persons, etc.)
- Reciprocal agreements to recognize a sample as "representative"
- Signature of the sampler and at least one witness on the sampling protocol

An example of such a sampling protocol can be found at the end of this leaflet.

**The sample containers** must be labelled unambiguously and legibly (ensure assignment to the sampling protocol) and sealed in such a way that subsequent changes to the sample are clearly visible, possibly sealed.

In each case, three similar samples should be prepared (1 sample for the own company, 1 sample for the trading partner, 1 arbitration sample). Store samples in a dry place at temperatures between 8-15 °C. The retention period should be at least 3 months. A sample storage beyond 6 months does not make sense.

### Note

The leaflet is a summary of the experience of the AGQM and its members and has been compiled with the utmost care. Nevertheless, no guarantee can be given for the accuracy, completeness and timeliness of the content provided. For this reason, we exclude any liability in connection with the use of the leaflet.

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## Sampling Protocol - Example

		ID:
Company		
Street		
Postal Code, City		

### Information on Sampling

The manufacturer makes use of the derogation according to chapter 2.2.1.2 of the QM system of AGQM with low production.	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Due to the derogation, the sampler took two retain samples of the last batch produced in the last three months (a third sample of the batch sampled remains in the company as retain sample).	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

Designation of the sampling point	Sampler	Date of Sampling	Time
Operational description of the batch	Responsible person in the company		

### Further Information

Purpose	<input type="checkbox"/> B100 <input type="checkbox"/> Blend component for diesel fuel <input type="checkbox"/> Blend component for biodiesel
Feedstock	
The sampling point is the one reported to AGQM.	Yes <input type="checkbox"/> No <sup>1</sup> <input type="checkbox"/>
The condition of the sampling point is suitable for carrying out the sampling (free from contamination and adhering water, correct operability, safety at work).	Yes <input type="checkbox"/> No <sup>1</sup> <input type="checkbox"/> Retain sample <input type="checkbox"/>
The samples for operational quality assurance are also taken at this point.	Yes <input type="checkbox"/> No <sup>1</sup> <input type="checkbox"/>
Retain sample was given to the company.	Yes <input type="checkbox"/> No <sup>1</sup> <input type="checkbox"/>
The plant or analysis certificate of the tested batch is attached.	Yes <input type="checkbox"/> No <sup>3</sup> <input type="checkbox"/>

<sup>1</sup>Please briefly explain below.    <sup>2</sup> Volume per retain sample mind. 1 l

<sup>3</sup>will be handed in within 5 working days

Other comments / specifics:

The sampling was carried out in the presence of a representative of the company. All circumstances relevant to sampling (including the name of the sample) are recorded in the log.

\_\_\_\_\_  
Signature Sampler

\_\_\_\_\_  
Signature of the representative of the company