

Bulk Engine Oil Chain of Custody and Quality Documentation

API 1525A

SECOND EDITION, NOVEMBER 2021



American
Petroleum
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FOREWORD

API 1525A *Bulk Engine Oil Chain of Custody and Quality Documentation* provides procedures for managing bulk engine oil chain of custody to ensure oil quality from the point of manufacture to installation in the end user's engine. All parties involved with supplying finished bulk engine oil to consumers have a role in protecting the quality of the oil throughout the supply chain. Responsibility for quality starts with the Bulk Engine Oil Provider (BEOP) and ends with the installer. The blender, the transporter/distributor and the installer that originally ordered the product have a role in ensuring the quality of the engine oil received matches the quality ordered.

Since publication of the First Edition in 2012, API's EOLCS group has worked cooperatively with the National Conference on Weights and Measures (NCWM) to establish labeling criteria for bulk engine oils.

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Suggested revisions are invited and should be submitted to the Standards Department, API, 200 Massachusetts Ave. NW, Suite 1100 Washington, D.C. 20001-5571, USA. standards@api.org.

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Bulk Engine Oil Chain of Custody and Quality Documentation

1. Scope

This document provides procedures for managing bulk engine oil chain of custody to ensure oil quality from the point of manufacture to installation in the end user's engine. The procedures specifically address the following key topics: Bulk Engine Oil Provider (BEOP) practices; the ordering of oils meeting API 1509; chain-of-custody documentation that identifies bulk engine oil throughout the supply system; and requirements for informing consumers about the types of engine oil available for installation and requirements for notification (written and/or electronic) and labelling of the oil installed in mobile equipment engines.

All parties involved with supplying bulk engine oil to consumers (end users) have a role in protecting the quality of the oil throughout the supply chain. Responsibility for quality starts with the BEOP and ends with the installer. The BEOP, the distributor and the installer that originally ordered the product all have a role in ensuring the quality of the engine oil received matches the quality ordered. Additionally, the installer should make best efforts to assist the end user in selecting products meeting the vehicle's performance needs.

This document builds on procedures published in API Recommended Practice 1525, *Bulk Oil Testing, Handling, and Storage Guidelines*. API 1525 addresses storage and handling of bulk oil, facility and equipment standards, loading and unloading, comingling in distributor storage, multiple transporters between BEOP and oil-change facilities, personal safety equipment, training, and governmental requirements and reviews.

Applicability of all or part of the guidelines should be determined on a case-by-case basis.

2. Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API 1509¹, *Engine Oil Licensing and Certification System*

API Recommended Practice 1525, *Bulk Oil Testing, Handling, and Storage Guidelines*

API Engine Oil Licensing and Certification System (EOLCS) Online System User Guide

ASTM D445², *Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)*

ASTM D1500, *Standard Test Method for ASTM Color of Petroleum Products (ASTM Color Scale)*

ASTM D4052, *Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter*

ASTM D4927, *Standard Test Methods for Elemental Analysis of Lubricant and Additive Components—Barium, Calcium, Phosphorus, Sulfur, and Zinc by Wavelength-Dispersive X-Ray Fluorescence Spectroscopy*

ASTM D4951, *Standard Test Method for Determination of Additive Elements in Lubricating Oils by Inductively Coupled Plasma Atomic Emission Spectrometry*

ASTM D5185, *Standard Test Method for Multielement Determination of Used and Unused Lubricating Oils and Base Oils by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES)*

¹ API, 200 Massachusetts Avenue NW, Suite 1100, Washington, DC 20001-5571, USA

² ASTM, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 USA

ASTM D5293, *Standard Test Method for Apparent Viscosity of Engine Oils and Base Stocks Between $-10\text{ }^{\circ}\text{C}$ and $-35\text{ }^{\circ}\text{C}$ Using Cold-Cranking Simulator*

ASTM D5762, *Standard Test Method for Nitrogen in Liquid Hydrocarbons, Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence*

ASTM D5949, *Standard Test Method for Pour Point of Petroleum Products (Automatic Pressure Pulsing Method)*

ASTM D5950, *Standard Test Method for Pour Point of Petroleum Products (Automatic Tilt Method)*

ASTM D5985, *Standard Test Method for Pour Point of Petroleum Products (Rotational Method)*

ASTM D6362, *Standard Practice for Certificates of Reference Materials for Water Analysis*

ASTM D6481, *Standard Test Method for Determination of Phosphorus, Sulfur, Calcium, and Zinc in Lubrication Oils by Energy Dispersive X-ray Fluorescence Spectroscopy*

ASTM D7279, *Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids by Automated Houillon Viscometer*

ISO 17050-1³, *Conformity Assessment — Supplier's Declaration of Conformity — Part 1: General Requirements*

SAE J183⁴, *Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving" or "Resource Conserving")*

SAE J300⁴, *Engine Oil Viscosity Classification*

3. Terms and Definitions

For the purposes of this document, the following definitions apply:

3.1. TERMS

- a. May—indicates provisions that are optional and, consequently, are at the discretion of the designer or operator.
- b. Must—indicates important legal or safety considerations.
- c. Shall—indicates provisions that are mandatory to meet this API standard and/or contractual obligations.
- d. Should—indicates provisions that are recommended but not mandatory. Implementation of these provisions will be made based on consideration of the following, as appropriate: (a) risk/benefit analysis, (b) company standards, (c) company experience, and (d) company philosophy.

3.2. DEFINITIONS

3.2.1. API service category: an engine oil designation (for example, API SP, SN, CJ-4, CK-4, and FA-4) that defines a specific level of performance as measured in engine and bench tests.

3.2.2. Batch: a delivery of finished engine oil from a Bulk Engine Oil Provider to a distributor from a maximum of one vehicle, rail car or portable container. A delivery of the same product from multiple compartments from a single vehicle at the same time may be considered a single batch if loaded from a single BEOP storage tank.

3.2.3. Bulk engine oil: engine oil dispensed and delivered in metered quantities.

³ ISO, 1, ch. de la Voie-Creuse, CP 56, 1211 Genève 20, Switzerland

⁴ SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001 USA

- 3.2.4. Bulk Engine Oil Provider (BEOP):** In the context of this document, an entity that fills one or both of the following roles, ultimately making engine oils available in bulk to installers:
- 3.2.4.1. A blender** mixes base stocks and engine oil performance additives (additive package) to produce an engine oil in bulk.
- 3.2.4.2. An oil marketer** is defined as the marketing organization responsible for the integrity of the brand name and the representation of the branded product in the marketplace.
- 3.2.5. Candidate Data Package:** a record of each test program conducted under the American Chemistry Council Code of Practice (see www.americanchemistry.com for details).
- 3.2.6. Distributor:** an entity that stores or delivers finished bulk engine oils to multiple users (including other distributors or installers)
- 3.2.7. Formulation:** a specific mixture of lubricant base stocks and performance additives (additive package), including treat levels of all components, that results in an engine oil.
- 3.2.8. Installer:** an entity that puts engine oil into the engine of a consumer (end user).
- 3.2.9. Licensable category:** an API service category listed in API 1509 as eligible for use in the API Service Symbol.
- 3.2.10. License status:** a statement that the formulation used to blend an engine oil is licensed or not licensed by API.
- 3.2.11. Licensed formulation:** a formulation that both (a) meets the requirements of API 1509 for the service category claimed and (b) is licensed by API.
- 3.2.12. Ownership:** the top management position in the legal entity (private or corporate) responsible for all actions carried out by all distributors and/or installers owned or controlled by the entity.
- 3.2.13. Performance designation:** This may include one or more of the following: active engine service category, or categories, as defined by the latest version of
- SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”),”
 - API Publication 1509, “Engine Oil Licensing and Certification System,”
 - European Automobile Manufacturers Association (ACEA), “European Oil Sequences,”
 - China GB oil standard,
 - JASO GLV-1,
 - Or other Vehicle or Engine Manufacturer standard(s)
- 3.2.14. Product:** a Bulk Engine Oil Provider’s finished engine oil, sold in bulk, with a unique brand name, viscosity grade, and API service category.
- 3.2.15. Product delivery:** the offloading of product to a distributor or installer’s tanks or the transfer of product in a portable container to the distributor or installer’s custody.
- 3.2.16. Product identification information:** the unique BEOP’s name, brand name, viscosity grade, API service category, and API license status that is specific to an engine oil or engine oils.
- 3.2.17. Product quality:** defined as an engine oil’s ability to meet API, OEM, industry, national or international specifications.
- 3.2.18. Qualified formulations:** specific engine oil formulations identified by unique codes for which acceptable performance against API performance standards has been demonstrated. Proof of performance against API standards requires the successful completion of engine and bench tests, frequently in combination with application of Base Oil Interchange and/or Viscosity Grade Read-Across guidelines.
- 3.2.19. Quality assurance:** a program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met.
- 3.2.20. Quality control:** the aggregate of activities (as design analysis and inspection for defects) designed to ensure adequate quality especially in manufactured products.
- 3.2.21. Quality statement:** a document that confirms that an engine oil delivered meets the characteristics and performance level expected from the BEOP. The quality statement can be a Certificate of Analysis (C of A), Certificate of Conformance (C of C) or other document as agreed between the parties prior to product delivery.

3.2.21.1. Certificate of Analysis (C of A): a certification report of the analyses performed to develop the certified values recorded. It shall list the test method(s) used for analysis and industry specification limits for tests listed, when available, for the engine oil(s) supplied (see latest edition ASTM D6362).

3.2.21.2. Certificate of Conformance (C of C): a document that contains a statement of Conformity of a manufactured product. The certificate documents that the product conforms to manufactured specifications (see latest edition ISO/IEC 17050-1).

4. General Principles

4.1. EQUIPMENT FOR HANDLING, SAMPLING AND TESTING ENGINE OILS

Engine oils should be handled, sampled and tested in accordance with the latest edition of API 1525; further requirements may be contractually imposed at any part of the custody transfer chain. At minimum, clean, dry, and clear glass (or plastic) bottles shall be used when making visual comparisons to reference samples for color, water, and contamination.

4.2. PROCEDURES

Engine oil marketers, blenders, distributors and installers should have written procedures consistent with those described in the latest edition of API 1525.

4.3. ABBREVIATION

If the format (or software support) for any documentation referenced by this standard imposes limits on the number of characters that can be used, an abbreviation may be used as long as the information required by the standard is discernible within the abbreviation. For example, if brand name, SAE viscosity grade, and API service category are required within the documentation, "Brand X SAE 5W-30 ILSAC GF-6A/API SP" could be abbreviated as "Brd X SAE5W-30 SP."

5. Requirements for Marketers and/or Blenders Supplying Engine Oil to API-Certified Distributors

5.1. BASIC REQUIREMENTS FOR BEOPS

5.1.1. Records required by this section shall be maintained a minimum period consisting of the balance of the current year plus one calendar year.

5.1.1.1. Example: Records dated 20 January 2021 must be maintained until 31 December 2022

5.1.2. A BEOP shall have available for supply to distributors or installers engine oils that are in compliance with the latest edition of API 1509.

5.1.3. The BEOP shall clearly identify to all recipients for each engine oil to be supplied the API service category or other performance designations per 3.2.13, API license status (if applicable), SAE viscosity grade, and brand name. Notification may be made by paper or electronic record.

5.1.4. The BEOP shall verify an engine oil's license status by providing a valid copy of its Schedule A License Agreement or citing API's on-line Directory of Licensees (www.api.org/eolcs). Notification may be made by paper or electronic record.

5.1.5. The BEOP must maintain pertinent sections of the Candidate Data Package provided by the technology supplier sufficient to document the API service category of each formulation supplied.

5.1.5.1. Candidate Data Packages shall be maintained as long as the formulations supported by the data packages are supplied.

5.2. BEOP PRACTICES TO SUPPORT CHAIN OF CUSTODY

5.2.1. Batch Quality and Tracking Management

The BEOP shall implement and maintain a quality testing and tracking system to allow identification of and assure conformance to the API service category claimed for every batch of engine oil delivered to distributors and installers.

5.2.1.1. Tracking System

The tracking system shall include, at minimum:

- a. A separate, unique code for each blend/batch.
- b. Blend code traceable to formulations on file with EOLCS online system.
- c. Certificates of Analysis for components used in oil batches.
- d. Records of the results of quality certification testing (See 5.2.1.2) on each batch.
- e. Record of batches in a tank for a given day (identify the most recent two batches added to a tank).
- f. The customers for all deliveries made each day from each engine oil storage tank.

5.2.1.2. Batch/Quality Certification Testing

At the time of manufacture, the BEOP shall run appropriate tests on each batch to certify the oil has been blended to meet identifiable properties. Tests should include the following (appropriate ASTM procedures, when available, are recommended):

- a. Kinematic viscosity at 100°C—ASTM D445 or D7279.
- b. Cold Cranking Simulator (CCS) @ temperature for viscosity grade (defined in SAE J300)—ASTM D5293.
- c. Additive elements sufficient to confirm additive package and additive component level (Ca, Mg, P, Zn, Molybdenum, Na, B & N and/or others if appropriate)—ASTM D4951 or D5185; D4927; and D6481, D5762 or D6443.
- d. Appearance (Visual), per company procedures and criteria
- e. Color (ASTM D1500).
- f. Specific gravity/density (ASTM D4052).
- g. Pour point (ASTM D5949, D5950, D5985).
- h. If available, HTHS (per ASTM D4683, D4741, D5481 or CEC L-36-90) and MRV (per ASTM D4684) are recommended as validation tests.

5.2.1.3. Retain Samples

The BEOP shall retain a minimum of 500 mL/1 pint of product from each blend, and these retain samples shall be traceable to the batch. The BEOP shall retain samples for a minimum of 6 months in an environment that is

- i. free from exposure to UV light to prevent deterioration or contamination and
- ii. avoids exposure to excess heat or cold.

The sample shall be labelled to include the following information at a minimum:

- a. Product name (or suitable identifier as permitted in 4.3)
- b. Date blended (or at which certification per 5.2.1.2 was completed)
- c. Reference number and date
- d. Batch number

Alternatively, a bar code system that encapsulates the above information digitally is acceptable.

5.3. CHAIN-OF-CUSTODY DOCUMENTATION—BEOP DELIVERY TO DISTRIBUTOR

5.3.1. Order Information

The BEOP shall provide a paper or electronic record with each sale of product that identifies the quality of the product. At minimum, the record shall include the following:

- a. Brand name.
- b. SAE viscosity grade.
- c. Performance designation(s) per 3.2.13.
- d. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed online at www.api.org/eolcs.
- e. Information necessary to ensure traceability to product performance claim.

5.3.2. Bill of Lading

The BEOP shall provide a Bill of Lading, consisting of a paper or electronic record, for each oil delivery to each distributor (or installer) receiving an engine oil or oils. This Bill of Lading shall include the information below for each oil in each compartment delivered, or the distributor shall be able to link to a system [for example, through product or stock-keeping unit (SKU) numbers] that defines the following:

- a. BEOP name(s).
- b. Brand name(s).
- c. SAE viscosity grade(s).
- d. Performance designation(s) per 3.2.13.
- e. If an API service Category is claimed as one of the performance designations for a product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed online at www.api.org/eolcs.
- f. Oil quantity(ies).
- g. Date of shipment.
- h. Delivery vehicle compartment(s) from which oil is dispensed.

5.3.3. Quality Statement

5.3.3.1. The BEOP shall provide, if requested by an API-licensed distributor, a quality statement for all engine oil deliveries to the distributor at the time of product delivery. The quality statement shall certify that the product has been inspected and tested and conforms to established specifications. The person responsible for the product quality shall sign the quality statement either by actual signature or electronic identification.

5.3.3.2. The quality statement shall be in the form of a Certificate of Analysis (C of A), Certificate of Conformance (C of C) or other document as agreed between the parties prior to product delivery.

5.3.3.3. The quality statement should contain at least the following information about each engine oil being transferred:

- a. BEOP name(s).
- b. Brand name(s).
- c. SAE viscosity grade.
- d. Performance designation(s) per 3.2.13.

- e. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.
- f. Oil quantity.
- g. Date of shipment.

5.3.3.4. The C of A should include results from tests as agreed between the BEOP and the oil recipient (see 5.2.1). Examples of tests include the following:

- a. Kinematic viscosity at 100°C—ASTM D445 or D7279.
- b. CCS @ temperature for viscosity grade (defined in SAE J300)—ASTM D5293.
- c. Elemental analysis—ASTM D4951, D4927, D5185, D6481 or D5762.
- d. Appearance (Visual).
- e. Density and relative density by digital density meter (ASTM D4052) or API gravity by ASTM D1250.
- f. Pour point (ASTM D5949, D5950, or D5985).

The C of A should list industry specification limits for tests run, when available, for the engine oil(s) supplied. The BEOP and distributor shall agree on what test results will be shown in the C of A or C of C.

5.3.3.5. A C of C should contain a statement of conformity that states that the engine oils manufactured meet the performance designation(s) claimed.

5.3.4. Retain Sample

The BEOP shall draw a minimum of 500 mL/1 pint of engine oil loaded onto the delivery vehicle. If the vehicle is loaded from more than one storage tank, the BEOP shall take a retain that represents product from each storage tank. Retain samples shall be traceable to the delivery, including the unique delivery vehicle identification and compartment number. The BEOP shall retain samples for a minimum of 6 months in an environment that

- i. Is free from exposure to UV light to prevent deterioration or contamination and
- ii. avoids exposure to excess heat or cold.

The sample shall be labelled to include the following information at a minimum:

- a. Product name (or suitable identifier as permitted in 4.3)
- b. Date received
- c. Reference number and date
- d. Batch number

Alternatively, a bar code system that encapsulates the above information digitally is acceptable.

5.3.5. Invoice

All invoices for engine oil delivered to a distributor shall contain at least the following information or link to a system (for example, through product or SKU numbers) that defines the following:

- a. BEOP name(s) and address.
- b. Buying entity name(s) and address
- c. Date and Time of sale
- d. Brand name(s).
- e. SAE viscosity grade(s).
- f. Performance designation(s) per 3.2.13.
- g. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.

- h. Oil quantity(ies).
- i. Date of shipment.

5.3.6. Record Retention

The BEOP shall maintain copies of the order, Bill of Lading, quality statement and invoice for a minimum period consisting of the balance of the current year plus one calendar year in paper or electronic format. An example of the retention period appears in 5.1.1.1.

6. Requirements for Distributor of Bulk Engine Oil

6.1. GENERAL REQUIREMENTS AND RECORD RETENTION

6.1.1. This section applies to all bulk engine oils handled by the distributor. Unless record retention requirements are identified in a specific paragraph, records required by this section shall be maintained for a minimum period consisting of the balance of the current year plus one calendar year in paper or electronic format. An example of the retention period appears in 5.1.1.1.

6.1.2. A distributor's engine oil offerings shall comply with the latest edition of API 1509 or the requirements of other, current performance designations.

6.2. CHAIN-OF-CUSTODY DOCUMENTATION—DISTRIBUTOR RECEIPT OF ENGINE OIL

6.2.1. Order Information

The distributor shall order engine oil from a BEOP by requesting and ensuring receipt of, at minimum, the information listed below:

- a. Brand name.
- b. SAE viscosity grade.
- c. Performance designation(s) per 3.2.13.
- d. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.
- e. Information necessary to ensure traceability to product performance.

6.2.2. Purchase Order

6.2.2.1. When ordering engine oil from a BEOP, the distributor shall order by requesting the information listed in 6.2.1. As an example, a distributor would order 2,000 gallons of Brand X SAE 5W-30 API-licensed ILSAC GF-6A/API SP engine oil. The distributor shall confirm the API license status of the engine oils ordered. API-licensed oils are listed on-line at www.api.org/eolcs.

6.2.2.2. The distributor shall document in writing the order placed including the information required in 6.2.1. If the distributor places a verbal order, the distributor should request a written summary from the BEOP or draft a dated summary and fax or email it to the BEOP for return verification. The written summary shall include at least the information required by 6.2.1.

6.2.3. Receiving Inspection

The distributor shall ensure that the Bill of Lading and quality statement, if requested, meet the purchase order requirements prior to product off-loading. This review must include confirmation of the following:

- a. BEOP name.
- b. Brand name.
- c. SAE viscosity grade.
- d. Performance designation(s) per 3.2.13.
- e. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.
- f. Oil quantity.
- g. Date of shipment.
- h. Delivery vehicle compartment from which oil is dispensed.
- i. Bill of Lading number.
- j. Carrier identification.
- k. Density and relative density by ASTM D4052 or API gravity by D1250.
- l. Batch number or other method of traceability.
- m. Supply point.
- n. Person taking delivery.

6.2.4. Record Retention

The distributor shall maintain records of product deliveries received from BEOPs for a minimum period consisting of the balance of the current year plus one calendar year in paper or electronic format. An example of the retention period appears in 5.1.1.1. Records shall include the batch identification, the purchase order, the Bill of Lading, and the quality statement as well as the product identification information in 6.2.1, date of delivery and the unique identification of the delivery vehicle, including compartment number.

6.2.5. Retain Samples

The distributor shall draw a minimum of 1 pint / 500 mL of engine oil from each delivery vehicle compartment from which delivery is accepted. The sample shall be traceable to the specific production batch and shall be retained for a minimum of 6 months in an environment that

- i. Is free from exposure to UV light to prevent deterioration or contamination and
- ii. avoids exposure to excess heat or cold.

The sample shall be labelled to include the following information at a minimum:

- a. Product name (or suitable identifier as permitted in 4.3)
- b. Date received
- c. Reference number and date
- d. Batch number

Alternatively, a bar code system that encapsulates the above information digitally is acceptable.

6.3. CHAIN-OF-CUSTODY DOCUMENTATION—DISTRIBUTOR DELIVERY TO INSTALLER

6.3.1. Customer Order

The distributor shall document the specific engine oil(s) ordered by the installer including product identification information (see 5.3.1).

6.3.2. Drop Ticket

6.3.2.1. The distributor shall provide a drop ticket for each engine oil delivery that includes at least the following information for each oil delivered:

- a. BEOP name(s).
- b. Brand name(s).
- c. Performance designation(s) per 3.2.13.
- d. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.
- e. Oil quantity(ies).

6.3.2.2. If the format for a field on the drop ticket limits the number of characters that can be used, abbreviations may be used as long as the brand, viscosity grade, and API service category are discernible. For example, "Brand X SAE 5W-30 ILSAC GF-6A/API SP" could be abbreviated as "BrdX5W30GF6ASP."

6.3.3. Invoice

All invoices for engine oils delivered to installers shall contain, at minimum, the following information on the engine oils delivered:

- a. BEOP name.
- b. Brand name.
- c. SAE viscosity grade.
- d. Performance designation(s) per 3.2.13.
- e. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.

6.3.4. Pre-Dispensing Verification

Before dispensing engine oil into an installer's bulk tank, the distributor shall confirm with the installer that the brand name, SAE viscosity grade and API service category of the engine oil being delivered matches the oil ordered. This confirmation shall be provided in written form (paper or electronic format). The distributor should dispense the oil in accordance with API 1525.

6.3.5. Post-Dispensing Verification

After the engine oil has been dispensed, the distributor shall allow the installer to verify that the meter-head on the delivery vehicle is zeroed out.

6.3.6. Retain Samples

The distributor should as a best practice retain at least 4 ounces of engine oil from each compartment of the delivery vehicle either after loading product into a compartment or at time of delivery to an installer. The sample shall be traceable to the delivery of oil from each compartment at each drop. The distributor shall retain samples for a minimum of 6 months in an environment that:

- i. Is free from exposure to UV light to prevent deterioration or contamination and
- ii. avoids exposure to excess heat or cold.

The sample shall be labelled to include the following information at a minimum:

- a. Product name (or suitable identifier as permitted in 4.3)
- b. Date received
- c. Reference number and date
- d. Batch number

Alternatively, a bar code system that encapsulates the above information digitally is acceptable.

6.3.7. Record Retention

The distributor shall maintain records of product deliveries to installers for a minimum period consisting of the balance of the current year plus one calendar year in paper or electronic format. An example of the retention period appears in 5.1.1.1. Records shall include the customer order, the drop ticket, and the invoice as well as the product identification information, date of delivery, and unique identification of the delivery vehicle including compartment number.

6.4. DIRECT DELIVERY FROM BEOP TO INSTALLER

If a BEOP delivers engine oil directly to an installer, the requirements in paragraph 6.3 shall apply.

6.4.1. Retain Samples from Compartments

The BEOP shall retain at least 4 ounces of engine oil loaded into each compartment of the delivery vehicle. The BEOP shall retain samples for a minimum of 6 months in an environment that

- i. is free from exposure to UV light to prevent deterioration or contamination and
- ii. avoids exposure to excess heat or cold.

The sample shall be labelled to include the following information at a minimum:

- a. Product name (or suitable identifier as permitted in 4.3)
- b. Date received
- c. Reference number and date
- d. Batch number

Alternatively, a bar code system that encapsulates the above information digitally is acceptable.

6.4.2. Retain Samples from Intermediate Bulk Container (IBC)

A BEOP delivering engine oil by intermediate bulk container (IBC) shall retain at least 4 ounces of engine oil loaded into the IBC. The BEOP shall retain samples for a minimum of 6 months in an environment that

- i. is free from exposure to UV light to prevent deterioration or contamination and
- ii. avoids exposure to excess heat or cold.

The sample shall be labelled to include the following information at a minimum:

- a. Product name (or suitable identifier as permitted in 4.3)
- b. Date received
- c. Reference number and date
- d. Batch number

Alternatively, a bar code system that encapsulates the above information digitally is acceptable.

6.5. MULTIPLE TRANSFERS BETWEEN INITIAL DISTRIBUTOR AND INSTALLER

6.5.1. If an engine oil is transferred more than once after being shipped to a distributor by a BEOP, practices outlined in Section 6 shall be followed by each entity transferring the oil. This is mandatory to maintain chain of custody and ensure the final user of the engine oil receives the proper information on the oil.

Distributors operating in accordance with this standard, and that receive engine oil from another distributor, shall draw for retention a minimum of 4 ounces of engine oil from each delivery vehicle compartment from which delivery is accepted. The samples shall be retained for a minimum of 6 months in an environment that

- i. is free from exposure to UV light to prevent deterioration or contamination and
- ii. avoids exposure to excess heat or cold.

The sample shall be labelled to include the following information at a minimum:

- a. Product name (or suitable identifier as permitted in 4.3)

- b. Date received
- c. Reference number and date
- d. Batch number

Alternatively, a bar code system that encapsulates the above information digitally is acceptable.

6.5.2. Two or more products with different physical and/or chemical properties as identified in items a through e of 5.3.3.3 shall not be commingled, even if the products are similar. Mixing different oils with different additive systems conflicts with the requirement under 5.3.1 to provide sufficient documentation to identify product properties and quality. The distributor shall ensure that tanks are drained and flushed between different products, different grades of the same product, and different products or product groups. The tank should be flushed using the guidelines outlined in API 1525 with the next product to be pumped into the tank.

7. Installer Ordering, Receipt and Installation of Bulk Engine Oil

7.1. PRODUCT OFFERING

An installer's bulk engine oil offerings shall adhere to at least one of the performance designations outlined in 3.2.13.

7.2. ORDER INFORMATION

7.2.1. The installer shall order engine oil from a distributor by requesting, at minimum, the information listed below:

- a. Brand name.
- b. SAE viscosity grade.
- c. Performance designation(s) per 3.2.13.
- d. If an API service Category is claimed as one of the performance designations for the product, the API license status (API-licensed or unlicensed). The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.
- e. The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.

7.2.2. The distributor shall designate how the oil will be described on its drop ticket and invoice in accordance with 6.3.2.1.

7.2.3. The installer should request that the distributor notify him or her every time the information above changes.

7.3. OIL ORDERING PRACTICES

7.3.1. When ordering engine oil from a distributor, an installer shall request a specific brand, SAE viscosity grade, performance designation per 3.2.13, and quantity of oil per the information agreed upon by the entities involved. As an example, the installer staff member responsible for ordering engine oil would order 2,000 gallons of Brand X SAE 5W-30 API-licensed ILSAC GF-6A/API SP engine oil. If the distributor no longer carries the brand requested, the installer shall request and receive the information required under 7.2.1 before accepting a substitute brand.

For products making an API performance category claim, the licensing status (licensed or unlicensed) should also appear. The API license status of the oil shall be confirmed by the distributor. API-licensed oils are listed on-line at www.api.org/eolcs.

7.3.2. If a verbal order is placed, the installer may request a written summary from the distributor or draft a dated summary and fax or email it to the distributor for return verification. The written summary shall include at least the information required by 7.2.1.

7.4. INSTALLER RECEIVING PRACTICES

- 7.4.1. The distributor shall assist the installer in ensuring that all labeling appearing on bulk oil tanks will clearly display the brand name, SAE viscosity grade, and performance designation per 3.2.13 of the engine oil being stored. All labeling must remain current.
- 7.4.2. The installer should ensure that a log detailing product receipt, date, tank location and volume is kept up to date
- 7.4.3. The installer must work in concert with all distributors to ensure that the labeling of all bulk tanks and dispensing equipment will be updated in a timely manner, whenever changes to performance designations and/or products stored in the tank take place.
- 7.4.4. Prior to allowing a distributor to dispense product into a bulk tank, the recipient of the delivery shall complete the following steps:
- Using the paper or electronic confirmation provided by the distributor in accordance with 6.3.4, confirm that the brand name, SAE viscosity grade, and API service category match the product ordered.
 - Measure via tank gauge or other device the contents of the tank into which the engine oil will be dispensed. The installer may also check the distributor's meter-head to make sure it is zeroed out. After delivery, the installer should take the same measurements again. The installer should document these measurements in a written log maintained by the installer to provide a long-term record that can be used to verify the quantity of deliveries.
- 7.4.5. Drop tickets or any other written documentation associated with the quality and quantity of the bulk engine oil delivered shall be kept for a minimum period consisting of the balance of the current year plus one calendar year in paper or electronic format. An example of the retention period appears in 5.1.1.1. .

7.5. INSTALLATION PRACTICES

- 7.5.1. Engine oil change options shall be clearly and accurately represented to consumers through a menu board, list of services, or other promotional methods.
- 7.5.2. Bulk engine oil installation hoses, hose reels or nozzles *and bulk tanks* shall be clearly labeled with the current brand name, SAE viscosity grade, and API service category of each oil being dispensed.

7.6. CUSTOMER RECEIPTS

The customer receipt for the engine oil change shall clearly identify the brand name, SAE viscosity grade, *and* API service category *and API license status* of the oil installed. For example, the receipt would provide the following information: "Specific Brand SAE 5W-30 *API-Licensed* SP/GF-6A."

An installer has the option to indicate that the brand of oil is a "house brand." Note, however, that an API engine oil license is not transferable and the licensee does not have the right to grant sublicenses. If an installer chooses to rename an engine oil as a "house brand," the *oil must be identified as "unlicensed."* For example, the receipt would provide the following information: "House Brand *Unlicensed* SAE 5W-30 SP/GF-6A."