

1. Identification of substance/preparation and of the company/undertaking

***Substance name:** Aluminium-composite materials: AlTi, AlCr, AlZr, AlSi, AlTiCr, AlTiSi, AlTiV, AlTiY, AlTiB, AlTiMo, AlCrSi, AlCrSiW ***Application:** Arc cathode resp. sputter target for PVD-coating technology ***Companies:** PLANSEE SE, A-6600 Reutte, Tel.: +43 (5672) 600-2226 and PLANSEE GmbH, Siebenbürgerstr. 23, D-86983 Lechbruck, Tel.: +49 (8862) 773-0 ***e-mail:** georg.thurner@plansee.com ***Emergency phone:** +43 5672 600-2226 (only during office hours)

2. Hazards identification

***Classification:** No hazardous preparations as specified in EC-directive 99/45/EG

3. Composition / Information on ingredients

***Composition:** Aluminium, CAS-No.: 7429-90-5, additions 0 - 90% of Cr, Mo, Si, Ti, V, W, Zr, TiB₂, YAl
***Dangerous components:** none

4. First-aid measures

*If used in accordance with their intended use, exposure is not possible (solid metallic body)

5. Fire-fighting measures

***Suitable extinguishing agents:** Substance is not combustible, adapt extinguishing agent to materials stored in the immediate neighbourhood ***Special risks:** none ***Protective equipment:** none

6. Accidental release measures

***Person-related safety precautions:** No special requirements ***Environmental protection measures:** No special requirements

7. Handling and storage

***Handling:** No special requirements ***Storage:** dry storage

8. Exposure controls / personal protection

***Exposure limit values:** workplace: Al: 6 mg/m³, Mo: 15 mg/m³, V: 0.5 mg/m³, W: 5 mg/m³ ***Emission of suspended particles:** General: 20 mg/m³, Cr and V: 5 mg/m³ ***Water emissions:** Al: 2.0 mg/l, Cr: 0.5 mg/l, Mo and W: 5 mg/l
***Exposure at workplace:** no exposure if used in accordance with intended use
***Environmental exposure:** no exposure if used in accordance with intended use

9. Physical and chemical properties

***Appearance:** Grey solid ***Melting range:** > 660 °C ***Density:** 2.7 – 19.3 g/cm³ at 20 °C ***Solubility:** insoluble in water, soluble in acids and alkalis

10. Stability and reactivity

***Conditions to be avoided:** Temperatures > 480 °C for AlTi and > 380 °C for AlZr, exothermic intermetallic reactions ***Materials to be avoided:** Al reacts with acids and alkalis under formation of hydrogen

11. Toxicological information

*No toxic effects known

12. Ecological information

***Ecological toxicity:** no ecotoxic effects known ***Mobility:** on the basis of low solubility low mobility ***Persistence and biodegradability:** Stable inorganic material ***Bioaccumulation potential:** no data available

13. Disposal considerations

*Notice national and regional regulations

14. Transport information

*No dangerous goods according to the international transport regulations

15. Regulatory information

*No labelling required ***The exposure limit values stated under item 8 refer to the Austrian legal provisions** ***Notice national regulations**

16. Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.