GREEN BOOM™

REINVENTING OIL-ONLY ABSORBENTS

Oil-Only Pad

BIO-PRODUCTS FOR LAND & SEA

Date of Revision: 05-27-2024

Manufacturers Safety Data Sheet (MSDS)

1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE & OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

CODE: SKU M2015

PRODUCT NAME: Green Boom Biodegradable Pad

1.2 Relevant Identified Uses Of The Substance Or Mixture & Uses Advised Against

INTENDED USE: Oil-only absorption pad for oil spill containment and recovery in water.

1.3 Details Of The Supplier Of The Safety Data Sheet

NAME: Green Boom North America LLC

FULL ADDRESS: 4800 River Green Pkwy, Duluth GA 30096

DISTRICT & COUNTRY: Duluth, GA 30096| United States of America (USA)

PHONE NUMBER: +1 (404) 990 9836

E-MAIL ADDRESS OF THE COMPETENT PERSON RESPONSIBLE FOR THE SAFETY DATA SHEET: info@greenboom.com

1.4 Emergency Telephone Number

FOR URGENT INQUIRIES REFER TO: Green Boom Corporation

CALL MANUFACTURER: 678-870-4386

2. HAZARDS IDENTIFICATION

2.1 Classification Of The Substance Or Mixture

EC CLASSIFICATION: The product is classified as non-hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments).
OSHA/HCS STATUS: This product is considered non-hazardous and contains no listed ingredient by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Any additional information concerning the risks for health and/or the environment are given in sections 11, 12 & 16 of this sheet.
GHS LABEL ELEMENTS | HAZARD PICTOGRAMS

SIGNAL WORD – Warning

The full wording of the hazard (H) and prevention (P) phrases is given in section 16 of the sheet.

2.2 Label Elements

HAZARD STATEMENTS

H317: May cause an allergic skin reaction.
H334: May cause allergy or asthma symptoms if dust is inhaled.

PREVENTION

P102: Keep out of reach of children.
P280: Wear protective gloves/eye protection.
P264: Wash hands thoroughly with soap and water after handling.
P241: Use explosion proof electrical / ventilation / lighting equipment.

RESPONSE

P301 + 331: IF SWALLOWED: Do not induce vomiting. Get immediate medical advice/attention and show this Product or Label.
P332: If skin irritation occurs: Wash with plenty of water and soap.
P305 + P351: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P370 + P378: In case of fire: Use extinguishing media listed in Section 5 below.

STORAGE

P410: Protect from sunlight, excessive heat and sources of ignition.

DISPOSAL

P501: Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards which do not result in classification/ HHNOC/PHNOC

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Cotton Fibers

3.2 Mixtures

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
COTTON			
100% Cotton	95- 100%	–	None
EC.:			
INDEX: –			

T+ = Very Toxic (T+), T = Toxic(T), Xn = Harmful (Xn), C = Corrosive (C), Xi = Irritant, (Xi), O = Oxidizing (O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment (N), Carc. = Carcinogen

4. FIRST AID MEASURES

4.1 Description Of First Aid Measures

No harm to the staff authorized to use has been reported. However, in case of contact, inhalation or ingestion, the following general measures provided for a first aid shall be taken.

INHALATION: Inhalation of dust may cause discomfort. Bring subject to the open air. If respiration is difficult, call a doctor immediately.
INGESTION: Consult a doctor immediately. Induce vomiting only as directed by your doctor. Do not give anything by mouth if the subject is unconscious and if not authorized by the doctor.

EYES: Remove any contact lenses. Wash immediately and abundantly with water OT saline solution for at least 15 minutes, opening the eyelids well. Consult a doctor if the problem persists.

SKIN: Wash immediately and abundantly with water and soap. If irritation persists, consult a doctor. Wash contaminated garments before reusing them.

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4.2 Most Important Symptoms And Effects, Both Acute And Delayed
No episodes of damage to health ascribable to the product have been reported.

4.3 indication Of Any Immediate Medical Attention And Special Treatment Needed
Follow doctor's orders

5. FIREFIGHTING MEASURES

5.1 Extinguishing Media
SUITABLE EXTINGUISHING MEDIA: The extinction equipment should be of the conventional kind: carbon dioxide, foam, chemical powder and nebulised water. Do not use strong streams of water or dry chemical that disperses dust into the air. Dust placed in suspension with ignition sources present may flash or explode.
EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS
Do not use water jets.

5.2 Special Hazards Arising From The Substance Or Mixture
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE: Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

5.3 Advice For Firefighters
GENERAL INFORMATION:
Small Fire: Use dry chemical powder.
Large Fire: Use water spray, fog or foam. Do not use water jet. Always wear full fire prevention gear. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and anti-static), a depressurized mask with face-mask covering the whole of the operator's face or a self-respirator (selfprotector) in the event of large quantities of smoke.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment & Emergency Procedures
If there are no contraindications, spray solid products with water to prevent the formation of dust. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental Precautions
The product does not present a hazard to sewers, surface water, ground water and neighboring areas.

6.3 Methods & Material For Containment & Cleaning Up
Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Water can be allowed to evacuate through sewer systems. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference To Other Sections
Any information on personal protection and disposal is given in sections 8 and 13.

7. HANDLING & STORAGE

7.1 Precautions For Safe Handling
Handle the product after consultation with all other sections of this SDS. Do not eat, drink or smoke during use. Follow normal hygiene and housekeeping standards for clean up.

7.2 Conditions For Safe Storage, Including Any Incompatibilities
Store in a well-ventilated place; keep far away from sources of heat, bright flames and sparks and other sources of ignition. Store closed containers in a well-ventilated area away from direct sunlight. Keep containers away from incompatible materials. See section 10.

7.3 Specific End Use(s)
Information not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Name	Type	Country	TWA/8H		ST EL /15 MI N	
	Value Limit		mg/m3	ppm	mg/m3	ppm
Total dust		USA	10			
	TLV-ACGIH	EU	4.0			

8.2 Exposure Controls
As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Personal protection equipment must comply with the rules in force indicated below.
Avoid dust accumulation and control ignition sources. Where appropriate, employ grounding, venting and explosion relief provisions in accordance with accepted engineering practices in processes capable of generating dust and/or static electricity.
HANDLING PROTECTION Protect hands with category I (ref. Directive 89/686/
EEC and standard EN 374) work gloves, such as those in PVC, butyl, fluoroelastomer or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.
EYE PROTECTION Wear protective safety goggles (ref. Standard EN 166).
SKIN PROTECTION Wear category I professional long-sleeved overalls and safety footwear (ref.Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing protective clothing.
RESPIRATORY PROTECTION If the threshold value (eg TLV-TWA) of the substance, or one or more of the substances present in the product is exceeded, it is advisable to wear a mask with type B filter whose class (1, 2 or 3) which must be chosen according to the limit concentration of use, (see standard EN 14387). If there are gases or vapors of a different nature and / or gases or vapors with particles (aerosols, fumes, mists, etc.), combined filters must be provided.

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The use of means of protection of the respiratory tract is necessary if the technical measures adopted are not sufficient to limit the exposure of the worker to the threshold values taken into consideration. However, the protection offered by the masks is limited.
In the event that the substance considered is odorless or its olfactory threshold is higher than the relative TLV-TWA and in the event of an emergency, wear an open circuit compressed air breathing apparatus (see standard EN 137) ,or a respirator.
The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

Appearance	Solid
Color	Beige
Odor	No Distinctive Odor
Odor Threshold	–
pH	–
Melting Or Freezing Point	> 160°C
Initial Boiling Point	–
Boiling Range	–
Flash Point	> 198° - 260°C
Evaporation Rate	–
Flammability Of Solids And Gases	–
Lower Inflammability Limit	–
Upper Inflammability Limit	–
Lower Explosive Limit	–
Upper Explosive Limit	–
Vapor Pressure	–
Vapor Density	–
Relative Density	(H2O = 1): 0.85
Solubility	Insoluble
Partition Coefficient:	N-Octanol/Water –
Ignition Temperature	300°C
Maximum Working Temperature	88°C
Viscosity	–
Reactive Properties	–

9.2 Other Information

Product VOC (Directive 2004/42/EC): <0.0 g/kg

10. STABILITY & REACTIVITY

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical Stability

The product is stable in normal conditions of use and storage.

10.3 Possibility Of Hazardous Reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4 Conditions To Avoid

None in particular, however the usual precautions used for dried biomass products should be respected.

10.5 Incompatible Materials

None

10.6 Hazardous Decomposition Products

In the event of thermal decomposition or fire, no vapors potentially dangerous to health will be released.

11. TOXICOLOGICAL INFORMATION

11.1 Information On Toxicological Effects

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled according to good industrial practices.

11.2 Acute Toxicity

Does not meet the classification criteria for this hazard class.

11.3 Irritant And Corrosive Effects

Does not meet the classification criteria for this hazard class.

11.4 Sensitization

Toxicological data are not available.

11.5 Specific Target Organ Toxicity

Does not meet the classification criteria for this hazard class.

11.6 Aspiration Hazard Factory Workers

DUST INHALATION: This material may produce dust. May cause respiratory tract irritation. Breathing small amounts of this material during normal handling is not likely to be harmful. Breathing large amounts may be harmful.

11.7 Aspiration Hazard Single Exposure

Does not meet the classification criteria for this hazard class.

11.8 Carcinogenicity

Does not meet the classification criteria for this hazard class.

11.9 Cmr Effects (Carcinogenicity, Mutagenicity And Toxicity For Reproduction)

Does not meet the classification criteria for this hazard class.

11.10 Practical Experience

OTHER OBSERVATIONS:
When product is being used for Oil Spill Recovery, repeated or prolonged contact with petroleum contaminated product(s) may cause serious health issues as related to contact with any type of hazardous waste products.

11.11 Overall Assessment On Cmr Properties

The components in this formulation do not meet the criteria for classification as CMR category 1 or 2.
There is no information available on the preparation itself . The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and has not been classified.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Not available. This product contains only components that are naturally occurring in soil and are biodegradable. Handle it according to good working practices. Avoid littering.

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12.2 Persistence & degradability
Information not available.

12.3 Bioaccumulative potential
Information not available.

12.4 Mobility in soil
TCLP has been performed for product. No leaching results. Report available upon request.

12.5 Results of PBT & vPvB assessment
Based on the available data, the product does not contain PBT or vPvB substances in percentages greater than 0.1%.

12.6 Other adverse effects
Information not available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods
If unused, no special precautions are necessary. Reuse with appropriate machinery when available. In certain types of cleanup applications, the nature of the material recovered will classify the resulting spent material as a hazardous component. In such instances the material should be disposed of via an approved hazardous waste disposal service and the appropriate manifesting obtained.
COMPOSTING: Product contains Class 1 microbial formulation to permit organic composting of hydrocarbons, soiled container sleeve and biomass content. Product is USDA Certified BioBased Product 100%. Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.
LAND FILL/INCINERATION: Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

14. TRANSPORT INFORMATION
The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Information not relevant.

15. REGULATORY INFORMATION

15.1 Seveso Category
Directive 2012/18/CE: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006. None.

15.2 Substances In Candidate List (Art. 59 REACH)
Based on the available data, the product does not contain SVHC substances in percentages greater than 0.1%.

15.3 Substances subject to authorization (Annex XIV REACH)
None

15.4 State Right To Know Laws
CALIFORNIA PROP. 65 COMPONENTS: This product does not contain chemicals in the California Prop. 65 Components List.

15.5 Cercla (Comprehensive Environmental Response Compensation And Liability Act)
No reportable quantity.

15.6 Sara Title Iii (Superfund Amendments & Reauthorization Act
Ingredients of this product are on the inventory list.

15.7 Tsca (Toxic Substances Control Act
No listed ingredient.

15.8 Healthcare Controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.9 Voc (Directive 2004/42/Ec)
VOC of product: 0.00 g/kg

15.10 Chemical Safety Assessment
No chemical safety assessment has been processed for the mixture and the substances it contains.

16. OTHER INFORMATION
Text of hazard (H) indications mentioned in section 2 – 3 of the sheet

H317: May cause an allergic skin reaction. Category 1

H334: May cause allergy or asthma symptoms if dust is inhaled. Category 1

Text of prevention (P) phrases mentioned in section 2 – 3 of the sheet:

P102: Keep out of reach of children. P280: Wear protective gloves/eye protection. P264: Wash hands thoroughly with soap and water after handling. P241: Use explosion proof electrical / ventilation / lighting equipment. P301 + 331: IF SWALLOWED: Do not induce vomiting. Get immediate medical advice/attention and show this Product or Label.

P332: If skin irritation occurs: Wash with plenty of water and soap.

P305 + P351: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

P370 + P378: In case of fire: Use extinguishing media listed in Section 5 below. P410: Protect from sunlight, excessive heat and sources of ignition. P501: Dispose of contents and container in accordance with all local, regional, national and international regulations.

PWHMIS CLASSIFICATION: Not a controlled product.

16.1 Legend
ADR: European Agreement concerning the carriage of Dangerous goods by Road

CAS NUMBER: Chemical Abstract Service Number

CE50: Effective concentration (required to induce a 50% effect)

CE NUMBER: Identifier in ESIS (European archive of existing substances)

CLP: EC Regulation 1272/2008

DNEL: Derived No Effect Level

EmS: Emergency Schedule

GHS: Globally Harmonized System of classification and labeling of chemicals

IATA DGR: International Air Transport Association Dangerous Goods Regulation

IC50: Immobilization Concentration 50% of the population subject to test

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IMDG: International Maritime Code for dangerous goods
IMO: International Maritime Organization
INDEX NUMBER: Identifier in Annex VI of CLP
LC50: Lethal Concentration 50%
LD50: Lethal dose 50%
OEL: Occupational Exposure Level
PBT: Persistent bioaccumulative and toxic as REACH Regulation
PEC: Predicted environmental Concentration
PEL: Predicted exposure level
PNEC: Predicted no effect concentration
REACH: EC Regulation 1907/2006
RID: Regulation concerning the international transport of dangerous goods by train
TB: Transparent Base
TLV: Threshold Limit Value
TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
TWA STEL: Short-term exposure limit
TWA: Time-weighted average exposure limit
VOC: Volatile organic Compounds
vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
WB: White Base
WGK: Water hazard classes (German).

16.2 General Bibliography

1. Regulation (CE) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp CLP)
10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
12. Regulation (EU) 2016/1179 (IX Atp CLP)
13. Regulation (EU) 2017/776 (X Atp CLP) Handling Chemical Safety
14. The Merck Index. – 10th Edition
15. Niosh – Registry of Toxic Effects of Chemical Substances
16. INRS – Fiche Toxicologique (Toxicological Sheet)
17. Patty – Industrial Hygiene & Toxicology
18. N.I. Sax – Dangerous Properties Of Industrial Materials-7, 1989 Edition
19. ECHA website 20. American National Standard for Hazardous Industrial Chemicals - Precautionary Labeling (ANSI Z-129.1-2000).
21. American National Standard for Hazardous Industrial Chemicals - MSDS Preparation (ANSI Z400.1-2004).
22. Health Canada GHS Website: www.healthcanada.ca/ghs;
23. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (“The Purple Book”), United Nations, 2005 First Revised Edition, available at www.unece.org/trans/danger/publi/ghs/ghs_rev01/01files_e. html or from United Nations Publications (publications@un.org)

NOTE FOR USERS

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .
This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.