# CLARIANT

## **Technical Data Sheet**

### GEKO® Bentonite



#### 제품 설명 (Description)

GEKO® 벤토나이트는 천연 나트륨 및 활성화 나트륨 벤토나이트 제품으로 생형사를 이용한 주형의 점결제 등 다양한 범위에서 사용되며, 우수한 주형 강도, 열 저항성, 탈사성, 유동성의 특징을 가진 제품 입니다.

GEKO<sup>®</sup> bentonites are natural sodium & sodium activated betonite. It is used as a binder for greensand molding in a wide range of foundry application. Its particular effects are: High mould strength, Excellent thermal durability, excellent collapse ability at shakeout, High flow ability.

제품 물성 (Material properties)

|  |                           |                      | ı                       | ,                    |
|--|---------------------------|----------------------|-------------------------|----------------------|
|  | 게코 스탠다드<br>GEKO® STANDARD | 게코 수퍼<br>GEKO® SUPER | 게코 옵티멈<br>GEKO® OPTIMUM | 게코 오에이이<br>GEKO® OAE |
| 수분 (%)<br>Moisture                       | 8~12                      | <b>+</b>             | <b>←</b>                | <b>←</b>             |
| 몬모릴로나이트 (%)<br>Mont.                     | Min. 70                   | Min. 80              | Min. 80                 | Min. 75              |
| 입도 (230mesh 잔류량%)<br>Particle size       | Max. 25                   | Max. 25              | Max. 25                 | Max. 25              |
| 겉보기 비중 (g/때²)<br>Loose bulk density      | 0.75~0.85                 | <b>←</b>             | <b>←</b>                | <b>←</b>             |
| 팽윤도 (ml/2g)<br>Swelling volume           | Min. 12                   | Min.16               | Min.20                  | Min.23               |
| 생형압축강도(N/m²)<br>GCS                      | Min. 8.0                  | Min. 9.0             | Min. 9.0                | Min. 8.0             |
| 습태인장강도(N/m²)<br>WTS                      | Min. 0.18                 | Min. 0.22            | Min. 0.22               | Min. 0.22            |
| 550℃ 압축강도(N/㎠)                           | Min. 5.5                  | Min. 6.0             | Min. 6.5                | Min. 7.0             |
| GCS@550℃ for 30min.                      | 0.0                       | 0.0                  | 515                     |                      |
| 550℃ 습태인장강도(N/m²)<br>WTS@550℃ for 30min. | Min. 0.08                 | Min. 0.12            | Min. 0.15               | Min. 0.18            |

<sup>\*</sup> Test method : Sand 100%, GEKO bentonite 5%, Moisture 2%, Compactability 45%, Mixing 6min.

화학 성분 (Chemical Composition)

| Item          | CAS no.   | Component content (%) |
|---------------|-----------|-----------------------|
| SiO2          | 7631-86-9 | 60~65                 |
| Al2O3         | 1344-28-1 | 14~17                 |
| Fe2O3         | 1313-59-3 | 2~5                   |
| CaO           | 1332-37-2 | 2~4                   |
| Na2O3         | 1309-48-4 | 2~5                   |
| MgO           | 1305-78-8 | 2~4                   |
| K2O           |           | 0~1                   |
| Ignition Loss |           | Min. 6                |

<sup>\*</sup> 벤토나이트 원광 특성에 따라 차이가 발생할 수 있습니다.
Differences of component content may occure based on natural bentonite conditon.

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2012

EDITION
July 2017

<sup>\*\*</sup> 상기 내용 중 일부 물성치는 현장 적용 특성에 따라 변경될 수 있습니다.
Some of properties above could be changed in accordance with characteristic of application.



#### 포장 (Packaging)

제품 포장은 25kg 지대, 1ton bag 또는 30ton 벌크로 가능합니다.

Packed in 25kg paper bags on pallets, 1ton jumbo bags and 30tons road tanker.

#### 보관 및 안정성 (Storage and stability)

상온에서 생산된 제품 용기에 보관하고 습기를 피해야 합니다. 부적절한 보관으로 제품의 특성이 저하 될 수 있습니다.

Store the product in its closed original packaging at ambient temperature and protect from humidity. A reduction of properties may result from inadequate storage.

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EDITION July 2017

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