

Assignment 8

1) MgZn₂ precipitate is found in which of the following Aluminium alloy ?

1 point

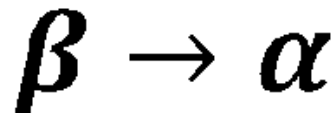
- Al 2024
- Al 6061
- Al 7075
- None of these

Accepted Answers:

Al 7075

2)

1 point



This type of transformation is known as _____ transformation.

- precipitation
- massive
- polymorphic
- ordering

Accepted Answers:

massive

3) Kinetics of precipitate formation depends on

1 point

- Cu %
- ageing temperature
- both a and b
- none

Accepted Answers:

both a and b

4) The first step of heat treatment for precipitation hardenable alloys is

1 point

- quenching

- solutionizing
- ageing

Accepted Answers:
solutionizing

5) Quenched-in vacancies helps in

1 point

- diffusion of solute atoms
- cross slip of dislocations
- formation of vacancy loops
- all of them
- none of them

Accepted Answers:
all of them

6) Shape of Ag_2Al precipitate is

1 point

- plate like
- spherical
- cuboidal
- irregular

Accepted Answers:
plate like

7) Ageing treatment for Al-Cu is done at

1 point

- 130-190 degree Celsius
- 250-270 degree Celsius
- 90-120 degree Celsius
- 60-80 degree Celsius

Accepted Answers:
130-190 degree Celsius

8) To form GP zones, Cu atoms segregate on _____ plane in Al-Cu system.

1 point

- (001)
- (011)
- (111)
- (220)

Accepted Answers:
(001)

9) The final equilibrium product during precipitation hardening in Al-Cu system has what kind of interface with the matrix ?

1 point

- all sides coherent
- incoherent
- coherent or semicoherent

Accepted Answers:
incoherent

10) $(\text{FeMo} + \text{Ni}_3\text{Ti})$ precipitate is found in

1 point

- Nimonic 105
- Cu-Be
- Maraging steel
- Cu-Co

Accepted Answers:

Maraging steel