

**TEKNİK ŞARTNAME/
TECHNICAL SPECIFICATION****ALLOYING ELEMENT
(SILICON)**

Döküman No
Document No : TŞ.014
İlk Yayın Tarihi
Publish Date :-
Rev. Tarihi
Rev.Date :27.09.2013
Rev. No: :6
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REVİZYON TARİHÇESİ/REVISION HISTORY

Rev. No	Revizyon Tarihi <i>Revision Date</i>	Revizyon Açıklaması <i>Revision Explanation</i>	Değişen Sayfa <i>Changed Page</i>	Revize Eden <i>Revised By</i>
1		
2		
3		
4	14.10.2011	Change of people responsible with the issuing of this document does not change the acceptance criteria.		
5	22.11.2011	Responsibility part has been updated.		
6	27.09.2013	Revised.	All	M.Dündar

1.0. KAPSAM/SCOPE

This specification identifies the required properties of Silicon (Si) master alloy added into the liquid aluminum in alloying practices of ASSAN aluminum.

2.0. MALZEME TANIMI VE ÖZELLİKLERİ/ PRODUCT DESCRIPTION AND SPECIFICATIONS

The materials to be delivered shall meet the qualities stipulated in this specification.

2.1. Chemical Composition

Si	% 98.00
Fe	max. % 0.65
Ca	max % 0,50
Cu	max. % 0.02
Mn	max. % 0.02
Mg	max. % 0.005
Pb	max. % 0.005
Zn	max. % 0.02
Each of the remaining	max. % 0.05
Others, total	max. % 0.10

	HAZIRLAYAN/ <i>PREPARED BY</i>	KALİTE SİSTEM ONAYI/ <i>OMS APPROVAL</i>	YÜRÜRLÜK ONAYI/ <i>ENFORCEMENT APPROVAL</i>
ÜNVANI/ <i>TITLE</i>	Product and Process Development Director	QMS Specialist	Product and Process Development Director
ADI-SOYADI/ <i>NAME-SURNAME</i>	Murat DÜNDAR	Gülen KIBAR BAKDAAL	Murat DÜNDAR
İMZA/ <i>SIGNATURE</i>			

TEDARİKÇİ ONAYI/APPROVAL OF SUPPLIER

TEDARİKÇİ ADI/ <i>SUPPLIER NAME</i>		MÜHÜR / İMZA/ <i>SIGNATURE</i>
YETKİLİ İSİM/ <i>RESPONSIBLE</i>		
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2.2. Physical Properties

No oxide deposits, swelling or any dirt (rust, mud etc.) should be present on the ingot surfaces. Shall be rigid enough not to crumble when held in hand. The container bag should not include any powder form of Si at the bottom.

2.3. Dissolution in liquid metal

The recovery rate of Si element in the metal bath must be above 95% for the application temperature of 700-800 °C at the end of 30 minutes.

3.0. TEST SERTİFİKASI VE / VEYA KOŞULLARI/ TEST CERTIFICATE AND/OR CONDITIONS

The supplier shall provide a test certificate for each material delivered showing the content of the master alloy that comply the specified values above. The following information must be included in the certificate:

Supplier's Name

Assan Order Number

Chemical composition

Product Name (and code, if available)

4.0. TESLİMAT ŞEKLİ/ DELIVERY CONDITIONS**4.1. Packaging**

Shall be in packages weighing 25 or 1150 kg that are not affected by the environmental conditions (such as rain, moisture, mud and dust) and the packaging shall allow ease of handling by forklift.

4.2. Labeling

The following information should be shown on the label prepared for each skid:

Supplier's Name

Material Name

	HAZIRLAYAN/ <i>PREPARED BY</i>	KALİTE SİSTEM ONAYI/ <i>OMS APPROVAL</i>	YÜRÜRLÜK ONAYI/ <i>ENFORCEMENT APPROVAL</i>
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Net Weight
Shipping date
Production lot

5.0. YÜKÜMLÜLÜK/ OBLIGATION

The supplier is obliged to meet the requirements indicated in this specification for each lot of materials delivered. The materials that do not meet with the requirements specified in this document shall be returned. ASSAN may charge all the losses originating from the master alloy itself, that does not comply the specification, to the supplier, including all the processing cost so far incurred and any charges generated by the use of material in the application of ASSAN customer and endorsed by the customer of ASSAN. In case of any discrepancy related to the quality issue violating the specification, the investigation reports issued by local research institute, TUBİTAK or universities İTÜ, ODTÜ, YTÜ will be employed for resolution.

6.0. SORUMLULUK/ RESPONSIBILITIES

The Product and Process Development Department is responsible from checking of certificate provided by the supplier for compliance with the specification. The Cast shop is responsible for checking physical properties and the proper use of the material in prescribed practices.

7.0. DİĞER HUSUSLAR/ OTHER

Supplier is obliged to have master alloy be tested in an accredited laboratory once in a year and submit the results to ASSAN.

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