# TECHNICAL DATA SHEET (TDS) — LOW & MEDIUM CARBON FERRO CHROME (LC / MC FeCr)

| | |
|---|---|
| **Document No.** | ATB-TDS-FEALLOY-LCFECR-2026-001 |
| **Revision** | Rev.00 |
| **Issue Date** | 26 October 2026 |
| **Product** | Low & Medium Carbon Ferro Chrome (LC / MC FeCr) |
| **Issued By** | ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ |
| **Companion Document** | Safety Data Sheet (MSDS) ATB-SDS-FEALLOY-LCFECR-2026-001 |

## 1. PRODUCT IDENTIFICATION

| | |
|---|---|
| **Product Name** | Low & Medium Carbon Ferro Chrome |
| **Abbreviation** | LC / MC FeCr |
| **Grades** | LC FeCr C0.15<br>LC FeCr C0.10<br>ELC FeCr C0.05<br>MC FeCr C2.0 |
| **HS Code (indicative)** | 7202.49 |
| **Prepared with Reference to** | ISO 5448<br>ASTM A101<br>GB/T 5683 |
| **Product Description** | Refined chromium–iron alloys with reduced carbon content, produced by silicothermic or converter refining; supplied as crushed and screened lumps. |

All chemical values are expressed as percentage by mass (% w/w). Country of origin, quantity, packing and the final guaranteed values for each shipment are stated in the Sales Contract, the Certificate of Origin and the Certificate of Quality issued at loading.

## 2. CHEMICAL SPECIFICATION

| Parameter (% by mass) | LC FeCr C0.15 | LC FeCr C0.10 | ELC FeCr C0.05 | MC FeCr C2.0 |
|---|---|---|---|---|
| Chromium (Cr) | 60.0 – 65.0 | 60.0 – 70.0 | 65.0 – 70.0 | 60.0 min |
| Carbon (C) | 0.15 max | 0.10 max | 0.05 max | 2.0 max |
| Silicon (Si) | 1.0 max | 1.5 max | 1.0 max | 1.5 max |
| Phosphorus (P) | 0.04 max | 0.03 max | 0.03 max | 0.04 max |
| Sulphur (S) | 0.03 max | 0.025 max | 0.025 max | 0.03 max |
| Iron (Fe) | Balance | Balance | Balance | Balance |
| Size (mm) | 10 – 50 | 10 – 50 | 10 – 50 | 10 – 50 |
| Size conformity | 90% min | 90% min | 90% min | 90% min |

## 3. PHYSICAL CHARACTERISTICS AND SIZING

| | |
|---|---|
| **Appearance** | Metallic silver-grey, dense lumps |
| **Physical State** | Solid |
| **Standard Size (mm)** | LC FeCr C0.15: 10 – 50<br>LC FeCr C0.10: 10 – 50<br>ELC FeCr C0.05: 10 – 50<br>MC FeCr C2.0: 10 – 50 |
| **Alternative Sizes (mm)** | 10 – 100; 3 – 10 |
| **Size Conformity** | 90% min within the specified range, determined by sieve analysis at loading |

## 4. PACKAGING AND MARKING

- Packing: jumbo bags.
- Container loading: 20' containers, approximately 20 – 25 MT net per container depending on density and packing.
- Marking on each package: product name, grade, lot / heat number, net and gross weight, package number and contract reference. Neutral packing is available.

## 5. APPLICATIONS

- Final chromium trim where low carbon is required.
- Low-carbon stainless and heat-resistant steels.
- Welding electrodes and special alloys.

## 6. SAMPLING, ANALYSIS AND INSPECTION

- Sampling and sample preparation prepared with reference to ISO 3713 and ISO 4552; sieve analysis with reference to ISO 4551.
- Carbon and sulphur by combustion–infrared analysis; principal and residual elements by ICP-OES, XRF or wet chemical methods.
- Independent inspection of quality, weight and packing at loading by an internationally recognised surveyor (SGS, Intertek, Bureau Veritas or equivalent, as agreed in the Sales Contract).
- The Certificate of Quality issued by the appointed surveyor at loading is final and binding for quality and size, unless otherwise agreed in the Sales Contract.

## 7. SHIPPING DOCUMENTS

| **Document** | **Issued By** |
|---|---|
| Commercial Invoice | ATABAŞ |
| Packing List | ATABAŞ |
| Certificate of Quality / Analysis | Independent surveyor at loading |
| Certificate of Weight | Independent surveyor at loading |
| Certificate of Origin | Chamber of Commerce |
| Bill of Lading / CMR | Carrier |
| Safety Data Sheet (MSDS) | ATABAŞ |

## 8. STORAGE AND HANDLING

- Store in dry, covered and well-ventilated areas on hard standing; keep packages closed and protected from rain, condensation and standing water.
- Additions to molten metal shall be dry and preheated where practicable; moist material in contact with molten metal can cause violent steam explosions.
- Avoid dust generation; segregate from acids, alkalis and oxidising agents; keep grades and lots separated to prevent mixing.
- Detailed safety information is given in Safety Data Sheet ATB-SDS-FEALLOY-LCFECR-2026-001.

## 9. SANCTIONS AND TRADE COMPLIANCE

ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ conducts its business in full compliance with the economic and trade sanctions regimes administered by the United States (OFAC), the European Union, the United Kingdom (OFSI) and the United Nations Security Council. ATABAŞ does not work with sanctioned countries, sanctioned companies, sanctioned individuals or sanctioned vessels, and does not supply, source, finance or transport goods in breach of these regimes.

All counterparties are subject to Know-Your-Customer and sanctions screening before contract signature and throughout performance. ATABAŞ reserves the right to suspend or terminate any transaction which may expose it to sanctions risk.

## 10. GENERAL

The values in this document are specification limits for the grades listed. The final guaranteed values, quantity, sizing and packing for each shipment are those stated in the Sales Contract and in the Certificate of Quality issued at loading. This document does not constitute a warranty of fitness for any particular purpose; the buyer is responsible for determining the suitability of the product for its own process.

| | |
|---|---|
| **Prepared By** | Technical & Quality Department, ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ |
| **Approved By** | Hakan ATABAŞ, Founder & CEO |
| **Date** | 26 October 2026 |
| **Signature & Company Stamp** | |