	भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS
	(PETROLEUM, COAL & RELATED PRODUCTS DEPARTMENT)
AGENDA	
11 December 2024, Wednesday, 1400 - 1700 h	
Industrial Lubricants & Specialty Products Subcommittee	10th Meeting
Convenor: Shri Siva Kasturi, Shell India Markets Pvt Ltd	Member Secretary: Ms. Kreeti Das
Meeting Information	
Meeting mode: Virtual	
Meeting link: https://bismanak.webex.com/bismanak/j.php?MTID=m8bfd2489cf8a06b2a9826af13bf1131d	
Meeting number: 2518 258 1208	
Password: Pcd25_1#10	

ITEM 0 WELCOME AND INTRODUCTORY REMARKS

- 0.1 Welcome by BIS
- 0.2 Opening Remarks by the Convenor

ITEM 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The 9th meeting of PCD 25:2 was held in hybrid mode on 18 April 2024. The minutes of the meeting along with PCD 25 minutes were circulated to all members through email on 18 June 2024. No comments were received on the minutes for PCD 25:2.

*The Subcommittee may **CONSIDER** confirmation of the minutes, as circulated.*

ITEM 2 TITLE, SCOPE AND COMPOSITION OF PCD 25:2

- 2.1 The title of the Subcommittee is given below:

TITLE - Industrial Lubricants & Specialty Products Subcommittee

- 2.2 The scope of the Subcommittee is given below:

Scope: To formulate Indian Standards for lubricants and other speciality products for industrial applications and related codes of practice for their storage, handling, transport and application.

[Ref: PCD 25/A-2.11]

*The Subcommittee may **NOTE**.*

- 2.3 The list of standards covered under PCD 25:2 is given in **Annex I**.

*The Subcommittee may **NOTE**.*



2.4 The composition of the subcommittee is given in **Annex II**.

2.4.1 The panel for review of composition for PCD 25 and its SCs met on 9 May 2024 and recommended the following changes in composition:

2.4.1.1 Co-options

- a) Savita Oil Technologies Ltd., Mumbai
- b) Danfoss Technologies Pvt. Ltd., Pune
- c) Hindalco Industries Ltd., Mumbai
- d) Tata Steel
- e) RDCIS Ranchi
- f) DMSRDE Kanpur

2.4.1.2 Withdrawals (in view of non-participation)

- a) Apar Industries Limited, Mumbai
- b) BASF India Limited, Mumbai
- c) DRDO, Ministry of Defence, New Delhi
- d) S S Industrial Corporation, New Delhi
- e) Sah Petroleums Limited, Mumbai
- f) Sarbi Petroleum and Chemicals Pvt Ltd, Mumbai
- g) SAIL, Bokaro Steel Plant, Bokaro
- h) The Western India Genuine Ghee Company, Mumbai
- i) Valvoline Cummins Pvt Ltd, Faridabad

2.4.1.3 The recommendations were circulated by email to PCD 25 members vide email dated 11 July 2024 for comments/objections with deadline of 18 July 2024.

The Western India Genuine Ghee Company, Mumbai, has raised objection to withdrawal stating that they have regularly attended PCD 25 meetings. The attendance of 8th and 9th meetings of PCD 25:2 indicate that they were not present in the last 2 meetings of the Subcommittee. However, the organization may be retained in PCD 25:2 due to their interest and relevance and their attendance may be monitored in future.

No other objections were raised, hence the co-options and withdrawals (other than The Western India Genuine Ghee Company, Mumbai) can be considered approved.

*The Subcommittee may **CONSIDER**.*

2.5 The panels under the subcommittee are given below:

- i. PCD 25 : 2 : P1 Panel for Formulation of Standards on Aviation Grade Hydraulic Fluids (Convenor – Shri Siva Kasturi, Shell India Markets Private Limited, Mumbai)

*The Subcommittee may **NOTE**.*

ITEM 3 R&D PROJECTS TO SUPPORT STANDARDIZATION

Bureau of Indian Standards (BIS), as the National Standards Body of India is responsible for formulating Indian Standards for products, processes and services. In the pursuit of this endeavour, it has so far developed more than 22000 Indian Standards. It is important that no standard should be developed without intensive and insightful research work, which is not confined only to the review of the existing literature and focus group



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discussions on the subject chosen for standardization, but also covers the detailed field level study of the existing processes and practices in product manufacturing and service delivery. This requires a large network of domain area experts to carry out the research & development work. The Memorandum of Understanding with the premier educational institutions imparting technical and professional education opens the window to the opportunities to expand this network substantially by utilizing the intellectual capital that resides with the faculty and the research scholars in these institutions. This association is conceived not only as a way to promote research & development work necessary for standards formulation but also to enrich the research ecosystem in these educational institutions.

The R&D guidelines are attached.



R&D Guidelines Sep 2023.pdf

*The Subcommittee may **CONSIDER** utilizing the provision of R&D projects for revision of standards/development of new standard*

3.1 Subjects for R&D Project


Sl. No.	Indian Standard	Decision in Previous Meetings	Action Taken/Current Status
i.	IS 1153 : 2021 Temporary Corrosion Preventives Hard Film Solvent Deposited	<ul style="list-style-type: none"> The Subcommittee NOTED that the Terms of Reference (ToR) is almost ready and only questionnaires for manufacturer, importers/exporters and users need to be added. The Subcommittee RECOMMENDED the panel to meet within first 2 weeks of May to review and finalize the draft ToR. After the panel finalizes the draft ToR, it will be presented to PCD 25 Chairperson for approval and submitted to relevant department of BIS for hosting. <p>COMMITTEE DECISION: The Committee ENDORSED the recommendation and ADVISED the panel for drafting of terms of reference (ToR) of R&D project for revision of temporary corrosion preventives to meet and finalize the questionnaires for the ToR at the earliest and submit the ToR for approval of Chairperson PCD 25.</p>	<ul style="list-style-type: none"> The draft ToR, including questionnaires for manufacturers, importers/exporters and users, will be prepared and sent to panel with a timeline of one week to provide comments. If no comments are received, the ToR will be finalized with approval of Chairperson PCD 25. <i>The Subcommittee may NOTE.</i>
ii.	IS 1154 : 2022 Temporary Corrosion Preventive Fluid, Soft Film, Solvent Deposited, Water Displacing - Specification		
iii.	IS 14779 : 2000 General purpose oil based temporary corrosion preventives - Specification		
iv.	IS 5730 : 1970 Specification for volatile corrosion inhibitor powder		
v.	IS 6049 : 1971 Code of practice for application of temporary corrosion preventives		
vi.	IS 6050 : 1971 Specification for temporary corrosion preventives, strippable, hot dipping type		



vii.	IS 6263 : 2018 Volatile corrosion inhibitor (VCI) treated paper - Specification		
viii.	IS 958 : 2020 Temporary Corrosion Preventives, Grease Type, Soft Film - Specification		

ITEM 4 ACTIVITIES OF INDUSTRIAL LUBRICANTS & SPECIALTIES SUBCOMMITTEE

4.1 Draft Standards/Amendments for Finalization

Sl. No.	Indian Standard/Document No.	Decision in Previous Meetings	Action Taken/Current Status
i.	PCD 25(23352) Adoption of ISO 6521-1 to replace IS 13256 : 1992 Air compressor lubricants - Types daa and dab - Specification	<ul style="list-style-type: none"> The Subcommittee NOTED that the document has been sent for printing. 	<ul style="list-style-type: none"> Document is under printing. <i>The Subcommittee may NOTE.</i>
ii.	PCD 25(25217)WC Third Revision of IS 8406 : 1993 Gear lubricants for enclosed industrial gear drives - Specification	<ul style="list-style-type: none"> The Subcommittee THANKED Dr Kavita Rai for the revised draft and NOTED that the document is under WC till 9 June 2024. The Subcommittee REQUESTED all members go through the WC document and give comments on BIS portal. 	<ul style="list-style-type: none"> Comments received on the WC document are attached:  WC%20Collated%20Comments%20-%20 <i>The Subcommittee may CONSIDER.</i>
iii.	PCD 25(27069)WC Third Revision of IS 1758 : 1986 Specification for jute batching oil	<ul style="list-style-type: none"> The Subcommittee NOTED that the document is under preparation for wide circulation. 	<ul style="list-style-type: none"> The document is issued into WC with document number PCD 25(27069)WC for a period of 60 days, ending on 4 February 2025. If no comments received on the WC, the document may be finalized for printing. <i>The Subcommittee may CONSIDER.</i>
iv.	PCD 25 (27070)WC Fourth Revision of IS 2297 : 1997 Gear lubricants, compounded - Specification	<ul style="list-style-type: none"> The Subcommittee NOTED that the document is under preparation for wide circulation. The Subcommittee especially REQUESTED DGQA to review the WC when it is issued and provide comments, if required. 	<ul style="list-style-type: none"> The document is issued into WC with document number PCD 25(27070)WC for a period of 60 days, ending on 6 February 2025. If no comments received on the WC, the document may be finalized for printing.



			<ul style="list-style-type: none"> The Subcommittee may CONSIDER.
v.	IS 9611 : 1980 Specifications for cutting oil soluble, clear	<ul style="list-style-type: none"> The Subcommittee NOTED that the document is under preparation for wide circulation. 	<ul style="list-style-type: none"> The document is under preparation for circulation into WC. The Subcommittee may NOTE.

4.2 Draft Standards/Amendments for Approval for Wide Circulation

NIL

4.3 Drafts Under Preparation

Sl. No.	Indian Standard/Document No.	Decision in Previous Meetings	Action Taken/Current Status
i.	IS 1628 : 1986 Specification for axle oil	<ul style="list-style-type: none"> The Subcommittee NOTED that comments from RDSO and editable file of IS 1628 was provided to Dr. Kavita Rai in 1st week of April. Dr Kavita Rai informed the Subcommittee that revised draft will be provided by the mid of May 2024. 	<ul style="list-style-type: none"> Revised draft of IS 1628 awaited from Dr. Rai. The Subcommittee may CONSIDER.
ii.	IS 3098 : 1983 Specification for oil, hydraulic, mineral oil type & IS 10522 : 1983 Specification for antiwear hydraulic oil & IS 11656 : 1986 Specification for antiwear hydraulic oil extra heavy duty type & PCD 25 (14904) All weather antiwear hydraulic oils - Specification	<ul style="list-style-type: none"> The Subcommittee NOTED that editable file of IS 10522 along with other documents – IS 11656, IS 3098, PCD 25(14904) – were sent to Shri Umesh Dwivedi in last week of March 2024. As the merging of these standards and preparation of a consolidated document has been pending since a long time, the Subcommittee RECOMMENDED BIS to prepare a working draft, consolidating the requirements from the individual standards and share it with Shri Umesh Dwivedi (Gulf Oil) and Shri C S Balamurugan (TIDE Water) by mid-May 2024. The Subcommittee further REQUESTED Shri Umesh Dwivedi and Shri C S Balamurugan to coordinate and review the working draft prepared by BIS, make necessary changes, and finalize the working draft to be issued into WC. 	<ul style="list-style-type: none"> Editable files of the all the standards and documents sent to the group - Shri Abhijit Sarkar (HPCL), Shri Nitin Chaudhari and Shri Sandeep Sarode (Lubrizol), Shri Umesh Dwivedi (Gulf Oil), and Shri C S Balamurugan (Tide Water) – to prepare merged document. However, merged working draft is awaited. The Subcommittee may CONSIDER.



		<p>COMMITTEE DECISION: The Committee RECOMMENDED that, hydraulic fluids being a very important technical product being widely used in industry, the consolidation of IS 3098, IS 10522, IS 11656, PCD 25(14904) and preparation of merged draft should be carried out by subject matter experts. Hence, the Committee REQUESTED Shri Abhijit Sarkar (HPCL), Shri Nitin Chaudhari and Shri Sandeep Sarode (Lubrizol), Shri Umesh Dwivedi (Gulf Oil), and Shri C S Balamurugan (Tide Water) to consolidate and prepare the merged draft and directed BIS to provide them with the relevant documents and editable files.</p> <p>The Committee REQUESTED the group to provide the merged document by 1st week of June 2024.</p>	
iii.	<p>PCD 25(25990)WC</p> <p>IS 10531 : 1983 Code of practice for selection and use of fire - Resistant hydraulic fluids</p>	<ul style="list-style-type: none"> The Subcommittee NOTED that IS 15178 has been recently transferred to PCD from PGD. The latest ISO 7745 : 2024 will be issued into WC for 60 days for adoption to replace IS 10531. 	<ul style="list-style-type: none"> ISO 7745 : 2024 was circulated into WC for identical adoption with document number PCD 25(25990)WC for a period of 60 days, ending on 24 August 2024. No comments received on the WC. The Subcommittee may CONSIDER finalizing the document for printing.
iv.	<p>IS 10532 (Part 1) : 1983 Specification for fire - Resistant hydraulic fluids: Part 1 dilute emulsions for powered supports</p>	<ul style="list-style-type: none"> In 8th meeting, the Subcommittee NOTED that ISO 12922 : 2020 “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” has been issued into WC as PCD 25 (23946)WC on 23 October 2023 for 2 months and REQUESTED all members to review and comment on the document. The Subcommittee NOTED that emails and letters were sent to IIP, DGMS, SAIL, NTH, HPCL, BPCL, and IOCL seeking comments on WC, 	<ul style="list-style-type: none"> The document has been finalized and submitted for printing. The Subcommittee may NOTE.
v.	<p>IS 10532 (Part 2) : 1983 Specification for fire - Resistant hydraulic fluids - Part 2 : invert emulsions (Water - In - Oil) type</p>		
vi.	<p>IS 10532 (Part 3) : 1983 Specification for fire - Resistant hydraulic fluids - Part 3 : water glycol type</p>		



<p>vii.</p>	<p>IS 10532 (Part 4) : 2019 Fire resistant hydraulic fluids - Specification: Part 4 phosphate esters type</p>	<p>especially regarding the test facility for fire resistance and ignition. Reply is awaited.</p> <ul style="list-style-type: none"> • IOCL, BPCL and HPCL confirmed that new test facilities prescribed in ISO 12922 for fire resistance and ignition are not available with them 	
<p>viii.</p>	<p>IS 10532 (Part 5) : 2016 Fire resistant hydraulic fluids - Specification: Part 5 organic ester type</p>	<ul style="list-style-type: none"> • Dr. Devendra Singh from IIP informed that Dr. G D Thakre will inform BIS regarding availability of testing facilities for the test as per ISO 12922 in 2 weeks' time. • Dr. Kavita Rai recommended that instead of adopting the new test methods for fire resistance and ignition (ISO 15029, ISO 14935, and ISO 20823), the fire-resistant tests prescribed in IS 7985 may be included in ISO 12922 as technical modification. • Considering the discussion and input from members, the Subcommittee RECOMMENDED BIS to send the main ISO standard ISO 12922 along with copies of referred test method standards to all members of PCD 25:2 and PCD 25 for a period of 1 month and REQUESTED all members to examine the document from the point of view of availability of test methods. • The Subcommittee also RECOMMENDED BIS to seek input from PCD 01 regarding availability of the testing facilities in India. <p>COMMITTEE DECISION: Considering the revision of these standards are delayed for quite some time and their importance for the mining and steel plants, Committee felt that latest standard needs to be in place.</p> <p>In view of lack of comments on WC document and letters sent by BIS to relevant stakeholders, the Committee DECIDED to finalize PCD 25(23946) for identical adoption of ISO 12922 : 2020, which will replace IS 10532 (Parts 1 – 5).</p>	



ix.	<p>IS 1115 : 1986 Specification for general purpose cutting oil, soluble</p>	<ul style="list-style-type: none"> The Subcommittee REQUESTED IOCL R&D to nominate a suitable expert for revision of the standard. <p>COMMITTEE DECISION: The Committee ENDORSED the recommendation of Subcommittee and REQUESTED Shri Mukul Maheshwari, IOCL R&D, to nominate a suitable expert to prepare the revised draft, as agreed in last meeting.</p>	<ul style="list-style-type: none"> Shri Mukul Maheshwari, IOCL R&D, nominated Dr. S Paul from IOCL R&D to prepare the revised draft. Editable file of IS 1115 along with soft copies of the standard and amendment has been sent to Dr. Paul with request to provide comments/revised draft. Revised draft awaited. The Subcommittee may CONSIDER.
x.	<p>IS 14385 : 1996 Aluminium cold rolling oils - Specification</p>	<ul style="list-style-type: none"> The Subcommittee NOTED that there has been inordinate delay in the revision of this standard. The Subcommittee RECOMMENDED that NALCO, BALCO, and HINDALCO may be co-opted as members in the Subcommittee and IS 14385 may be sent to the nominated representatives seeking comments for revision. <p>COMMITTEE DECISION: The Committee ENDORSED the recommendation of Subcommittee to co-opt NALCO, BALCO, and HINDALCO and request them for comments on the standard. The Committee also DECIDED that if no comments are received by next meeting, the standard may be archived.</p>	<ul style="list-style-type: none"> Letters were sent to NALCO, BALCO, and HINDALCO to provide comments on IS 14385. Comments were received on IS 14385 from HINDALCO and approval was taken from Chair PCD 25 to circulate the revised draft into WC for a period of 60 days. The document is under preparation for circulation into WC. The Subcommittee may NOTE.
xi.	<p>IS 1589 : 1994 Oil, cylinder - Specification</p>	<ul style="list-style-type: none"> The Subcommittee NOTED that comments are awaited from RDSO and RECOMMENDED to follow up with RDSO <p>COMMITTEE DECISION: The Committee ENDORSED the recommendation of Subcommittee and REQUESTED RDSO to provide comments on the standard within 1 month (end of May 2024).</p> <p>If no comments are received, the Committee DECIDED to archive the standard.</p>	<ul style="list-style-type: none"> Soft copy of IS 1589 along with editable file of the standard was sent to RDSO for comments. No comments received yet. The Subcommittee may CONSIDER archiving the standard.
xii.	<p>PCD 25(26883)WC Second Revision of</p>	<ul style="list-style-type: none"> The Subcommittee NOTED that a revised draft was submitted by Shri Sunjay Kumar on 21 June 2022, in which requirement of cooling 	<ul style="list-style-type: none"> The document is issued into WC with document number PCD 25(26883)WC for a



	<p>IS 4543 : 1977 Specification marquenching oil</p>	<p>characteristic analysis was added and the corresponding test method using nickel alloy probe was added.</p> <ul style="list-style-type: none"> • Gulf Oil also confirmed that ISO 9950 : 1995 can be adopted for the cooling characteristic test and there were no other changes made in the revised draft. • The Subcommittee RECOMMENDED to send the revised draft to Shri Umesh Dwivedi (Gulf Oil) and Shri Abhijit Sarkar (HPCL) to review if any other changes are required considering latest technologies and inform BIS by end of May 2024. • If no other changes are required, the Subcommittee AGREED that an amendment can be issued for the proposed change and RECOMMENDED BIS to issue the amendment for WC for a period of 60 days. <p>COMMITTEE DECISION: The Committee stated that revision of this standard has been pending since long and hence DECIDED that the revised draft provided by Shri Sanjay Kumar (Gulf Oil) to be issued into WC for 60 days.</p> <p>The Committee REQUESTED Shri Abhijit Sarkar (HPCL) and Shri Umesh Dwivedi (Gulf Oil) to review the WC document and provide comments.</p>	<p>period of 60 days, ending on 3 January 2025.</p> <ul style="list-style-type: none"> • If no comments received on the WC, the document may be finalized for printing. • <i>The Subcommittee may CONSIDER.</i>
<p>xiii.</p>	<p>IS 9182 (Part 1) : 1993 Lubricants for wire ropes and fibre cores - Specification: Part 1 lubricants for fibre core of wire - Ropes</p>	<ul style="list-style-type: none"> • The Subcommittee NOTED that editable files of IS 9182 (Parts 1,2, and 3) were sent to Shri Umesh Dwivedi in last week of March 2024. • Shri Umesh Dwivedi has informed that revised drafts will be provided by him by 1st week of June 2024. 	<ul style="list-style-type: none"> • Revised drafts of the standards are still awaited from Shri Umesh Dwivedi. • <i>The Subcommittee may CONSIDER.</i>
<p>xiv.</p>	<p>IS 9182 (Part 2) : 1993 Lubricants for wire ropes and - Fibre cores - Specification part - 2 lubricants for wire strands and ropes</p>	<p>COMMITTEE DECISION: The Committee ENDORSED the recommendation of Subcommittee and REQUESTED Shri Umesh Dwivedi (Gulf</p>	



<p>xv.</p>	<p>IS 9182 (Part 3) : 1993 Lubricants for wire ropes and fibre cores - Specification: Part 3 lubricants for rope dressing in service</p>	<p>Oil) to provide the revised drafts by 1st week of June 2024.</p>	
<p>xvi.</p>	<p>IS 9554 : 1980 Specifications for lubricants for open gears</p>	<ul style="list-style-type: none"> • The Subcommittee NOTED that copies of ISO 12925-2, IS 9554, and IS 16909 sent to Dr. T Singh, Shri Siva Kasturi (Convenor), and Shri Umesh Dwivedi in last week of March 2024. • The Subcommittee REQUESTED the members to verify whether the ISO standard can replace both Indian Standards or one of them • If ISO 12925-2 cannot replace IS 9554, the Subcommittee REQUESTED Shri Umesh Dwivedi to provide the revised draft. <p>COMMITTEE DECISION: The Committee REQUESTED Dr. T Singh to examine if ISO 12925-2 can replace IS 9554 and IS 16909 and inform BIS in 2 weeks' time.</p> <p>If yes, the Committee DIRECTED BIS to issue ISO 12925-2 into WC for 60 days to replace IS 9554 and IS 16909.</p>	<ul style="list-style-type: none"> • Soft copies of ISO 12925-2, IS 9554, and IS 16909 sent to Dr. T Singh to examine if ISO 12925-2 can replace IS 9554 and IS 16909. • Response awaited. • <i>The Subcommittee may CONSIDER.</i>
<p>xvii.</p>	<p>Aviation Grade Hydraulic Fluids</p>	<ul style="list-style-type: none"> • The Subcommittee RECOMMENDED the panel to meet in May 2024 for planning the development of a working draft. <p>COMMITTEE DECISION: The Committee ENDORSED the recommendation of Subcommittee to conduct a meeting in May 2024 and strongly recommended the panel to develop working draft considering urgency of Indian defence.</p>	<ul style="list-style-type: none"> • PCD 25:2/P1 "Panel for Formulation of Standards on Aviation Grade Hydraulic Fluids" met on 5 November 2024. • BIS presented technical specifications sourced online for aviation grade hydraulic fluid from three manufacturers - Philips, Avi Oil, and Shell - and enquired from the panel regarding the classification and requirements that should be covered in the standard. • Gp Capt Asheesh Srivastava suggested that the panel work on synthetic aviation grade hydraulic fluid as the aircraft industry is now moving away from mineral based hydraulic fluid due to



			<p>fire hazard and bulk modulus issue. However, he also acknowledged that defence sector still majorly uses mineral based aviation grade hydraulic fluid. Hence, BIS suggested that the panel should focus on mineral based aviation grade hydraulic fluid first to meet the need for defence sector and thereafter take up development of standard for synthetic aviation grade hydraulic fluid based on market need and with approval of PCD 25. The suggestion was accepted by panel members.</p> <ul style="list-style-type: none"> • The panel members discussed on possible classification of aviation grade hydraulic fluid and classification based on either viscosity or end application was suggested. • Dr. Kavita Rai pointed out that there is a Joint Services Specification (JSS 9150-090 : 2021) for Aviation Grade Hydraulic Fluid for Defence sector. She informed that this specification was formed with the involvement of hydraulic oil manufacturers as well as several departments of Ministry of Defence. Upon this information, BIS suggested that as the NWIP was received from Gp Capt Asheesh Srivastava (representative of Air Force) and the Committee had instructed the panel to develop the standard for defence purposes, now there is no need for BIS to work on this subject as a JSS is already existing. • Shri Asheesh Srivastava recommended that an Indian Standard may be developed
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			<p>for Aviation Grade Hydraulic Fluid for civil aviation sector. BIS suggested that before starting the endeavour to develop a standard for aviation grade hydraulic fluid for civil aviation sector, a need for the standard has to be established. For this, the proposal has to come from an end user (civil aviation sector) or manufacturer of hydraulic oil for civil aviation sector. If there is no market need for the standard, the Committee may not take up the subject as it takes significant amount of time and effort to develop a standard.</p> <ul style="list-style-type: none"> • After further discussion, the panel agreed to recommend to PCD 25 that there is no need to develop a standard for Aviation Grade Hydraulic Fluid for Defence purposes as JSS 9150-090 : 2021 is existing for this product. The panel requested Gp Capt Asheesh Srivastava to share a copy of the JSS with BIS for reference. • Regarding the suggestion to develop a standard for Aviation Grade Hydraulic Fluid for civil aviation, Convenor recommended to discuss in PCD 25 whether there is market need for such a standard and requested panel members to submit any supporting market related data. • <i>The Subcommittee may CONSIDER.</i>
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ITEM 5 ANY OTHER BUSINESS

ITEM 6 VOTE OF THANKS



Annex I

List of Indian Standards under the Scope of PCD 25:2

Sl. No.	Indian Standard	Title
1.	IS 493 (Part 1) : 2019	Specification for general purpose machinery and spindle oils: Part 1 machinery oils (Second Revision)
2.	IS 493 (Part 2) : 2019	Specification for general purpose machinery and spindle oils: Part 2 spindle oils (Second Revision)
3.	IS 1012 : 2002	Turbine lubricating oils - Specification (Third Revision)
4.	IS 1083 : 2022	Industrial White Oil - Specification (Second Revision)
5.	IS 1115 : 1986	Specification for general purpose cutting oil, soluble (Second Revision)
6.	IS 1153 : 2021	Temporary Corrosion Preventives Hard Film Solvent Deposited
7.	IS 1154 : 2022	Temporary Corrosion Preventive Fluid, Soft Film, Solvent Deposited, Water Displacing - Specification (second revision)
8.	IS 1589 : 1994	Oil, cylinder - Specification (First Revision)
9.	IS 1628 : 1986	Specification for axle oil (Second Revision)
10.	IS 1758 : 1986	Specification for jute batching oil (Second Revision)
11.	IS 2297 : 1997	Gear lubricants, compounded - Specification (Third Revision)
12.	IS 2664 : 1980	Specification for quenching oil (Second Revision)
13.	IS 3065 : 2021	Cutting oil neat
14.	IS 3098 : 1983	Specification for oil, hydraulic, mineral oil type (Second Revision)
15.	IS 4543 : 1977	Specification for marquenching oil (First Revision)
16.	IS 4578 : 1997	Lubricants - Lubricating oil for refrigeration machinery - Specification (Second Revision)
17.	IS 5730 : 1970	Specification for volatile corrosion inhibitor powder
18.	IS 6049 : 1971	Code of practice for application of temporary corrosion preventives
19.	IS 6050 : 1971	Specification for temporary corrosion preventives, strippable, hot dipping type



20.	IS 6263 : 2018	Volatile corrosion inhibitor (Vci) treated paper - Specification (First Revision)
21.	IS 6552 : 1987	Specification for straight mineral high demulsibility oils (First Revision)
22.	IS 8406 : 1993	Gear lubricants for enclosed industrial gear drives - Specification (Second Revision)
23.	IS 9182 (Part 1) : 1993	Lubricants for wire ropes and fibre cores - Specification: Part 1 lubricants for fibre core of wire - Ropes (First Revision)
24.	IS 9182 (Part 2) : 1993	Lubricants for wire ropes and - Fibre cores - Specification part - 2 lubricants for wire strands and ropes (First Revision)
25.	IS 9182 (Part 3) : 1993	Lubricants for wire ropes and fibre cores - Specification: Part 3 lubricants for rope dressing in service (First Revision)
26.	IS 9466 : 2020	Viscosity Classification For Industrial Liquid Lubricants (First Revision)
27.	IS 9554 : 1980	Specifications for lubricants for open gears
28.	IS 9611 : 1980	Specifications for cutting oil soluble, clear
29.	IS 10522 : 1983	Specification for antiwear hydraulic oil
30.	IS 10531 : 1983	Code of practice for selection and use of fire - Resistant hydraulic fluids
31.	IS 10532 (Part 1) : 1983	Specification for fire - Resistant hydraulic fluids: Part i dilute emulsions for powered supports
32.	IS 10532 (Part 2) : 1983	Specification for fire - Resistant hydraulic fluids - Part 2 : invert emulsions (Water - In - Oil) type
33.	IS 10532 (Part 3) : 1983	Specification for fire - Resistant hydraulic fluids - Part 3 : water glycol type
34.	IS 10532 (Part 4) : 2019	Fire resistant hydraulic fluids - Specification: Part 4 phosphate esters type (First Revision)
35.	IS 10532 (Part 5) : 2016	Fire resistant hydraulic fluids - Specification: Part 5 organic ester type
36.	IS 11159 (Part 1) : 2020	General Classification of Lubricants, Industrial Oils and Related Products Part 1 Class L (First Revision)
37.	IS 11159 (Part 2) : 2021	Classification of lubricants industrial oils and related products Part 2 Family A Total loss systems
38.	IS 11159 (Part 3) : 2021	General classification of lubricants industrial oils and related products Part 3 Family F Spindle bearings bearings and associated clutches



39.	IS 11159 (Part 4) : 2011/ ISO 6743-3 : 2003	Lubricants, industrial oils and related products (Class L) - Classification: Part 4 family d (Compressors)
40.	IS 11159 (Part 5) : 2019/ ISO 6743-4 : 1999	Lubricants, industrial oils and related products (Class L) - Classification: Part 5 family h (Hydraulic Systems) (First Revision)
41.	IS 11159 (Part 6) : 2011/ ISO 6743-5 : 2006	Lubricants, industrial oils and related products (Class L) - Classification: Part 6 family t (Turbines)
42.	IS 11159 (Part 7) : 2019/ ISO 6743-6 : 1990	Lubricants, industrial oils and related products (Class L) - Classification: Part 7 family c (Gear Systems) (First Revision)
43.	IS 11159 (Part 13) : 2019/ ISO 6743-12	Lubricants, industrial oils and related products (Class L) - Classification: Part 13 family q (Heat Transfer Fluids)
44.	IS 11186 : 1985	Specification for synthetic grinding fluid
45.	IS 11656 : 1986	Specification for antiwear hydraulic oil, extra heavy duty type
46.	IS 11695 : 2020	Inhibited Type Machinery Oils Specification (First Revision)
47.	IS 11696 : 2020	Inhibited Type Spindle Oils Specification (First Revision)
48.	IS 12927 : 2004	Glass mould oils - Specification (First Revision)
49.	IS 13256 : 1992	Air compressor lubricants - Types daa and dab – Specification
50.	IS 13796 : 2004	Molybdenum disulphide powder for lubricants - Specification (First Revision)
51.	IS 13797 : 2021	Molybdenum Disulphide Dispersion in Oil - Specification (first revision)
52.	IS 13913 : 2020	Molybdenum Disulphide, Paste Specification (First Revision)
53.	IS 14384 : 1996	Colloidal graphite dispersion in oil - Specification
54.	IS 14385 : 1996	Aluminium cold rolling oils - Specification
55.	IS 14745 : 1999	Thermic fluids – Specification
56.	IS 14779 : 2000	General purpose oil based temporary corrosion preventives - Specification
57.	IS 15112 (Part 1) : 2002/ ISO 12925-1	General classification of lubricants, industrial oils and related products: Part 1 class L
58.	IS 16775 : 2018/ ISO/TS 11365:2011	Petroleum and related products - Guidance for the maintenance and use of triaryl phosphate ester turbine - Control fluids
59.	IS 16852 : 2018	Petroleum and related products - Guidance for in - Servicing of lubricating oils for steam, gas and combined - Cycle turbines



60.	IS 16909 : 2018	Girth gear lubricants - Specification
61.	IS 17382 : 2021	Syn Gas Ammonia Turbo Compressor Lubricating Oils Specification



Annex II

PCD 25:SC 2 Industrial Lubricants & Specialty Products Subcommittee

S.No.	Organization	Member Name	Member Designation	Role
1.	Shell India Markets Private Limited, Mumbai	Shri Siva Kasturi		Convenor
2.	Afton Chemicals Private Limited, Mumbai	Shri Anand Kumar		Principal Member
3.	Balmer Lawrie and Company Limited, Kolkata	Dr. Somnath Chattopadhyay	Sr Manager	Alternate Member
		Shri Madhaba Chandra Dash	Manager (R&D)	Principal Member
4.	Bharat Petroleum Corporation Limited, Mumbai	Dr. Kashinath Sutar	SR. MANAGER R & D, LUBES	Alternate Member
		Shri Sarvesh S. Tomar		Principal Member
		Shri Vivek Jain	Manager (R&D)	Young Professional
5.	CSIR - Indian Institute of Petroleum, Dehradun	Dr. Devendra Singh	Sr. Principal Scientist	Alternate Member
		Dr G. D Thakre	Sr. Pr. Scientist	Principal Member
6.	Danfoss Technologies Pvt. Ltd., Pune	Shri Anjeeve George	Lead Engineer	Principal Member
7.	Defence Materials and Stores Research and Development Establishment, Kanpur	Nomination Awaited		
8.	Directorate General of Quality Assurance, Ministry of Defence, Kanpur	Dr. Om Prakash Singh	Principal Scientific Officer	Alternate Member
		Shri A K Kanaujia	JAG (NFSG)	Principal Member
9.	Gulf Oil Lubricants India Limited, Mumbai	Shri Tapas Chakraborty	Dy. General Manager - Technical Services	Alternate Member



		Shri Umesh Chandra Dwivedi	General Manager - Global Technology	Principal Member
		Shri D Vinod Kumar	Senior R&D Scientist	Alternate Member
10.	Hindalco Industries Limited	Nomination Awaited		
		Shri Abhijit A Sarkar	Deputy General Manager – Product Development & OEM Business	Alternate Member
		Sh. Lokender Singh Tevathiya	Chief Manager - Quality Control	Principal Member
11.	Hindustan Petroleum Corporation Limited, Mumbai	Shri Shakti P Mishra	DGM (Technical Services)	Young Professional
		S. Venkatesan	General Manager (Lube – QC)	Alternate Member
12.	Indian Oil Corporation (MKTG), Mumbai	Peeyush Dubey	Dy. General Manager (Technical Services)	Alternate Member
		Dr Chanakya Tripathi	Senior Research Manager	Alternate Member
13.	Indian Oil Corporation (R and D Centre), Faridabad	Dr. Kavita Rai	DGM (IL)	Principal Member
		Shri Nitin Chaudhari	Product manager metalworking fluids and grease	Alternate Member
14.	Lubrizol India Limited, Mumbai	Shri Sandeep Sarode	IMEA IND & Fuels Product Manager	Principal Member
15.	R&D Centre for Iron and Steel, SAIL, Ranchi	Nomination Awaited		
		Shri Kamal Prakash Singh	Deputy Director (M&C)	Principal Member
16.	RDSO, Ministry of Railways, Lucknow	Shri Bharat Prasad	Assistant Research Officer	Alternate Member



17.	Savita Oil Technologies Limited, Mumbai	Shri Elanchezhian K	Vice President - Technical	Principal Member
18.	Tata Steel	Nomination Awaited		
		Nomination Awaited		Principal Member
19.	Tide Water Oil Co. India Limited, Kolkata	Shri C.S. Balamurugan		Alternate Member
		Shri Dhanesh Rathod		Principal Member
20.	The Western India Genuine Ghee Company Private Limited, Mumbai	Shri Paresh Rathod		Alternate Member
21.	Vinni Chemicals Private Limited, New Delhi	Shri Harsh Vardhan Jain		Principal Member