



Glauconite Greensand

Section 01 - Chemical And Product Information	
Product Use	Filter medium for water, natural absorbent, soil treatment
Supplier Name	Marion Ag Service 18745 Butteville Rd Aurora, OR 97002 For more information: www.marionag.com 503-633-4562
Preparation Date	January, 4, 2016
24-Hour Emergency Phone	INFOTRAC 1-800-535-5053

Section 02 - Composition/Information on Ingredients			
CHEMICAL COMPOSITION, CONTENT, %		MINERAL COMPOSITION	
SiO ₂	65,70	Glauconite	37±6%
TiO ₂	0,73	Quartz	46±6%
Al ₂ O ₃	9,65	Mica (muscovite)	4±1%
Fe ₂ O ₃	10,10	Feldspar	8±2%
MnO	0,02	Zeolite	4±1%
CaO	1,10	Chlorite	1±0,5
MgO	2,17	EXCHANGE CATIONS:	
Na ₂ O	0,32	Ca	10,48 mg-equ
K ₂ O	3,90	Mg	6,58 mg-equ
P ₂ O ₅	0,34	Na	2,61 mg-equ
SO ₃	<0,03	K	1,28 mg-equ
pH water extraction	8,01	Total amount	20,95 mg-equ

Section 03 - Hazard Identification	
Inhalation	Normal irritation due to dust.
Skin Contact / Absorption	No effect
Eye Contact	Causes mild irritation as any small particulate.
Ingestion	No effect
Exposure Limits	None established. Use nuisance dust levels as a guideline.



Section 04 - First Aid Measures	
Inhalation	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.
Skin Contact/Absorption	Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists
Eye Contact	Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention
Ingestion	No effect
Additional Information	Not available

Section 05 - Fire Fighting	
Conditions of Flammability	Non-flammable
Means of Extinction	Product does not bum.
Flash Point	Not applicable
Auto-ignition Temperature	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Hazardous Combustible Products	None known
Special Fire Fighting Procedure	None
Explosion Hazards	Non-explosive

Section 06 - Accidental Release Measures	
Leak I Spill	Wear appropriate personal protective equipment. Ventilate area. Stop or reduce leak if safe to do so. Prevent material from entering sewers. Sweep up and place in a container for disposal.
Deactivating Materials	None

Section 07 - Handling and Storage	
Handling Procedures	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Storage Requirements	Store in a cool, dry, well-ventilated place. Keep container tightly closed, and away from incompatible materials.



Section 08 - Personal Protection and Exposure Controls

Protective Equipment

Eyes	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.
Respiratory	Wear a dust mask when exposed to the dust.
Gloves	Impervious gloves of chemically resistant material (rubber or PVC) should be worn. Wash contaminated clothing and dry thoroughly before reuse.
Clothing	Body suits, aprons, and/or coveralls of chemical resistant material should be worn. Wash contaminated clothing and dry thoroughly before reuse.
Footwear	No special footwear is required other than what is mandated at place of work.

Engineering Controls

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	Use general ventilation to control dust

Section 09 - Physical and Chemical Properties

Physical State	Solid, powder
Odor and Appearance	Odourless green sand
Odor Threshold	Not applicable
Specific Gravity (Water=1)	2.4
Vapor Pressure (mm Hg, 20C)	Not applicable
Vapor Density (Air=1)	Not available
Evaporation Rate	Not available
Boiling Point	Not available
Freeze/Melting Point	Not available
PH	8.34
Water/Oil Distribution Coefficient .	Not available
Bulk Density	1100 kg/m ³
% Volatiles by Volume	0
Solubility in Water	Insoluble

Section 10 - Stability and Reactivity

Stability	Stable
Incompatibility	None incompatible
Hazardous Products of Decomposition	none
Polymerization	Will not occur



Section 11 - Toxicological Information	
Irritancy	None
Sensitization	Not available
Chronic/Acute Effects	Inhalation produces the same effect as normal over-exposure to dust.
Synergistic Materials	Not available
Animal Toxicity Data	Not available
Carcinogenicity	Not considered to be carcinogenic (IARC and ACGIH).
Reproductive Toxicity	Not available
Teratogenicity	Not available
Mutagenicity	Not available

Section 12 - Ecological Information	
Fish Toxicity	Not available
Biodegradability	Not available
Environmental Effects	Not available

Section 13 - Disposal Consideration	
Waste Disposal	Dispose in accordance with all federal, provincial, and/or local regulations including the Russian Environmental Protection Act.

Section 14 - Transportation Information	
TDG Classification	
Class	Not regulated
Group	Not regulated
PIN Number	Not regulated
Other	Secure containers (full and/or empty) with suitable hold down devices during shipment

Section 15 - Regulatory Information	
WHMIS Classification	Not a controlled product

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE RUSSIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.



Section 16 - Other Information

List of sources of data used for the Safety passport compilation

1. TU9158-002-97006009-2010 Glaucosite Green Sand
2. GOST 8.579-2002. State system for ensuring the uniformity of measurements. Requirements for the number of prepackaged products of any kind in their manufacture , packaging, sale and import.
3. Harmful substances in the industry. Ref. ed. Ed. E. Y. Levinoy, K.D. Gadaskinoy. - L.: Chemistry. 1985
4. A.Y. Korolchenko. Fire and explosion hazard of substances and materials and the means of extinguishment. Handbook. - Moscow: Ass. «Pozhnauka», 2000
and (or) Manual fire- hazardous substances and materials and means of extinguishing vols. 1 and 2. - M.: «Chemistry», 1990.
5. Safety rules and procedure for the liquidation of emergencies with dangerous at transportation by rail. - Moscow: Ministry of Railways of the Russian Federation, 1997.
6. Regulations for the transport of dangerous goods by road. - M.: Transport.
7. Transportation of Dangerous Goods Regulations (Part 2) to the Agreement on International Goods Transport by Rail (SMGS). - OSJD, 1998.
and (or) Addendum 1 and 2 of the above-mentioned regulation.
8. List of specifications: maximum permissible concentration (MPC) and approximate safe exposure levels (ASL) of harmful substances in the water of water bodies of fishery value. State Committee for Fisheries of the Russian Federation , approved. 28.04.1999, № 96. M. VNIRO , 1999
9. Hazardous chemicals , Vol.7 , Ed. Filova V.A., Musiychuk Y.I. , Ivina B.A. , St.-Petersburg , 1998.
10. Harmful inorganic compounds in industrial wastewater. Grushko Y.M. , Handbook - L. : «Chemistry» , 1979
11. GOST 12.0.004-90 SSLS. The organization of training safety. General Provisions
12. GOST 12.1.004-91 SSLS. Fire safety. General requirements
13. GOST 12.1.005-88 SSLS. General hygiene requirements to the working area
14. GOST 12.1.007-76 SSLS. Harmful substances. Classification and general safety
15. GOST 12.1.044-78 SSLS. Fire and explosion safety of substances and materials. The range of indicators and methods for their determination
16. GOST 12.1.016-79 SSLS. The air working area. Requirements for methods of measurement of concentrations of harmful substances
17. GOST 12.1.018-93 SSLS. Fire and explosion of static electricity. General requirements
18. GOST 12.2.003-91 SSLS. Industrial equipment. General requirements



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| 19. GOST 12.3.002-75 | SSLS. The processes of production. General requirements for safety |
| 20. GOST 12.4.028-76 | SSLS. Respirators SB -1 «Lepestok». Technical requirements |
| 21. GOST 12.4.011-89 | SSLS. Means of workers protection. General requirements and classification
SSLS. Ventilation systems. General requirements |
| 22. GOST 12.4.021-75 | |
| 23. GOST 12.4.034-85 | SSLS. Personal respiratory protection. Classification and labeling |
| 24. GOST 12.4.068-79 | SSLS. Personal protective dermatological. Classification and general requirements |
| 25. GOST 12.4.103-83 | SSLS. Special protective clothing, personal protection for feet and hands. Classification |
| 26. GOST R 12.4.230.1-2007 | SSLS. Personal eye protection. General technical requirements |
| 27. GOST R 12.4.026-2001 | SSLS. Signal colors, safety signs and signal marking. Purpose and application rules. General technical requirements and specifications. Test Methods. |
| 28. GOST 12.4.131-83 | SSLS. Women overalls. Specifications |
| 29. GOST 12.4.132-83 | SSLS. Men overalls. Specifications |
| 30. GOST 17.1.3.13-86 | Nature Conservancy. Hydrosphere. General requirements for the protection of surface waters against pollution |
| 31. GOST 17.2.3.02-78 | Nature Conservancy. Atmosphere. Rules for establishing permissible emissions of industrial enterprises |
| 32. GOST 2226-88 | Paper bags. Specifications |
| 33. GOST 10354-82 | Polyethylene. Specifications |
| 34. GOST 12302-83 | Bags of polymeric and composite materials. General specifications |
| 35. GOST 13841-95 | Corrugated Boxes for chemical products. Specifications |
| 36. GOST 14192-96 | Cargo marking |
| 37. GOST 18251-87 | Adhesive tape on paper. Specifications |
| 38. GOST 18573-86 | Wooden boxes for the product of the chemical industry. Specifications |
| 39. GOST 19433-88 | Dangerous goods. Classification and labeling |
| 40. GOST 20010-93 | Technical rubber gloves. Specifications |
| 41. GOST 27574-84 | Women's suits for protection against common industrial dirt and mechanical damage. Specifications. |



42. GOST 27575-84 Men's suits for protection against common industrial dirt and mechanical damage. Specifications.
43. GOST 31340-2007 Warning labeling of chemical products. General requirements
44. GOST R 51474-99 Packaging. Marking indicating the type of handling with the cargo
45. SanPiN 2.1.7.1322-03 Hygiene requirements for the waste placement and disposal of production and consumption
46. HN 2.2.5.1313/HN 2.2.5.2308-07 Maximum permissible concentration (MPC/ASL) of harmful substances in the air of the working area
47. HN 2.1.5.1315/HN 2.1.5.2307-07 Maximum permissible concentration (MPC/AAC) of chemical substances in the water reservoirs of drinking and cultural and community water
48. HN 2.1.6.1338/HN 2.1.6.2309-07 Maximum permissible concentration (MPC/ASL) in the ambient air of residential areas
49. HN 2.3.3.972-00 Maximum permissible limits of chemicals released from materials in contact with food
50. Information Card of chemical and biological substance (RPOHV). Dialuminium trioxide dioxide silica dihydrate. State registration number AT 000 574 - M: RPOHV, 1995
51. SNiP 41-01-2003 «Heating, Ventilation and Air Conditioning»
52. EC Regulation EEC 1999/45/EC
53. Chemical Encyclopedic Dictionary. M.: «Sov. Encyclopedia», 1983
54. RSS-99/2009 Radiation safety standards (SanPiN 2.6.1.2523-09)
55. The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer with adjustments made by the Second Meeting of the Parties (London, 27-29 June 1990) and the Fourth Meeting of the Parties (Copenhagen, 23-25 November 1992), and further adjusted by the Meeting of the Parties (Vienna, 5-7 December 1995), and with additional adjustments by the Ninth Meeting of the Parties (Montreal, 15-17 September 1997)
56. Stockholm Convention on Persistent Organic Pollutants (THE UNITED NATIONS, May 22, 2001)
57. MI 2.1.7.730-99. Hygienic requirements to the soil of the populated areas

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Users should make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials for the safety and health of employees, customers, and the environment. This hazard information is not a substitute for risk assessment under actual conditions of use. Users have the responsibility to keep currently informed on chemical hazard information, to design and update their own programs, and to comply with all applicable national, federal, state, and local laws and regulations regarding safety, occupational health, right to know, and environmental protection.