

RHASSOUL.CO.UK

Northfield Farm, Dam Lane, Thornton Curtis,
North Lincolnshire, DN39 6XN

Call the team at 01469 531 227 or 07743 362 408

Material Safety Data Sheet - Rhassoul Clay

General Information

Item Name: Rhassoul Clay

INCI: Montmorillonite

Chemical Formula: $\text{Si}_3.78\text{Al}_0.22\text{Mg}_2.92\text{Fe}_0.09\text{Na}_0.08\text{K}_0.08\text{O}_{10}(\text{OH})_2 \cdot 4\text{H}_2\text{O}$. (magnesium Montmorillonite)

Company's Name: Rhassoul.co.uk

Company's Address: Northfield Farm, Dam Lane, Thornton Curtis, North Lincolnshire, DN39 6XN

Telephone: 01469 531 227 or 07743 362 408

Ingredients/Identity Information

Ingredient: Minerals and Trace Elements

CAS Number: 12417-86-6

Physical/Chemical Characteristics

Appearance and Odour: Brownish Fine Powder, un-fragranced.

Vapour Pressure (MM Hg/70 F): negligible

Vapour Density (Air=1): N/A

Specific Gravity:

Evaporation Rate: N/A

Solubility in Water: None, but absorbs water.

Percent Volatiles by Volume: 0 %

Fire and Explosion Hazard Data

Flash Point: N/A

Lower Explosive Limit: Unknown, Upper Explosive Limit: Unknown

Extinguishing Media: Water

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

Reactivity Data

Conditions to Avoid (Stability): N/A

Materials to Avoid: None

Hazardous Decomposition Products: None (biodegradable)

Can Hazardous Polymerisation Occur: No

Protection Data

Signs/Symptoms of Overexposure: LUNGS: Move to fresh air

EYES: Flush with plenty of water for about 15 minutes. Seek medical care if symptoms persist.

Skin contact: N/A

Precautions for Safe Handling and Use

Steps if Material is Released/Spill: Scoop up powder, mop up wet clay.

Waste Disposal Method: MAINS DRAINAGE, or LANDFILL

Precautions-Handling/Storing: Store in a dry and well ventilated room in a closed container.

Control Measures

Respiratory Protection: Use dust mask or respirator

Ventilation: Provide adequate ventilation

Protective Gloves: Type as required for task

Eye Protection: Safety goggles

Other Protective Equipment: As required to prevent prolonged contact

Occupational Exposure limit. Not determined.

Carcinogen Not determined.

Transportation Data

Ship as a foodstuff, not to be loaded with incompatible materials including poisons.

Chemical Composition and physical characteristics.

The Ghassoul is a purely natural mineral product mostly composed of stevensite. It is a clayey mineral made of magnesium silicate.

Optical microscope aspect.

Under the optical microscope the prepared Ghassoul looks like a grey shapeless colloidal base on which we can see fine micelles. No trace of vegetable waste has been observed.

Electron microscope aspect.

The electron microscope shows that the Ghassoul crystalline structure is similar to the other minerals belonging to the stevensite and the montmorillonites group.

Density

The rough Ghassoul density is around 1.7 in the pycnometer

Water content

The water content is found at 180 degrees Celsius by attaining a constant weight. The loss of weight by desiccation is nearly 13% of the total weight.

Ashes content

The total ashes resulting from a complete combustion at 600 degrees Celsius, in a ceramic crucible containing the sample already dry by desiccation at 180 degrees Celsius is about 18% of the total weight.

Chemical analysis:

The silicon contents formulated in silicate represents 55% of the Ghassoul.

Écht N°	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	FeO %	TiO ₂ %	CaO %
Beige	58,38	2,21	0,89	0,22	0,17	2,21

MgO %	Na ₂ O %	K ₂ O %	MnO %	P ₂ O ₅ %	P_Feu %	Total %
25,75	0,53	0,67	<0,01	0,02	8,65	99,69

Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Cd ppm
<0,5	<10	56	14	< 5	< 5

Ce ppm	Co ppm	Cr ppm	Cu ppm	Li ppm
34	8	25	7	940

Mo ppm	Nb ppm	Ni ppm	Pb ppm	Sb ppm	Sr ppm
< 5	<5	25	14	<10	191

V ppm	Y ppm	Zn ppm	Hg ppb
45	<5	60	<10

Indice de Blancheur	Humid %	Indice de Gonflement	pH l/10	Matière Organique %
51,05	10,96	12 ml	8,2	<0,01

Indice de sédimentation (en ml)					
1H	2H	3H	24H	48H	72H
20,0	18,0	17,0	15,0	15,0	15,0

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