

**SAFETY DATA SHEET**

**PRODUCTS RELATED TO THIS MSDS**  
**BRACKET GAUGE (ALUMINIUM)**

Raw materials used are Aluminum AL6026. Aluminum has a surface treatment to increase sterilization resistance (18 $\mu$ m anodizing)

**CHEMICAL COMPOSITION**

**ALUMINUM**

1.	Up to	0.6% – 1.20% Mg
2.	Up to	0.2% – 1.00% Mn
3.	Up to	0.0% – 0.70% Fe
4.	Up to	0.6% – 1.40% Si
5.	Up to	0.2% – 0.50% Cu
6.	Up to	0.0% – 0.40% Pb
7.	Up to	0.5% – 1.50% Bi
8.	Up to	0.0% – 0.30% Zn
9.	Up to	0.0% – 0.05% Sn
10.	Up to	0.0% – 0.30% Cr
11.	Up to	0.0% – 0.20% Ti
12.	Up to	0.0% – 0.15% Others
13.	Balance	Aluminum Al

**PHYSICAL - CHEMICAL PROPERTIES AND FLAMMABILITY**

<b>ALUMINIUM</b>			
Appearance	Solid	Colour	Silver-grey
Odour	Odourless	Safety Data	None
Ph-value	None		
<i>Change of status</i>			
Bowling point	n.a.	Melting point	580 – 650 C°
Combustion rate	n.a.	Flammability	n.a.
Ignition temperature	n.a.	Auto-ignition temperature	n.a.
Comburent capability	n.a.	Explosion limit	n.a.
Vapour pressure	n.a.	Density at 20°	2.62 g/cm <sup>3</sup>
<i>Solubility and scattering features</i>			
Soluble in water	Insoluble	Soluble in fat	Insoluble
Scattering coefficient	None		

**ORTHODONTIC MANUFACTURER SIA SRL**

**Sede Legale:** Via Aristide Leonori,113 - 00147 Roma **Uffici e Stabilimento:** Zona Ind.le snc - 81050 Rocca d'Evandro (CE) Italy  
**Recapiti:** Tel: +39 (0)823 908029 Fax: +39 (0)823 908028 **Email:** info@siaorthodontics.com - www.siaorthodontics.com

## **REACTIVITY**

**Stability and reactivity:** stable and not reactive

⇒

## **HAZARDS IDENTIFICATION**

**Information on toxicity:** no toxic effects caused by the material in massive form or during the usual orthodontic process have been noticed.

**Possible hazards during the working process:**

⇒ **Effects of overexposure:** inhalation is very serious. A prolonged excessive exposition to dust, mist and fumes of this alloy may contribute to chronic respiratory ailments.

⇒ **Possible cancer hazard:** Nickel is treated as a potential agent, being included in the NTP and IARC lists. Some scientific studies have found an excessive incidence of cancer of the respiratory tract among workers involved in certain steps of nickel refining processes. However, several studies on workers exposed to various forms of nickel and its compounds have not shown any increased risk of cancer.

⇒ **Primary routes of entry:** inhalation of dust and fumes.