QMS Auditor Checklist



- 1. Check allocated internal code for the Product Brand Name (PBN).
- 2. Search for formulation linked to internal code stored in database.
- **3.** Request Candidate Data Pack (CDP) and/or ACEA (association of European Automotive Manufacturers) Performance Data Set for listed formulation.
- 4. The auditor should check that the CDP meets the current valid iteration(s) of the ACEA European Engine Oil Sequences.
- **5.** Check formulation in CDP and/or ACEA Performance Data Set matches the product formulation from blend records.
- 6. Check the Quality Controls listed for PBN are aligned to characteristics shown in the CDP and/ or ACEA Performance Data Set.
 - a. The CDP and/or ACEA Performance Data Set will not necessarily list Production Tolerances but there will be typical values of key characteristics.
 - b. The Quality Control (QC) protocol must be derived from CDP and/or ACEA Performance Data Set, material specifications from additive producers, SAE (Society of Automotive Engineers) J300 and ACEA European Engine Oil Sequences.
- 7. Check specification claims for PBN in labels and technical data sheets match those listed in CDP and/or ACEA Performance Data Set.
 - a. If a claim for a formal OEM approval is being made, check the blender has corresponding approval letters for PBN from Original Equipment Manufacturers (OEMs) whose specifications are claimed.
 - b. Check the formulation code in the OEM approval letter matches the code in the CDP and/or ACEA Performance Data Set etc.
 - c. It is not unusual that some CDP and/or ACEA Performance Data Set specifications are not used for PBN for marketing reasons.
- 8. Check blending records from a sample of blends, for example 10% of batches blended within the past twelve months of the PBN and verify the formulation used matched database and CDP and/or ACEA Performance Data Set records.
- 9. Move to raw material inventory.
- **10.** Is there evidence of inventory of the exact raw materials listed in CDP and/or ACEA Performance Data Set/database for PBN?
 - a. It may be needed to check the storage areas for visual evidence of stocks of materials.
 - b. Drums or Intermediate Bulk Containers (IBCs) will carry labels from producer showing Trade Name, Batch Number and Date of Production.
 - c. Bulk materials, mainly base oils and possibly some additives, may be stored in tanks which do not carry producer's details. A label or tank designation is not sufficient evidence of the contents. Refer to purchasing records. There should be documentation available showing the contents of the tank by Trade Name and latest Batch Number delivered within stockholding records held by the Lubricant Marketer and/or their toll blender. Check inbound Certificates of Analysis for raw materials.

- d. Do the trade names match the raw materials in CDP and/or ACEA Performance Data Set?
- e. Are there consistent records of inbound Certificate of Analysis (CofA) for the given materials? Check that all aspects of the CoA are consistent with the specification held by the Lubricant Marketer for both properties, limits (where stated), and values of the batch).
- f. Does the CoA batch number match the batch on the material.
- g. Does the CoA show all expected properties are present to the right values and reported with the right units to the right methodology?
- **11.** Check procurement records and invoices of raw materials listed.
 - a. Are there regular purchases?
 - b. Since the last audit was undertaken, the ISO auditor needs to satisfy themselves that the quantities of raw materials purchased support the volume of finished lubricants produced, at the correct treat rates, of the PBN by referring to blend records over the previous period since the last audit.
 - c. For some components purchased at very low treat rates occasional purchasing may occur, for example once a year or once every two years. Where regular purchases don't match the production volumes and treats rates as set out within the CDP, the Lubricant Marketer should provide evidence that the raw materials purchased matches those set out within the CDP.
 - d. Note: raw materials may be used for several different PBNs so purchased volumes may greatly exceed the manufactured volume of PBN alone but should not be less.
- **12.** It is possible that formulation for PBN was changed for commercial reasons. If this situation occurs:
 - a. Check date of migration from previous formulation to alternative.
 - b. Repeat steps 1 to 11.

Glossary

ACEA = European Automobile Manufacturers Association

- CDP = Candidate Data Package
- CoA = Certificate of Analysis
- IBC = Intermediate Bulk Container
- OEM = Original Equipment Manufacturer

PBN = Product Brand Name

Lubricant Market Standards

ACEA European Engine Oil Sequences Society of Automotive Engineers J300