MATERIAL DATA SHEET

Aluminium Alloy – Castings

DEK Reference ID:

DSC 1.1.8

Material Name EN:

EN AC-43000

Material Group:

Cast Aluminium Alloy Group: AlSi10Mg

Characteristics:

Near-eutectic alloy with excellent casting properties and good resistance to hot tearing. Good machinability, excellent weldability, and high chemical resistance.

Chemical Composition (subset C, Si, Mn, Cr, Ni):

Si(%) – Min	Si(%) – Max	Fe(%) – Max	Cu(%) – Max	Mn(%) – Max	Mg(%) – Min	Mg(%) – Max	Ni(%) – Max	Pb(%) – Max	Ti(%) – Max	Zn(%) – Max
9.00	11.00	0.55	0.05	0.45	0.20	0.45	0.05	0.05	0.15	0.10

Properties: F

Density (Mg/m^3)	Young's modulus (GPA)	Yield Stress YS Min MPa	Tensile Strength TS Min MPA	Elongation A(%)	Brinell Hardness *HBW*
2.65	74	80	150	2	50

Properties: T6

Density (Mg/m^3)	Young's modulus (GPA)	Yield Stress YS Min MPa	Tensile Strength TS Min MPA	Elongation A(%)	Brinell Hardness *HBW*
2.65	74	180	220	1	75

Material Safety Data Sheet:

MSDS Series 3xx.x.pdf

Temper Types:	Preferred Temper Types are in:
F	As Cast
T6	Solution heat treated and artificially aged.
Note:	The temper condition must be added to the drawing:- **DSC 1.1.8_F or DSC 1.1.8_T6**

Approved Comparison Standards:

British:	***EN AC 43000***
German:	***DIN 3.2381***
ISO:	***Al-Si10Mg***
Japanese:	***JIS AC4A***