مؤسسة المواصفات والمقاييس الأردنية

الرقم: م / علم / 17792
التاريخ: 1447 / 03 / 22 هـ
الموافق: 2025 / 09 / 15 م

معالـي .....
عطوفة .....
سعادة .....

تحية طيبة وبعد،

أرجو معاليكم/عطوفتكم/سعادتكم التكرم بالعلم بأن أسلوب العمل الفني المتبع في وضع المواصفات القياسية والقواعد الفنية الأردنية يقتضي تعميم مشروع التصويت على الجهات ذات العلاقة، وذلك لإبداء الرأي والتصويت عليه تمهيداً لعرضه على مجلس الإدارة لاعتماده كمواصفة قياسية أو قاعدة فنية أردنية.

لذا أرجو أن أرفق لكم طياً نسخة عن مشروع التصويت للمواصفة القياسية الأردنية ٢٠٢٥/٢٤٢١ الخاص بزيوت التزييت ـ الزيوت الهيدروليكية ـ التصنيف، الذي أعدته اللجنة الفنية الدائمة لزيوت التزييت (٤).

يرجى التكرم بعرض هذا المشروع على المختصين لديكم وموافاتنا بردكم عليه خلال شهرين من تاريخه، وذلك باستخدام بطاقة التصويت المرفقة، علماً بأن عدم الرد خلال المدة يعتبر موافقة من قبلكم على المشروع المذكور.

وتفضلوا بقبول فائق الاحترام

المديـــر العـــام

م. عبير بركات الزهير

المرفقات:
- مشروع التصويت
- بطاقة التصويت

نسخة/ مدير مديرية التقييس
نسخة/ رئيس قسم فحص ومتابعة المواصفات
نسخة/ رئيس قسم الصناعات الكيميائية
نسخة/ م. رحاب المراحلة
ربا-٢٠٢٥/٩/١١

مؤسسة المواصفات والمقاييس الأردنية

بطاقة تصويت

رقم المشروع: ٢٠٢٥/٢٤٢١	عنوان المشروع: زيوت التزييت ـ الزيوت الهيدروليكية ـ التصنيف.
اسم اللجنة الفنية: الدائمة لزيوت التزييت (٤)	أمين اللجنة الفنية: م. رحاب المراحلة
تاريخ التعميم: ٢٠٢٥/٠٩/١٥	آخر موعد للرد: ٢٠٢٥/١١/١٥

الرقم	نوع الملاحظة			الملاحظة *	التعديل المقترح	رأي اللجنة الفنية
	عامة	فنية	هيكلية وصياغية			

النتيجة النهائية للتصويت:

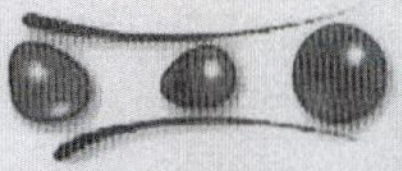
☐ موافقة (لا توجد ملاحظات).

☐ موافقة مع الملاحظات المرفقة ، والتي يمكن الأخذ بها أو تجاوزها حسب الاقتضاء.

☐ عدم موافقة للأسباب الفنية المرفقة، والتي عند زوالها ينقلب التصويت إلى موافقة.

* يرجى تزويدنا بالمراجع التي اعتمد عليها في حالة وجود ملاحظات.

الجهة القائمة بالتصويت:	التاريخ:
اسم الشخص المسؤول:	



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ع ت ٢٠٢٥/٢٤٢١
الإصدار الأول

مشروع تصويت

(إعداد)

زيوت التزييت ـ الزيوت الهيدروليكية ـ التصنيف

Lubricating oils – Hydraulic oils – Classification

مؤسسة المواصفات والمقاييس

المملكة الأردنية الهاشمية

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Table

This Jordanian Standard 2421, JS 2422, JS 2423 and JS 2424 cancels and replaces the Jordanian Standard 476 issued in 2003.

Foreword

Jordan Standards and Metrology Organization is the national standardization body in Jordan. The work of preparing Jordanian Standards is normally carried out by technical committees composed of the interested parties, which are involved in the scope of the standard. All the interested parties have the right to vote on the draft Jordanian Standard during the enquiry stage, taking into consideration the importance of harmonizing Jordanian Standards with the international, regional or national standards (as much as possible) for the purpose of eliminating technical barriers to trade and facilitating the international trade.

Jordanian Standards are drafted in accordance with the rules given in the Jordanian Directive 1-2/2005, part 2: Rules for the structure and drafting of Jordanian Standards*.

The permanent technical committee Lubricating oils 4 has studied the Jordanian Standard 476:2003 related to **"Mineral oils – Hydraulic oils"**, and the prepared project 2421:2025 related to **"Lubricating oils – Hydraulic oils – Classification**, and has recommended to approve the amended project as a Jordanian Standard 2421:2025, according to article (12) of Standards and Metrology Law No. (22) for the year 2000 and it's amendments.

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* under amendment.

Lubricating oils – Hydraulic oils – Classification

1- Scope

This Jordanian Standard establishes the detailed classification of hydraulic oils. This classification system does not include automotive brake fluids or aircraft hydraulic fluids.

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. Indexes for published standard can be found in JSMO's library.

- ISO 11158, Lubricants, industrial oils and related products (class L) – Family H (hydraulic systems)
- Specifications for categories HH, HL, HM, HV and HG.
- ISO 12922, Lubricants, industrial oils and related products (class L) – Family H (Hydraulic systems)
- Specifications for hydraulic fluids in categories HFAE, HFAS, HFB, HFC, HFDR and HFDU.
- ISO 15380, Lubricants, industrial oils and related products (class L) – Family H (Hydraulic systems)
- Specifications for categories HETG, HEPG, HEES and HEPR.
- ASTM D6158:2023 Standard specification for mineral hydraulic oils.

3- Detailed classification

The detailed classification is shown in Table 1.

Table 1 — Classification of hydraulic fluids

Code letter	General applications	Particular applications	More specific applications	Composition and properties	Symbol	Typical applications	Remarks	International Standard
H	Hydraulic Systems	Hydrostatic		Non-inhibited refined mineral oils	HH			ISO 11158
				Refined mineral oils with improved antirust and antioxidation properties	HL			ISO 11158
				Oils of HL type with improved antiwear properties	HM	General hydraulic systems which include highly loaded components		ISO 11158
				Oils of HM type with /improved viscosity temperature properties	HV	Construction and marine equipment		ISO 11158
		High performance systems	High pressure and temperature	A refined mineral base oil or synthetic base stock with rust and oxidation inhibitors plus antiwear characteristics meeting a higher performance level than an HM fluid to address higher demanding hydraulic systems.	HMHP	Hydraulic systems operating at maximum pump capacity for long periods under severe conditions.	Oils of HM meeting a higher performance level to meet the changing needs of hydraulic systems, especially for those working at high pressures and temperatures intended to work at maximum pump capacity for long periods of time.	ASTM D6158

Table 1 — Classification of hydraulic fluids (continued)

Code letter	General applications	Particular applications	More specific applications	Composition and properties	Symbol	Typical applications	Remarks	International Standard
H	Hydraulic Systems	High performance systems	Wide temperature range	A refined mineral base oil with rust or synthetic base stock and oxidation inhibitors, antiwear characteristics, and increased viscosity index higher than 140 meeting a higher performance level than an HV fluid to address higher demanding hydraulic systems	HVHP	Demanding hydraulic systems operating over a wide range of ambient temperatures.	Oils of HMHP type with improved viscosity/temperature properties, for more demanding hydraulic systems where equipment is intended to operate over a wide range of ambient temperatures.	ASTM D6158
		Hydrostatic	Applications where environmentally acceptable fluids are requested	Triglycerides	HETG	General hydraulic systems		ISO 15380
				Polyglycols	HEPG			
				Synthetic esters	HEES			
				Polyalphaolefin and other synthetic hydrocarbons	HEPR			
			Hydraulic slideway systems	Oils of HM type with anti-stick/slip properties	HG	Machines with combined hydraulic and plain bearing way lubrication systems where vibration or intermittent sliding (stick/ slip) at low speed is to be minimized	These fluids are Intended to be multifunctional but they do not function successfully under all hydraulic applications.	ISO 11158

Table 1 — Classification of hydraulic fluids (continued)

Code letter	General applications	Particular applications	More specific applications	Composition and properties	Symbol	Typical applications	Remarks	International Standard
H	Hydraulic Systems	Hydrostatic	Applications where fire-resistant fluids are required	Oil in water emulsions	HFAE		Typically more than 95 % mass fraction of water.	ISO 12922
				Chemical solutions in Water	HFAS		Typically more than 95 % mass fraction of water	
				Water in oil emulsions	HFB		Typically more than 40 % mass fraction of water.	
				Water polymer solutions	HFC		Typically more than 35 % mass fraction of water.	
				Synthetic fluids containing no water and consisting phosphate esters	HFDR			
				Synthetic fluids containing no water and of other composition	HFDU			

References

- ISO 6743-4:2015, Lubricants, industrial oils and related products (class L) – Classification – part 4: Family H (Hydraulic systems).
- ASTM D6158:2023 Standard specification for mineral hydraulic oils.