

TECHNICAL DATA SHEET

- Product:** Alginate Impression Material
- Product Description:** Alpha-Dent® Alginate Impression Material is available in a variety of flavors and set types. This heavy body material is designed to produce consistent impressions. Each can includes powder scoop and vial.
- Indications for Use:** Alpha-Dent® Alginate Impression Materials are indicated for making dental impressions for fabrication of casts, for orthodontic models, opposing models and case study models.
- Appearance:** Fluffy, off-white powder.
- Curing Mechanism:** The material sets when mixed with tap or distilled water.
- Shelf-Life:** 24 months
- Filler Type:** Not applicable.

Main Composition (%w/w):

| | |
|-----------------------------|-------------|
| Sodium Alginate | 5 – 15 % |
| Diatomaceous Earth | 55 – 70 % |
| Retardant | 0.5 – 3.5 % |
| Accelerator | 5 – 15 % |
| Pigment | 2.0 – 5.0 % |
| Filler | 2.0 – 7.0 % |
| Potassium Titanium Fluoride | 0.5 – 1.5 % |
| Flavor | < 2 % |

Physical /Mechanical Properties: (Typical Values)

| | Fast Set | Normal Set |
|-----------------------------|-----------------|-------------------|
| Initial setting time (sec.) | 90 | 155 |
| Total working time (mm) | 0.04 | 0.04 |
| Recovery from deformation % | 98 | 98 |
| Strain in compression % | 14.5 | 14.0 |
| Compressive Strength Mpa | 0.80 | 0.85 |
| Compatibility to gypsum | Passes test | Passes test |
| Reproduction of details | Passes test | Passes test |
| Deterioration Mpa | 0.6 | 0.5 |

Regulatory Classification:

This product is in conformity with the following standard(s) or other normative documents:

- Code of Federal Regulations 21 CFR Part 820 – Medical Device Quality System Regulation
- Code of Federal Regulations 21 CFR §872.3660 Impression Material
- International Standard ISO 21563:2013 Hydrocolloid Impression Materials
- ANSI/ADA Specification No. 18: 1992 Specification No. 18 for Dental Alginate Impression Material