

**BUREAU OF INDIAN STANDARDS**

**MINUTES**

**INORGANIC CHEMICALS SECTIONAL COMMITTEE, CHD 1  
PANEL MEETING ON BORIC ACID – SPECIFICATION (IS 10116)**

**2:30 PM, Tuesday, 06 June 2023  
WebEx Video Conferencing/  
Auditorium, Bureau of Indian Standards  
Manak Bhawan, New Delhi**

**Chairperson : Dr. Kannan Srinivasan, Director, CSMCRI  
Member Secretary : Shri Sagar Singh, Bureau of Indian Standards (BIS)**

**Members present:**

1. Dr. Kannan Srinivasan, Director, CSMCRI
2. Dr. J.R. Chunawala, CSMCRI
3. Dr. Pratyush Maiti, CSMCRI
4. Shri H S Das, Alkali Manufacturers Association of India
5. Shri PVVR Sarma, Geological Survey of India
6. Shri Nageshwar Kapuri, Hindalco
7. Smt Ritu Grover, Delhi Jal Board
8. Shri Mandar Gaikwad, The Dharamsi Morarji Chemical Company Limited
9. Shri Bhavesh Vora, GACL
10. Shri H S Das, AMAI
11. Shri Kuldeep, The Dharamsi Morarji Chemical Company Limited
12. Shri Pravin Likhari, IICT
13. Dr Vishal Choudhary, DCPC

**Invitees:**

1. Shri P S Haridas, Navin Fluorine International Limited
2. Shri Sajal Jain, Indoborax
3. Shri Chandrakant Mody, Indoborax
4. Smt Laxmi Menon, Indoborax
5. Shri Vishal Patel, Prime Industries
6. Shri Naman Choudhary, Indianborax, Kolkata
7. Shri Anand Shetty, Organic Industries Pvt Ltd
8. Shri Pravir Shetty, Organic Industries Pvt Ltd
9. Shri Girish Mehta, Borochemie India Pvt.Ltd
10. Shri Ujjwal Garg, Eastern Borax
11. Shri Mitulkumar Patel, Rasoham Chemicals
12. Dr Hemlata, IIP
13. Dr Kishore, Gujarat Boron Derivatives
14. Dr Dinesh, Shree Tirupati Industries, Gujarat
15. Shri Naman Choudhary

## Item 1 WELCOME AND INTRODUCTORY REMARK

### 1.1 Welcome by BIS

On behalf of BIS, Shri Ajay Lal (Head, Chemical Department) and Shri Sagar Singh (Member Secretary) welcomed the Chairman and all the participants present in the meeting and requested them to participate actively in the deliberations. Shri Ajay Lal highlighted that IS 10116 Boric Acid Specification is presently under mandatory certification. This standard specifies the requirements as well as the sampling and testing methods for boric acid used in the production of capacitors, electronics, nuclear energy, foundries, fireproofing of worker's apparel, glass and ceramics, explosives, refractories, paints, chemicals, dye intermediates, electroplating, leather, adhesives, and enamel. Three grades of boric acid are specified in the Standard based on the application - Special quality (SQ), Technical (TECH) and Explosive grade.

### 1.2 Opening remarks by the Chairman

Dr. Kannan Srinivasan, Director, CSMCRI welcomed all the members present in the meeting and called for collective effort of the members to formulate national standards of value. He requested all the members to participate actively in the meeting and advised them to give their inputs with regard to the chloride and sulphates contents of Boric Acid specification (IS 10116).

## Item 2 REVIEW OF INDIAN STANDARDS

### 2.1 IS 10116 Boric Acid – Specification

The members had a detailed deliberation on the chloride and sulphates contents of technical grade boric acid. As per clause no. 4.4 of IS 10116 'Additional Requirement for Technical Grade Boric Acid', the technical grade boric acid shall also comply with the following additional requirements of polishing compounds when tested according to the methods prescribed in Annex A. Reference to the relevant clauses of Annex A is given in col 5 of the Table 1.:

- a) Chloride (as Cl), : 0.05 – 0.15  
percent by mass
- b) Sulphate (SO<sub>4</sub>), : 0.15 – 0.25  
percent by mass

The comments of various members as presented during the meeting are tabulated below:

Sl. No.	Commentator	Comments
1	Organic Industries Pvt. Ltd	<p>Their representatives proposed to revise the chloride and sulphates contents of the standard as under:</p> <p>Technical Grade :</p> <ul style="list-style-type: none"><li>a. Chloride, percent by mass : 0.00 – 0.15 max</li><li>b. Sulphate (SO<sub>4</sub>), percent by mass : 0.00 – 0.25 max</li></ul> <p>They emphasized that chlorides and sulphates are present as impurities in boric acid and therefore the values should be in terms of Maximum permitted in boric acid.</p>

2	Navin Fluorine International Limited	<p>Their representatives stressed that their requirement is for boric acid containing Max 10 ppm of chloride and sulphates content and proposed to revise the chloride and sulphates contents of the standard as under:</p> <p>a. Chloride (as Cl), percent by mass, Max - 0.05 b. Sulphate (as SO<sub>4</sub>), percent by mass, Max - 0.05</p>
3	Indoborax	<p>Their representatives attended the meeting physically at BIS Office New Delhi and proposed that no changes to be made in the Sulphate and Chloride ranges prescribed for the Technical Grade of Boric Acid in IS 10116 as this product is used in several applications such as ramming mass in induction furnace where the presence of these elements is essential for optimum performance.</p> <p>Technical Grade :</p> <p>a. Chloride (as Cl) percent by mass : 0.05 – 0.15 b. Sulphate (as SO<sub>4</sub>), percent by mass : 0.15 – 0.25</p>
4	Gujarat Boron Derivatives	<p>Their representatives initially proposed that no changes to be made in the Sulphate and Chloride ranges prescribed for the Technical Grade of Boric Acid in IS 10116. However, later on they were of the opinion to revise the chloride and sulphates contents of the standard by putting a Maximum limit.</p>
5	Geological Survey of India	<p>Their representatives proposed that no changes to be made in the Sulphate and Chloride ranges prescribed for the Technical Grade of Boric Acid in IS 10116. Standard has different values prescribed for these elements for 3 different grades and if the range is changed, there will be confusion among various other grades of boric acid such as explosive grade and special quality (SQ) grade.</p>
6	Department of Chemicals and Petrochemicals (DCPC)	<p>Their representatives proposed that no changes to be made in the Sulphate and Chloride ranges prescribed for the Technical Grade of Boric Acid in IS 10116.</p>
7	Shree Tirupati Industries, Gujarat	<p>Their representatives proposed to revise the chloride and sulphates contents of the standard by putting a Maximum limit.</p>
8	Alkali Manufacturers Association of India	<p>Their representatives proposed to revise the chloride and sulphates contents of the standard by putting a Minimum limit.</p>
9	Eastern Borax	<p>Their representatives proposed to revise the chloride and sulphates contents of the standard by putting a Maximum limit. He suggested that arsenic and nitrates content should also be checked and monitored.</p>
10	The Dharamsi Morarji Chemical Company Limited	<p>Their representatives informed that they possess BIS license for all 3 grades of boric acid – SQ, Tech and Explosive and further proposed that no changes to be made in the Sulphate</p>

		and Chloride ranges prescribed for the Technical Grade of Boric Acid in IS 10116.
11	Chairman (Dr Kannan Srinivasan, CSMCRI)	<p>The Chairman from his understanding of the discussion opined that chloride and sulphates are additives for polishing compounds rather than impurities and suggested that there is a need to seek inputs from large user industries such as:</p> <ul style="list-style-type: none"> <li>i) Ceramic Industry</li> <li>ii) Steel Slag Industry</li> <li>iii) Induction Steel Furnace</li> <li>iv) Agro Industry</li> <li>v) Electroplating Industry</li> <li>vi) Chemicals Sector</li> </ul> <p>BIS Sectt to gather inputs from the users of boric acid and the same would be taken up for deliberation in the Sectional Committee Meeting for further decision in this regard.</p>

### Item 3 VOTE OF THANKS

The meeting ended with the hearty vote of thanks to the chair and all the participants.

**BUREAU OF INDIAN STANDARDS**

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**MINUTES****INORGANIC CHEMICALS SECTIONAL COMMITTEE, CHD 01 26th MEETING****10:30 AM, Monday, 19 June 2023****WebEx Video Conferencing/****Auditorium, Bureau of Indian Standards****Manak Bhawan, New Delhi****Chairperson : Dr. Kannan Srinivasan, Director, CSMCRI****Member Secretary : Shri Sagar Singh, Bureau of Indian Standards (BIS)****Members present**

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1. Dr. Kannan Srinivasan, Director, CSMCRI
2. Dr. J.R. Chunawala, CSMCRI
3. Dr. Pratyush Maiti, CSMCRI
4. Dr Vishal Choudhary, Department of Chemicals & Petrochemicals (DCPC)
5. Shri K Srinivasan, Alkali Manufacturers Association of India
6. Shri H S Das, Alkali Manufacturers Association of India
7. Shri Brijesh Tomar, CQA(M), Kanpur, Ministry of Defence
8. Smt Richa Kundra, NTH
9. Smt. Anshumala Shukla, NTH
10. Shri PVVR Sarma, Geological Survey of India
11. Shri Nageshwar Kapuri, Hindalco
12. Shri Prasad, Hindalco
13. Shri NH Khan, Tata Chemicals
14. Shri Sojan Varghese, HUL
15. Smt Ankita Narvankar, HUL
16. Smt Ritu Grover, Delhi Jal Board
17. Shri Satyen Rohitkumar, Industrial Carbons Pvt. Ltd.
18. Shri Mandar Gaikwad, The Dharamsi Morarji Chemical Company Limited
19. Shri Ashok Nagarch, The Dharamsi Morarji Chemical Company Limited
20. Dr Trilochan Mishra, NML
21. Shri R S Baghel, in personal capacity
22. Shri MAU Khan, Consumer Voice
23. Dr. Prashant Sharma, NMDC
24. Shri Vibhuti Roshan, NMDC
25. Shri Bhavesh Vora, GACL
26. Shri V K Mahida, GACL
27. Smt S S Tripathy, NPL
28. Shri Rahul Dhanuka, Global Adsorbents Pvt Ltd
29. Shri Lalit Panda, Global Adsorbents Pvt Ltd
30. Shri D K Jain, in personal capacity
31. Shri O P Sharma, Department of Chemicals and Petrochemicals (DCPC)
32. Shri Pravin Likhar, ICT
33. Shri Kuldeep, The Dharamsi Morarji Chemical Company Limited

**Invitees:**

1. Prof V R Kanetkar, Institute of Chemical Technology, Mumbai
2. Shri P S Haridas, Navin Fluorine International Limited
3. Shri Sajal Jain, Indoborax
4. Shri Chandrakant Mody, Indoborax
5. Smt Laxmi Menon, Indoborax
6. Shri Vishal Patel, Prime Industries
7. Shri Naman Choudhary, Indianborax, Kolkata
8. Shri Anand Shetty, Organic Industries Pvt Ltd
9. Shri Pravir Shetty, Organic Industries Pvt Ltd
10. Shri Sritam Kumar Mishra, Organic Industries Pvt Ltd
11. Shri Girish Mehta, Borochemie India Pvt.Ltd
12. Shri Mitulkamar Patel, Rasoham Chemicals
13. Dr Hemlata, IIP
14. Dr Kishore, Gujarat Boron Derivatives
15. Dr Dinesh, Shree Tirupati Industries, Gujarat
16. Shri Naman Choudhary
17. Shri A K Mitra, MSME
18. Kumar Siddhartha, Chemexcil
19. Shri Ashok Mer, UPL
20. Shri Saurabh Tripathi, Cabot Sanmar Ltd
21. Dr Prashanta Kumar Jal, Cabot Sanmar Ltd
22. Shri DS Padmanabhan, Cabot Sanmar Ltd
23. Shri Sankarshan Joshi, All India Alum Manufacturer's Association

**Item 1 WELCOME AND INTRODUCTORY REMARK****1.1 Welcome by BIS**

On behalf of BIS, Shri Ajay Lal (Head, Chemical Department) and Shri Sagar Singh (Member Secretary) welcomed the Chairman and all the participants present in the meeting and requested them to participate actively in the deliberations. Shri Ajay Lal highlighted that IS 10116 Boric Acid Specification is presently under mandatory certification. This standard specifies the requirements as well as the sampling and testing methods for boric acid used in the production of capacitors, electronics, nuclear energy, foundries, fireproofing of worker's apparel, glass and ceramics, explosives, refractories, paints, chemicals, dye intermediates, electroplating, leather, adhesives, and enamel. Three grades of boric acid are specified in the Standard based on the application - Special quality (SQ), Technical (TECH) and Explosive grade.

**1.2 Opening remarks by the Chairman**

Dr. Kannan Srinivasan, Director, CSMCRI welcomed all the members present in the meeting and called for collective effort of the members to formulate national standards of value. He requested all the members to participate actively in the meeting and advised them to give their inputs with regard to the chloride and sulphates contents of Boric Acid specification (IS 10116). He also highlighted the importance of this technical committee from International perspective (ISO/TC 47 Chemistry and ISO/TC 298 Rare Earth). He further requested all the members to participate actively in the meeting and advised them to give their inputs timely so that the process of standard formulation is not hindered.

## Item 2 CONFIRMATION OF MINUTES OF THE 25<sup>th</sup> MEETING OF CHD 1

The Committee CONFIRMED the Minutes of the 25<sup>th</sup> Meeting of Inorganic Chemicals Sectional Committee, CHD 01 held on 15<sup>th</sup> March 2023 via Video Conferencing as circulated.

## Item 3 COMPOSITION OF CHD 01

3.1 & 3.2 The Committee noted and reviewed the composition of CHD 1 given at **Annex I** and **Annex II** of the agenda and requested the Member Secretary to update the committee composition accordingly.

## Item 4 SCOPE AND ACTIVITIES OF THE INORGANIC CHEMICALS SECTIONAL COMMITTEE, CHD 01

4.1 The Committee NOTED the information given at Item 4.1 of the agenda.

## Item 5 REVIEW OF INDIAN STANDARDS

### 5.1 DOCUMENTS TO BE SENT FOR WIDE CIRCULATION

The Committee noted Item 5.1 of the agenda and decided to send these documents for Wide Circulation for a period of 2 months to receive inputs from various stakeholders. If no comments are received, then the documents are to be directly processed for printing. If comments are received, the same would be examined at BIS Sectt level and put up to the Chairman for his approval and decision for processing the documents for printing or discussion in next sectional committee meeting, as required.

Sl. No.	IS No.	Title
1	Doc No. CHD 01 ( ) IS 251	Soda ash, technical — Specification ( <i>fourth revision</i> )
2	Doc No. CHD 01 ( ) IS 256	Specification for glauber salt (Sodium Sulphate, Decahydrate), technical ( <i>first revision</i> )
3	Doc No. CHD 01 ( ) IS 258	Potash alum — Specification ( <i>second revision</i> )
4	Doc No. CHD 01 ( ) IS 259	Specification for ammonium alum ( <i>first revision</i> )
5	Doc No. CHD 01 ( ) IS 260	Aluminium sulphate, non - Ferric — Specification ( <i>second revision</i> )
6	Doc No. CHD 01 ( ) IS 266	Sulphuric acid — Specification ( <i>third revision</i> )
7	Doc No. CHD 01 ( ) IS 297	Sodium sulphide, technical — Specification (Second Revision)
8	Doc No. CHD 01 ( ) IS 381	Sodium silicate — Specification (Second Revision)
9	Doc No. CHD 01 ( ) IS 494	Specification for aluminium stearate for lubricants ( <i>first revision</i> )
10	Doc No. CHD 01 ( ) IS 505	Light kaolin — Specification ( <i>third revision</i> )

11	Doc No. CHD 01 ( ) IS 566	Specification for disodium phosphate, dodecahydrate ( <i>second revision</i> )
12	Doc No. CHD 01 ( ) IS 567	Disodium phosphate, anhydrous — Specification ( <i>second revision</i> )
13	Doc No. CHD 01 ( ) IS 571	Monosodium phosphate specification ( <i>second revision</i> )
14	Doc No. CHD 01 ( ) IS 573	Trisodium phosphate — Specification ( <i>fourth revision</i> )
15	Doc No. CHD 01 ( ) IS 574	Glassy sodium metaphosphate specification ( <i>fourth revision</i> )

## 5.2 DOCUMENTS UNDER PUBLICATION

The Committee noted Item 5.2 of the agenda.

## 5.3 REAFFIRMATION OF STANDARDS

The Committee noted Item 5.3 of the agenda and requested the members to provide inputs on the below Standards within a time frame of 1 month. If no comments are received, then the Standards are to be reaffirmed as such. If comments are received, the same would be examined at BIS Sectt level and put up to the Chairman for his decision or discussion in next sectional committee meeting, as required.

Sl. No.	IS No.	Title
1	IS 11673 (Part 1) : 2019	Sodium hypochlorite solution - Specification: Part 1 household and industrial use (Second Revision)
2	IS 11673 (Part 2) : 2019	Sodium hypochlorite solution - Specification: Part 2 water treatment use (Second Revision)
3	IS 1065 (Part 1) : 2019	Stable bleaching powder - Specification: Part 1 household and industrial use (Third Revision)
4	IS 1065 (Part 2) : 2019	Stable bleaching powder - Specification: Part 2 treatment of water intended for drinking

## Item 6 COMMENTS ON PRINTED INDIAN STANDARDS

### 6.1 IS 10116 BORIC ACID – SPECIFICATION

The Committee noted Item 6.1 of the agenda and deliberated as follows:

1. Based on the decision in the last panel meeting held on 6<sup>th</sup> June 2023, views/inputs of user industries' association were taken by BIS Sectt vide email dated 9<sup>th</sup> June 2023. Letters were sent to approx. 15 user industries' association out of which 13 responded and all in favor of retaining the range of chloride and sulphates as currently prescribed in the Standard. 4 individual industries wrote to BIS that boric acid supply should have less levels of chloride and sulphates for better end application. The details were also enclosed in the agenda.

2. Prof V R Kanetkar, ICT Mumbai and Dr Vishal Choudhary, Dy Industrial Advisor, DCPC opined that chloride and sulphates are additives for polishing compounds rather than impurities



and agreed with the inputs received from user industries' associations to retain the range as prescribed currently in the Indian Standard, IS 10116:2015. Prof Kanetkar also emphasized on the need of incorporating instrumental test methods such as AAS, ICP-OES in the Standard.

3. Representatives from Indoborax proposed that no changes to be made in the Sulphate and Chloride ranges prescribed for the Technical Grade of Boric Acid as this product is used in several applications such as ramming mass in induction furnace where the presence of these elements is essential for optimum performance. They informed that the presence of polishing compounds - sulphate and chloride in the range currently specified in IS 10116 for Boric Acid technical grade provide durable and accident free furnace lining as the presence of polishing compounds inhibit corrosion.

4. However, representatives from Organic Industries, Shree Tirupati Industries, Navin Florine stressed that chlorides and sulphates are present as impurities in boric acid and therefore the values should be in terms of maximum permitted and proposed to revise the chloride and sulphates contents by putting a max limit (Chloride - 0.15 max, Sulphate – 0.25 max). They emphasized that they are manufacturing boric acid with low levels of chloride and sulphates (less than that specified in the Indian Standard). The Committee sought information from them about user industries' association for non-polishing compounds boric acid, however they couldn't provide the desired information.

5. BIS Sectt in the presence of Head (Chemical Department) suggested the Committee to think on possible solutions to address this matter as given below:

- a. Retaining the range of chloride and sulphates as currently prescribed in the Standard (based on the inputs and comments of user industries associations).
- b. Creating two sub grades under technical grade as it is commonly used/sold in the market incorporating both the requirements as one being polishing (clause 4.5 of IS 10116) and other being non-polishing.
- c. Instead of having a range, putting a max limit to chloride and sulphates content subject to the condition that these are not impurities and there is demand in the market.
- d. The Committee may consider to carry out a research based study/project on the above issues by some R&D Institute such as ICT, Mumbai etc and if required, BIS may provide the required funding for the same.

**6. Dr Kannan Srinivasan, Chairman opined that the Standard was formulated in 2015 by judiciously and thoughtfully considering the functionality aspect and agreed with the viewpoint of user industries' associations and also concurred with BIS Sectt proposal as given above. He deliberated that the range of chloride and sulphates as currently prescribed in the Standard be retained as of now and a research based study/project by an R&D Institute such as ICT Mumbai may be initiated and be completed within a timeframe of 4-6 months. Based on the outcome of this research project, revision of the Standard may be further taken up, if required.**

7. Chairman also emphasized that import/export data of high purity boric acid may also be sought from Department of Commerce & Department of Chemicals & Petrochemicals or any relevant stakeholder. Also, details of varieties of raw materials used/their suppliers, their distribution and end use may also be sought from the manufacturers of boric acid.

## 6.2 IS 798 : 2020 ORTHOPHOSPHORIC ACID — SPECIFICATION (Third Revision)

The Committee noted Item 6.2 of the agenda and decided that if no comments are received, then the amendment is to be directly processed for printing. If comments are received, the same would be examined at BIS Sectt level and put up to the Chairman for his approval and decision for processing the amendment for printing or discussion in next sectional committee meeting, as required.

## Item 7 REVISION OF A5 STANDARDS

7.1 The Committee deliberated on Item 7.1 of the agenda and requested the Committee members to voluntarily take Standards from the list given below based on their interest and expertise and provide their comments to BIS Sectt within 1 month.

Sl. No.	IS No.	Title
1	IS 2317 : 1975	Method for gravimetric determination of sulphates (First Revision)
2	IS 2780 : 1964	Specification for sodium bromide, pure
3	IS 2797 : 1998	Potassium bromide - Specification (Third Revision)
4	IS 1540 (Part 1) : 1980	Specification for quick lime and hydrated lime for chemical industries: Part 1 quick lime (Second Revision)
5	IS 1540 (Part 2) : 1990	Quicklime and hydrated lime for chemical industries - Specification: Part 2 hydrated lime (Third Revision)
6	IS 4150 : 1984	Specification for potassium chloride, technical (Second Revision)
7	IS 4285 : 1967	Method for volumetric determination of calcium
8	IS 5305 : 1969	Method for volumetric determination of phosphorus
9	IS 5813 : 1970	Method for determination of crystallizing point
10	IS 10271 : 1982	Specification for anhydrous hydrogen fluoride, technical
11	IS 10332 : 1982	Specification for hydrofluoric acid, aqueous
12	IS 1040 : 1987	Specification for calcium carbide, technical (Third Revision)
13	IS 10614 : 1983	Method for atomic absorption spectrophotometric determination of sodium and potassium
14	IS 1078 : 1987	Specification for copper naphthenate (Second Revision)
15	IS 1089 : 1986	Specification for oleum, technical (Second Revision)
16	IS 10895 : 1984	Specification for copper nitrate
17	IS 10896 : 1984	Specification for aluminium hydroxide, technical
18	IS 10904 : 1984	Specification for sodium fluoride, technical
19	IS 1109 : 1980	Specification for borax (Second Revision)
20	IS 11112 : 1984	Specification for alumina, chromatographic grade
21	IS 11123 : 1984	Method for determination of copper by atomic absorption spectrophotometry
22	IS 11124 : 1984	Method for atomic absorption spectrophotometric determination of arsenic
23	IS 1113 : 1965	Specification for ammonium chloride, technical and pure (Revised)
24	IS 11224 : 1985	Specification for rock phosphate for chemical industries
25	IS 11236 : 1985	Specification for manganese acetate
26	IS 11237 : 1985	Specification for manganese carbonate
27	IS 11305 : 1985	Specification for thionyl chloride
28	IS 8814 : 1978	Specification for sodium metal
29	IS 8770 : 1978	Specification for artificial sea water for laboratory use
30	IS 11782 : 1986	Specification for sodium cyanide, technical
31	IS 12041 : 1987	Method for the determination of mercury by atomic absorption spectrophotometer
32	IS 12042 : 1987	Method for determination of molybdenum by atomic absorption spectrophotometer
33	IS 12046 : 1987	Method for the determination of manganese by atomic absorption spectrophotometer
34	IS 12074 : 1987	Method for determination of lead by atomic absorption spectrophotometer
35	IS 12122 : 1987	Method for determination of nickel by atomic absorption spectrophotometry
36	IS 2263 : 1979	Methods of preparation of indicator solutions (First Revision)

37	IS 1612 : 1976	Specification for iron powder (Reduction Grade) (First Revision)
38	IS 9189 : 1979	Method for determination of free chlorine in chlorinated organic liquid compounds (Colorimetric)
39	IS 9190 : 1979	Methods for determination of acidity and alkalinity in halogenated organic solvents and their admixtures
40	IS 9252 : 1979	Method for determination of zinc (Volumetric)
41	IS 9398 : 1987	Specification for silicon tetrachloride, technical (First Revision)
42	IS 9424 : 1979	Specification for sodium metasilicate
43	IS 2730 : 1977	Specification for magnesium sulphate (Epsom Salts) (First Revision)
44	IS 12178 : 1987	Specification for acetylene, black
45	IS 2881 : 1984	Specification for barytes for chemical industry and oil - Well drilling (Second Revision)
46	IS 3204 : 1978	Specification for limestone for chemical industry (First Revision)
47	IS 3205 : 1984	Specification for precipitated barium carbonate, technical (First Revision)
48	IS 3605 : 1984	Specification for bauxite for chemicals and petroleum industries (First Revision)
49	IS 3607 : 1979	Specification for magnesite for chemical industry (First Revision)
50	IS 9931 : 1981	Mercurimetric method for determination of chloride in inorganic chemicals
51	IS 4408 : 1979	Specification for sodium chloride, analytical reagent (First Revision)
52	IS 494 : 1970	Specification for aluminium stearate for lubricants (First Revision)
53	IS 5288 : 1980	Barium Chloride
54	IS 9497 : 1980	Method for determination of sodium and potassium (Flame Photometric)
55	IS 566 : 1984	Specification for disodium phosphate, dodecahydrate (Second Revision)
56	IS 5762 : 1970	Methods for determination of melting point and melting range
57	IS 9506 : 1980	Method for determination of sulphate (volumetric)
58	IS 5877 : 1971	Specification for barium sulphide, technical (Black Ash)
59	IS 7163 : 1989	Potassium iodide, pure and analytical reagent - Specification (First Revision)
60	IS 6015 : 1984	Specification for barium hydroxide (First Revision)
61	IS 6135 : 1981	Specification for soda ash, fused, technical (First Revision)
62	IS 6186 : 1986	Specification for bentonite (First Revision)
63	IS 6361 : 1971	Methods of colorimetric determination of phosphorus
64	IS 6605 : 1972	Specification for potassium chromate
65	IS 6655 : 1972	Methods of test for Sulphur
66	IS 6980 : 1983	Specification for tetrasodium pyrophosphate, anhydrous, technical (First Revision)
67	IS 7017 : 1973	Method for colorimetric determination of traces of heavy metals by dithizone
68	IS 7223 : 1986	Specification for potassium chloride, analytical reagent (First Revision)
69	IS 7541 : 1974	Specification for stabilized liquid sulphur trioxide
70	IS 8769 : 1978	Methods of determination of ash and sulphated ash
71	IS 8883 (Part 2/Sec 1) : 1978	Methods of sampling chemicals and chemical products: Part 2 sampling equipment: Sec 1 for solids
72	IS 8883 (Part 2/Sec 2) : 1978	Methods of sampling of chemicals and chemical products: Part 2 sampling equipment: Sec 2 for liquid
73	IS 8883 (Part 2/Sec 3) : 1978	Methods of sampling chemical and chemical products: Part 2 sampling equipment: Sec 3 for gases

## Item 8 NEW SUBJECT FOR STANDARD FORMULATION

### 8.1 Fumed Silica

The Committee noted Item 8.1 of the agenda and decided that the draft document on Fumed Silica be circulated among the Committee members for their review and inputs within 1 month time frame. The inputs to be received will be taken up for deliberation of the Committee in its next meeting.

## **Item 9 INTERNATIONAL ACTIVITY**

### **9.1 ISO/TC 47 Chemistry**

The Committee noted Item 9.1 of the agenda and requested the Member Secretary to get the delegation approved by the Committee for attending the next Meeting of ISO/TC 47 scheduled in Sumida City (Japan) from 7-9 November 2023.

### **Item 9.2 ISO/ TC 298 Rare Earth**

The Committee noted Item 9.2 of the agenda and requested the Member Secretary to get the delegation approved by the Committee for attending the next Meeting of ISO/TC 298 scheduled in South Korea from 10-13 October 2023.

## **Item 10 DEVELOPMENT OF STRATEGIC ROAD MAP OF SECTIONAL COMMITTEES**

The Committee noted Item 10 of the agenda.

### **Item 11 PROCESS REFORMS BY BIS**

The Committee noted Item 11 of the agenda and agreed to give the desired inputs on priority.

### **Item 12 ANY OTHER BUSINESS**

The Committee requested the Member Secretary to seek inputs from the members on the proposal received from Global Adsorbents Pvt. Ltd (placed at Annex-VII of the agenda). The same would be taken up for deliberation of the Committee in its next meeting.

### **Item 13 DATE AND PLACE OF NEXT MEETING**

The date and place of next meeting will be informed to all members in consultation with the chairman tentatively within 3 months timeframe, preferably at CSMCRI, Bhavnagar or any other city as mutually agreed by the members.

### **Item 14 VOTE OF THANKS**

The Chairman proposed for Industrial Visits by BIS Sectt for knowledge enhancement which will contribute significantly to the Standardization process and improve the quality of Indian Standards. The meeting ended with the hearty vote of thanks to the chair.

F. No. 11/51/2016- BIS  
Government of India  
Ministry of Consumer Affairs, Food & PD  
Department of Consumer Affairs  
(BIS Section)

Krishi Bhawan, New Delhi.  
Dated the 20<sup>th</sup> July, 2023

To

**The Director General (BIS),  
Bureau of Indian Standards,  
9, Manak Bhavan,  
Bahadur Shah Zafar Marg,  
New Delhi-110002**

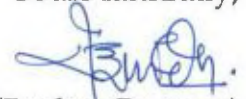
**Sub: Minutes of the meeting regarding Indian Standard 10116:2015 (Boric Acid - specification) held on 11.07.2023 at 5.30 PM in Committee Room No. 46 (Jagriti) Krishi Bhawan, New Delhi - regarding**

Madam,

I am directed to refer to the subject mentioned above and to forward herewith the minutes of the meeting regarding Indian Standard 10116:2015 (Boric Acid - specification) held on 11.07.2023 for information and necessary action.

Encl: As above.

Yours faithfully,



(Roshan Burman)

Under Secretary to the Govt. of India

Tel: 23383337

E-mail: [usbis-ca@nic.in](mailto:usbis-ca@nic.in)

E-mail: [usbis-ca@nic.in](mailto:usbis-ca@nic.in)

Copy to :

- i) Shri P.S. Haridas, Navin Flouring International Ltd, Mumbai
- ii) Shri Prof. B. N. Thorat, ICT.
- iii) Shri Anand Shetty, MD, Organic Industries Pvt Ltd.
- iv) Shri R. Janakiraman, President & Chief Supply Chain Officer, Padmanabh Mafatlal Group.
- v) Shri Sajal Jain, Managing Director, Indo Borax & Chemicals Ltd. Mumbai.
- vi) Dr. G.D. Mehta, Borochemie Raj Borax

Copy also to:

- i) PSO to Secretary(CA), DoCA.
- ii) Sr. PPS to AS(CA), DoCA.
- iii) Sr. PPS to JS(VM), DoCA.
- iv) DS(BIS), DoCA.

**MINUTES OF THE MEETING TO REVIEW THE BORIC ACID RELATED  
ISSUES HELD ON 11TH JULY, 2023 AT KRISHI BHAWAN**

A meeting was held under the Chairpersonship of Additional Secretary (Consumer Affairs) on 11<sup>th</sup> July 2023 at 5.30 pm in "Jagriti" Room Number 46, Krishi Bhawan (New Delhi) to discuss issues relating to the Boric Acid with various stakeholders and BIS officials. List of participants is at **Annex-I**.

1. At the outset, Head (Chemical Dept), BIS gave a presentation highlighting the developments so far on this Boric acid issue, which are as under:

i) The Indian Standard IS 10116:2015 classifies Boric acid into 3 grades;

a) **Special quality (SQ)**, for use in capacitors, electronics nuclear energy, foundries and fire proofing of workman's apparel;

b) **Technical (TECH)**, for use in glass, ceramics, refractories, paints, chemicals, dye intermediates, electroplating, leather, adhesives and enamel industries, talc powder, ramming mass and as carom board powder; and

c) **Explosive grade**.

ii) The Indian Standard prescribes that in addition to meeting the requirements for Boric acid and moisture, the technical grade shall also comply with the following additional requirements of polishing compounds

a) Chloride (Cl), percent by mass: 0.05 – 0.15

b) Sulphate (SO<sub>4</sub>) percent by mass: 0.15 – 0.25

iii) M/s Organic Industries had informed that they are manufacturing the technical grade Boric acid with low levels of chloride and sulphate i.e. 0.00 – 0.15% max, and 0.00 – 0.25 % max respectively. They claimed that since chloride and sulphate are impurities, the Indian Standard should only specify maximum values instead of a range.

iii) BIS informed that, the issue raised by M/s Organic Industries was discussed during a panel meeting held by BIS on 06.06.2023. During the deliberations, it was clarified by the concerned experts that chloride and sulphate are not impurities, rather they are additives. However, the committee further decided to invite the views of the affected user industries associations in this regard, based on which a suitable conclusion could be arrived at.

iv) BIS further informed that as discussed in the previous meeting held on 7<sup>th</sup> June 2023 on this issue which was chaired by Secretary (CA), it was decided that the

Technical Committee shall be requested to look into specifying subgrades under technical grade for polishing compounds and non-polishing compound applications where the limits specified for chloride and sulphate may be removed/relaxed for the technical subgrade for non-polishing compound applications. Accordingly, this matter was discussed during a meeting of the Technical Committee held on 19 June 2023. It was noted that out of the 15 user industries' associations which had been requested to give their views on the matter, 13 associations had responded stating that they are all in favour of retaining the range of chlorides and sulphides whereas 4 individual industries had written to BIS stating that Boric acid should have lesser levels of chlorides and sulphates.

vi) In the Technical Committee meeting, after deliberating on the issue, it was decided that the range of chloride and sulphates as currently prescribed in the Standard be retained as of now and a research-based study/project by an R&D Institute such as ICT Mumbai may be initiated and be completed within a timeframe of 4-6 months. Based on the outcome of this research project, revision of the Standard may be further taken up, if required. Subsequently, BIS has written to ICT Mumbai to take up this study/project.

2. In this regard, M/s Organic Industries reiterated their demand that since they are manufacturing Boric acid with low levels of chloride and sulphates (less than that specified in the Indian Standard), therefore the values for chloride and sulphate specified for technical grade boric acid should be in terms of maximum permitted and proposed to revise the chloride and sulphates contents by putting a max limit (Chloride - 0.15 max, Sulphate – 0.25 max).

3. M/s Indo Borax, another BIS licensee for Boric acid, reiterated their stand as given during the technical committee meeting that no changes to be made in the Sulphate and Chloride ranges prescribed for the Technical Grade of Boric Acid as this product is used in several applications such as ramming mass in induction furnace where the presence of these elements is essential for optimum performance. They informed that the polishing compounds - sulphate and chloride- are not impurities rather they are intentionally added to technical grade boric acid to provide the required properties.

4. M/s Navin Fluorine, one of the customers of M/s Organic Industries, informed that they are importing Boric acid for manufacturing boron trifluoride, and that they require Boric acid with low levels of chloride and sulphates (less than that specified in the Indian Standard) and their final product i.e. boron trifluoride is meant for export. They informed that they had approached DGFT for exempting the boric acid imported by them since their final product is meant for export but were told by

DGFT that NOC has to be obtained from BIS. It was clarified by BIS that NOC/exemption from QCOs is not in the purview of BIS but the concerned Ministry/Department which has issued the QCO i.e. DCPC in case of Boric acid

5. It was noted that for explosive grade, the requirement given in the standard is in consonance with what Organic Industries want (Chloride: 0.03% max, and Sulphate: 0.10% max). As such, they can produce the Boric acid under explosive grade instead of technical grade which would be in compliance with the standard. However, Organic Industries reiterated that they wish to sell their product under technical grade only as per the market demand as there are certain stringent conditions to be followed if Explosive grade is to be used, which can be cumbersome for the industries.

6. Dr. Kannan Srinivasan, Director, CSIR - Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar and Chairman of CHD 01 (Inorganic Chemicals Sectional Committee) stated that this issue was deliberated at length during the meeting of the Technical Committee and a considered view was taken on the basis of these deliberations, to retain the ranges of chloride and sulphate for technical grade Boric acid given in the standard currently, pending the results of the research project. He also stressed upon the need to ensure that any changes in the standards should not end up in giving an advantage to foreign manufacturers over Indian manufacturers.

7. The Chair requested BIS to consider the views given by various stakeholders during the deliberations and to expedite the research project so that the matter can be brought to a logical conclusion in the next 3 to 4 months.

Meeting ended with a vote of thanks to the Chair.

\*\*\*\*



**List of Participants**

1. Ms. Nidhi Khare, Additional Secretary, DoCA.
2. Shri. Vineet Mathur, Joint Secretary, DoCA.
3. Shri. Pramod Kumar Sahoo, Deputy Secretary, BIS.
4. Shri. Ajay Kumar Lal, Scientist –F & Head (CHD) BIS.
5. Shri. Aditya Das, Scientist-D BIS.
6. Shri. Sagar Singh, Scientist-D BIS.
  
7. Shri. P.S. Haridas, Navin Flourine International Ltd. Mumbai.
8. Shri. Sajal Jain, Indo Borax & Chemicals Ltd.
9. Shri. Lakshmi Menon, Indo Borax & Chemicals Ltd.
10. MS. Saumya Jain, Indo Borax Chemicals.
11. Shri. Dr. G. D. Mehta, Borochemie Raj Borax Pvt. Ltd.
12. Shri. Pravir Anand Shetty, Organic Industries Pvt. Ltd.
13. Shri. Sritam Kumar Mishra, Organic Industries Pvt. Ltd.
14. Shri. Anand Shetty, Organic Industries Pvt. Ltd.
15. Shri. Prof. B.N. Thorat, ICT.

**Online attendee**

16. Dr. K Srinivasan, Chairman, Technical Committee
17. Dr. Vishal Chaudhary, Deputy Industrial Advisor, DCPC
18. Dr. Anil kishore
19. Shri A. K Pradhan, JD
20. Shri Buddh Prakash
21. Professor Dr. V. R. Kanethar

1<sup>st</sup> August, 2020

To

The Standardization Head (Chemicals)

The Bureau of Indian Standard

9 Bahadur Shah Zafar Marg,

New Delhi-110002,

India.

Sir,

I, Narendra J. Jakkani, in my capacity as Director Operations of M/s Organic Industries Pvt. Ltd., along with my senior colleague Shri Ravi Bhairi, in his capacity as Marketing Executive had attended the meeting of CHD 1 earlier in 2020 vide video conferencing wherein the standards of Boric Acid IS 10116:2015 were reaffirmed and had extended our support to the existing range of Sulphates and Chlorides (Polishing Compounds) prescribed for Boric Acid Technical Grade in IS 10116:2015, which are vital for its various applications in India. On behalf of M/s Organic Industries Pvt. Ltd., we had also extended our support to the packing of Boric Acid Technical Grade in Jute Bags as prescribed in IS 10116:2015.

The above is for your kind information.

With Best Regards,

  
(Narendra J. Jakkani)



## About Us

Organic Industries Pvt. Ltd. is one of the fastest growing **Pharmaceutical Drug Intermediates, Specialty Chemicals manufacturing Company** in India. We are **Manufacturers, Suppliers, Distributors & Exporters of Drug Intermediates and Specialty Chemicals**. We have very strong team of Technocrats & Chemists for the synthesis of Drug and Organic Intermediates for Supply to Multinational Pharmaceutical Companies in Domestic Market and for Export.

We were founded in the year 1980 by **Mr. Anand Shetty**. Under the able guidance of Mr. Shetty, we have earned the reputation being a dependable supplier. Our enormous success in the industry is the combined result of our technologically advanced manufacturing unit, extensive R&D and our team of experts. Our quality products at competitive prices establish us as a reputed and renowned suppliers of various pharma intermediates in the industry.

Our cGMP (Current Good Manufacturing Practices) plant is located at Dahej in Gujarat having area of 47 acres in the chemical zone having all required infrastructure. We have wide experience in Indian and International market and we fully understand the requirements of Regulatory agencies. plant is manned by 170 Qualified and Experienced Technicians.

The company is now aimed towards the International Market. Now we registered with REACH as our first step to it & we have already commenced the procedure for implementation of ISO 9001:2000. Also we are in process of Implementing Schedule M and WHO- GMP Certification from Food and Drug Administration of Gujarat State.

We manufacture Potassium Permanganate ( $KMnO_4$ ) about 200 tons per month and Boric Acid ( $H_3BO_3$ ) about 500 tons per month. We have exported Potassium Permanganate to USA, Germany and Saudi Arabia in addition to Domestic supply. We have planned to increase this installed capacity as per customer's requirements.

Our Potassium Permanganate ( $KMnO_4$ ) manufacturing plant is certified by National Sanitation Foundation, USA.

The existing manufacturing facility has all infrastructure which includes the administration / engineering Block and Utilities having boiler capacity 10 mt and 2 thermopac-coal based fluidized bed of 10 lakh kcal per hr.

The present manufacturing plant is connected by Electrical load of 2500KVA, Diesel Generator and Water storage capacity of 100 kl

The present manufacturing facility has occupied 8 acres of land and Management has planned to install APIs and Organic Drug Intermediates facility in the remaining area complying with ICH guidelines.

Our Company Operates on Following Philosophy.

- Quality is our Main Objective.
- Customer Satisfaction is our Concern.
- Scheduled Delivery is our Target.
- Competitiveness is our Effort.

### Custom Manufacture

The customer provide literature methods of their own synthesis route in which all details of synthesis are included, the more information provided the shorter the timelines.

If you have no technical information about the product that you want, we can give you and estimate after

### }} *Our Vision*

### }} *Our Promise*

Excel by improving Customer Services, Quality standard and upgradation of Technology. We're committed to consistent product quality for our customers and safe environment for our people with a strong belief in the capabilities of our team to rapidly transfer ideas to reality. We have a firm faith in promising future.



**Mail us**

we carefully review it. Our technical team evaluates Synthesis and determine whether to pursue the project if so we will provide you an estimate cost and delivery time.

### Scale-Up of Existing Processes & Commercial Manufacturing

If you already have demonstrated route and need it reproduce in timely and efficient manner our technical team will meet or exceed your expectations. Along the way we will identify and develop steps as appropriate for safety consideration.

Once your project reaches this level of maturity, we offer commercial manufacturing Facility.

### Technical Team :

- **Mr. Narendra Jakkani Chem. Enggn.**

Email Id: [narenj29@organicgroup.co.in](mailto:narenj29@organicgroup.co.in)

Director – Operations

Mr. Narendra Jakkani has 15 years of experience in the Chemical Industries.

He has working experience Reputed companies like M/s. Bombay Carbon Dioxide, Gas Corporation, Borax Morarji

### Infrastructure

Our well knit infrastructure helps us in providing better quality products to clients. We have our own warehouse, which is well ventilated, free from rain, dust and sunlight that helps in preventing the deploy of quality of chemicals. Further the support of our highly qualified professionals, experts, executives and other dedicated workers assist us in providing best services to clients. Our wide sales, marketing and distribution network is spread all over Indian and many parts in other countries, which strengthen our work skills and enable us to offer better and prompt services to clients..

### Factory Plants



Asangaon



Bangalore



Silvassa Plant - 1



Silvassa Plant - 2



Silvassa Plant - 3



Dahej Plant 1



Dahej Plant 2

### Clientele

We have more than 50 reputed customers, who are highly satisfied with our service, quality of products and prices.

## Products

We are pioneer in manufacturing of premium quality chemicals, which are used in all type of industries for different applications.

MGT FORM 17-18

MGT FORM 18-19

Organic Industries Ltd. Tel No.: +91-22-41622828 (100 Lines) FAX No.: +91-22-41622803

Email: [info@organicind.com](mailto:info@organicind.com)

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भारत सरकार

GOVERNMENT OF INDIA

Issue Date: 31/10/2011



नरेंद्र जनार्धन जक्कानी

Narendra Janardhan Jakkani

जन्म तारीख / DOB: 29/03/1973

पुरुष / MALE

Mobile No.: 9819498174

6055 2061 3990

माझे आधार, माझी ओळख



भारतीय विशिष्ट पहचान प्राधिकरण

UNIQUE IDENTIFICATION AUTHORITY OF INDIA

Download Date: 26/03/2022

पता:

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अनिरुध्द, थे टिलाकनगर भरा, खंड चस लटड ब्लडग नो २७  
टिलाकनगर चेंबूर वेस्ट, नेक्स्ट तो रेलिअनका इनेर्जी, मुंबई,  
मुंबई सबअर्बन,  
महाराष्ट्र - 400089

**Address:**

Lavanya Jakkano, flat no 1102, D WING 11TH FLOOR  
ANIRUDH, THE TILAKNGAR BHARA, KHAND CHS LTD BLDG  
NO 27 TILAKNAGAR CHEMBUR WEST, NEXT TO RELIANC  
ENERGY, Mumbai, Mumbai Suburban, Maharashtra - 400089



6055 2061 3990



1947  
1800 300 1947



help@uidai.gov.in

WWW

www.uidai.gov.in



P.O. Box No. 1947,  
Bengaluru-560 001