



**FLUORSPAR**

**1. SCOPE**

This specification governs the quality of Fluorspar lumps, fluorspar powder and fluorspar briquettes (starch bonded only) with the following requirements.

**2. APPLICATION**

The material shall be used for melting and refining of steel.

**3. CONDITION OF DELIVERY**

The size should be in the range of 10-60 mm. However oversized or undersized material should not exceed 10% each by weight.

**4. COMPLIANCE WITH NATIONAL STANDARDS**

The specification in general is based on Indian standards specification IS 4574.

**5. FREEDOM FROM CONTAMINATION**

The material shall be free from extraneous contamination.

**6. CHEMICAL COMPOSITION**

The material shall conform to the following chemical composition when it is analyzed in accordance with IS: 2411. Composite sample shall be prepared by drawing samples from each consignment of 1000Kg or part thereof.

ELEMENT	Minimum (%)	Maximum (%)
SiO <sub>2</sub>	-	4
Mixed oxides	-	4
Sulphur	-	0.05
Effective CaF <sub>2</sub> CaF <sub>2</sub> (eff) = CaF <sub>2</sub> -2.5xSiO <sub>2</sub>	84	-

Trace elements are for information purpose only.

The test results are to be rounded off as per IS 2-1960 (reaffirmed 2000).

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			APPROVED : <b>PLANT STANDARDS COMMITTEE</b>		
			PREPARED : SMS TECH	ISSUED : Steel Melting Shop	DATE : 24-12-10

*[Handwritten signatures and initials]*



**7. INSPECTION AT SUPPLIER'S WORKS:**

- CFFP reserves the right to witness the testing of the material at supplier works and therefore the supplier shall notify the readiness of the material in advance.
- CFFP may, at its discretion, test the material after receipt and acceptance of the material will be based on the CFFP'S test results.
- Supplier shall ensure that the material is free from extraneous material. The material shall be rejected if it is not free from extraneous material.
- For result of analysis and properties of material the decision of CFFP shall be final and binding on the supplier.

**8. TEST CERTIFICATES**

One Original and three copies of Test Certificate from the **Manufacturer** containing the following information **along with test result of clause 3 and the chemical composition as per clause 6** should be provided.

Manufacturer's Name  
 Name of the material  
 Quantity.

Note:

- A manufacturer supplying directly to BHEL should include BHEL's P.O. No. and Challan No. also in the TC.
- Any other supplier should provide a covering letter along with original Manufacturer's TC as above mentioning BHEL's P.O. No. and Challan No. Supplier shall give the packing detail of the material in the guarantee certificate.

**9. PACKING AND MARKING**

The material shall be packed such as to prevent loss / deterioration in quality during handling, transport and storage. It should be in the manufacturer's packing. Each package should be marked with the following details.

Name of the material  
 Manufacturer's Name / Trade mark  
 Net weight.

**10. REFFERED STANDARDS**

IS: 4574, IS: 2411.

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 412/m2k  
 27.12.10

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**REVISION RECORD SHEET**

SN	Revision No.	Revision date	Nature of Changes
01.	02	09.03.2005	- Format changed.
02.	03	17.07.2006	- Clause 9 modified.
03.	04	17.11.2008	- Fluorspar briquettes (type B) added. In clause 4.
04.	05	07.09.2009	- Clauses 8 and 9 revised incorporating requirement of manufacturer's packing and Test certificate.
05.	06	24.12.2010	- Clause 3: Size range changed to 10-60mm for lumps and Briquettes.  - Clause 4: In general based on IS 4574.  - Clause 6: Redefined.  - Clause 8 & 9: Batch no and lot no removed.

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