MATERIAL SAFETY DATA SHEET

SECTION 1–IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND IDENTIFICATION OF THE COMPANY / UNDERTAKING

1.1 Product Identifer : Coconut Shell Charcoal

Identification of the substance

CAS Number : 16291-96-6

1.2 Relevant identified uses of the substanceor mixture and uses advised against Identified uses : Barbeque and Energy

1.3 Details of the supplier of the safety data sheet :

1.4 Emergency telephone number : 1

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture : Classification according to Regulation (EC) No. 1272/2008 (CLP) This substancemeets the criteria for classification in accordance with Regulation No. 1272/2008/EC.

2.2 Label elements : A positive result is obtained in a test using 100 mm cube at 140°C of 24 hours test, while e test using 25 mm cube at 140°C and 100 mm cube at 120°C indicates a negative result.

Accordingly, said sample shall not be classified as Class 4.2 of the IMDG code: substances liable to spontaneous combustion, and the substance is to be transported in packages with a volume not more than $3m^3$

Labeling according to Regulation (EC) No 1272/2008 (CLP): not required

2.3 Other hazard : There is no additional information.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances		**Wet Basic**	**Dry Basic**
Moisture in the Analysis Sample (weight %)	:	3.53	-
Ash Content (weight %)	:	1.23	1.28
Volatile Matter (weight %)	:	30.06	31.16
Fixed Carbon (weight %)	:	65.18	67.56

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

General notes : Take off contaminated clothing

Following inhalation : Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact : Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact : Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion : Rinse mouth. Call a doctor if you feel unwell. Symptoms and effects are not known to date.

4.2 Most Important Symptoms and Effcts, both acute delayed : None

4.3 Indication of any immediate medical attention and special treatment needed : None

SECTION 5 – FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	:	Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO_2)
Unsuitable extinguishing media	:	Water jet

5.2 Special hazards arising from the substance or mixture : Danger of dust explosion.

Hazardous combustion products	:	In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO_2).

5.3 Advice for firefighters : Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6– ACCIDENTAL RELEASE MEASURE

6.1 Personal precautions, protective equipment, and emergency procedures

6.1.1 Personal Precautions	:	Avoid contact with eyes. Ensure adequate ventilation. Use personal protective equipment as required.
6.1.2 Special hazards arising from the substance or mixture	:	Refer to protective measures listed in Sections 8.

6.2 Enviromental Precautions

6.2.1 Environmental Precautions	:	See section 12 for ecological information.

6.3 Methods and Material for Containment and Cleaning Up

6.3.1 Methods for Containment	:	Use appropriate tools to out the spilled solid in a convenient waste disposal container.
6.3.2 Methods for Cleaning Up	:	Remove heat and ignition sources. Vacuum sweep, if possible, to avoid generating airbone dust. Wash residual to on-site tratment area, where appropriate. If treatment area is not available, wash down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process wahed-down material

6.4 Reference To Other Section

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7- HANDLING AND STORAGE

7.1 Precautions for safe handling

7.1.1 Handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing.

7.2 Conditions for Safe Storage Including any Incompatibilities

7.2.1 Storage : The Wood should be stored well ventilated areas and air should be able to circulate between the stored materials. The product should be stored in a dry area away from open flames, heat sources, and other ignition sources.

7.2.2 Incompatible product : Strong oxidizer

7.3 Specific end use(s) : Barbeque and Energy

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameter

National limit values
Occupational exposure limit values (Workplace Exposure Limits) not relevant

8.2 Exposure controls

Individual protection measures (personal protective equipment)

- Eye/face protection : Use safety goggle with side protection.
- Hand Protection : Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.
- Type of Material : NBR (Nitrile rubber).
- Material Thickness : >0.11 mm.
- Breakthrough times of the glove material : >480 minutes (permeation: level 6)
- Other protection measures : Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.
- Respiratory protection : Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, color code: White). Keep away from drains, surface and ground water.

SECTION 9- PHYSICAL DATA AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	:	Solid
Color	:	Black
Odor	:	None
Ignition Point	:	Combustible
Flash point	:	Not available
Boiling point	:	Not available
Melting point	:	398°C
Evaporation rate	:	Not available
pH	:	7
Vapor density	:	Not available
Specific gravity	:	1.3 (Approximately)
Solubility (water)	:	Insoluble
Vapor pressure	:	< 0.1 mm Hg
Upper explosion limit	:	Not available
Lower explosion limit	:	Not available
Auto ignition temperature	:	Not available
Decomposition temperature	:	Not available
Viscosity	:	Not available
Partition coefficient	:	Not available

SECTION 10- STABILITY AND REACTIVITY DATA

10.1 Reactivity : The product in the delivered form is not dust explosion capable; the enrichment of fine dust howeverleads to the danger of dust explosion

10.2 Chemical stability : The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions : Danger of explosion: Oxidisers, Peroxides

10.4 Conditions to avoid : There are no specific conditions known which have to be avoided.

10.5 Incompatible materials : There is no additional information Contact with oxidizing (e.g ozone, chlorine, liquid, and oxygen), acids and metals may cause a fire.

10.6 Hazardous decompostion products : Hazardous combustion products: see section 5.

SECTION 11 - TOXICOLOGICAL PROPERTIES

11.1 Information on likely routes of exposure

Inhalation	:	Inhalation may irritate respiratory tract.
Eye contact	:	Dust may cause temporary eye irritation.
Skin Contact	:	Minor or no effects expected
Ingestion	:	Minor or no effects expected
Symptoms	:	May cause an tearing of the eyes. Inhalation of dust may irritate respriratory tract.
Sensitization	:	No information available.
Mutagenic Effects	:	No information available.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity	:	Acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.
12.2 Process of degradability	:	The methods for determining the biological degradability are not applicable to inorganic substances.
12.3 Bio accumulative potential	:	Does not significantly accumulate in organisms.
12.4 Mobility in soil	:	Data are not available.

SECTION 13 – DISPOSAL CONSIDERATION

13.1 Waste treatment methods

13.1.1 Disposal Methods	:	Reclaim, if possible; otherwise dispose of in accordance with all applicable federal, state, and local regulations.
13.1.2 Contaminated Packaging	:	Dispose of in accordance with all applicable federal, state, and local regulations.

SECTION 14 – TRANSPORT INFORMATION

14.1 UN number : (Not subject to transport regulations)

14.2 UN proper shipping name : Not relevant

14.3 Transport hazard class(es) : Not relevant *(since the Self Heating Test showed that the related sample shall NOT be classified in Self Heating Substances)

14.4 Packing group : Not relevant since the Self Heating Test showed that the related sample shall NOT be classified in Self Heating Substances

14.5 Special precautions for user : None (non-environmentally hazardous acc. to the dangerousgoods regulations). There is no additional information.

14.6 Transport in bulkaccording to Annex II of MARPOL73/78 and the IBC Code : The cargo is not intended to be carried in bulk.

14.7 Information for each of the UN Model Regulations

- Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) : Not subject to ADR, RID and ADN.
- International Maritime Dangerous Goods Code (IMDG) : Not subject to IMDG. *(since Self heating Test showed that related sample is NOT classified as Self Heating Substances)

SECTION 15 – REGULATORY INFORMATION

15.1 Safety, health and enviromental regulations/legaslation specific for the substance or mixture

Relevant provisions of the European Union (EU) 14.2 UN proper shipping name

15.1.1 Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC) : Not listed

15.1.2 Regulation 1005/2009/EC On substances that deplete the ozone layer (ODS) : Not listed

15.1.3 Regulation 850/2004/EC on persistent organic pollutants(POP)	:	Not listed
15.1.4 Restrictions according to REACH, Annex XVII	:	Not listed
15.1.5 Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II	:	Not listed
15.1.6 Regulation 166/2006/EC concering the establishment of a European Pollutant Release and Transfer Register (PRTR)	:	Substance is listed in the following national inventories: - EINECS/ELINCS/NLP (Europe) - REACH (Europe

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16 – OTHER INFORMATION

16.1 Additional Information

Always wash hands with soap and water before smoking, eating or drinking. Showering at the end of the working day is recommended. Launder contaminated clothing before reuse. Encourage no eating, drinking or smoking when handling this material.

Respirators	: In general, the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken.
Exposure Standards – Time Weighted Averages	: Exposure standards are established on the premise of an 8-hour work period of normal intensity, under normal climatic conditions and where a 16-hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).
Personal Protective Equipment Guidelines	: The recommendation for protective Equipment contained within this MSDS report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.
Health Effects From Exposure	: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a MSDS report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

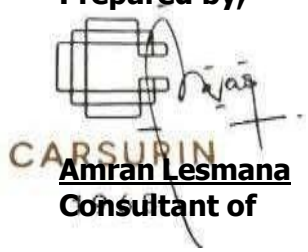
Report Status

This document has been compiled by Carsurin on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to Carsurin by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While Carsurin has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Carsurin accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

Jakarta, June 19th, 2023
Prepared by,



Amran Lesmana
Consultant of

PT. Carsurin
Neo Soho Capital, 28th Floor
Jl. Letjen S. Parman Kav. 28
Grogol Petamburan
Jakarta Barat 11470 Indonesia
Phone : +62 21-50226868 / +62 21-50171799
Email : charcoal@carsurin.com
Web : www.carsurin.com

for verification of authenticity of certificate or reports, please contact charcoal@carsurin.com