Version: 1.2 / EN Revision Date: 05/03/2017

SECTION 1: IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Product identifiers Product Name : ACS Material N-Doped Mesoporous Carbon (N-doped CMK-3) Brand : ACS Material LLC CAS-No. : 7440-44-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacturing of substances

1.3 Details of the supplier of the safety data sheet

Company	:	ACS MATERIAL LLC 959 E Walnut St. Suite 100 Pasadena, CA 91106
		USA
Telephone	:	+1 (866)-227-0656
Fax	:	+1 (781)-518-0284

1.4 Emergency telephone number

Emergency Phone #: +1 (866)-227-0656

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Carcinogenicity (Category 2), H351 For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance name	:	ACS Material N-Doped Mesoporous Carbon
CAS-No	:	7440-44-0
EC-No.	:	231-153-3



Safety Data Sheet – N-Doped Mesoporous Carbon (N-doped CMK-3) ACS Material LLC

: N-Doped Mesoporous Carbon.

Linear formula : $C_x N_y$ (C/N (atom) = 4.3)

Hazardous ingredients

Synonyms

Components	Concentration	CAS No.
N-Doped Mesoporous Carbon	>99.0%	7440-44-0

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities: None known.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **4.2** Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
- **4.3** Indication of any immediate medical attention and special treatment needed No data available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture No data available.

5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.



5.4 Further information No data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures
- 6.2 Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
 For personal protection see section 8.
 Environmental precautions
 No special environmental precautions required.
- **6.3 Methods and materials for containment and cleaning up** Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places

- **7.2** Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

1)	Appearance	Form: Solid
		Colour: Black
2)	Odour	Odorless
3)	Odour Threshold	No data available
4)	рН	No data available
5)	Melting point/freezing point	No data available
6)	Initial boiling point and boiling range	No data available
7)	Flash point	No data available
8)	Evaporation rate	No data available
9)	Flammability (solid, gas)	No data available
10)	Upper/lower flammability or explosive limits	No data available
11)	Vapour pressure	No data available
12)	Vapour density	No data available
13)	Relative density	No data available
14)	Water solubility	No data available
15)	Partition coefficient: n- octanol/water	No data available
16)	Auto-ignition temperature	452 deg. C (845.60 deg. F)
17)	Decomposition temperature	No data available



Safety Data Sheet – N-Doped Mesoporous Carbon (N-doped CMK-3)

ACS Material LLC

- 18) Viscosity
- 19) Explosive properties
- 20) Oxidizing properties

No data available No data available No data available

9.2 Other safety information No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available.
- **10.5 Incompatible materials** Strong oxidizing agents.
- Hazardous decomposition products
 Hazardous decomposition products formed under fire conditions. Carbon oxides
 Other decomposition products No data available.
 In the event of fire: see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Inhalation No data available. Dermal No data available.

Skin corrosion/irritation No data available.

Serious eye damage/eye irritation No data available. Respiratory or skin sensitisation No data available.

Germ cell mutagenicity No data available.

Carcinogenicity



Safety Data Sheet – N-Doped Mesoporous Carbon (N-doped CMK-3) ACS Material LLC

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

Aspiration hazard

No data available.

Additional Information

RTECS: Not available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

- **12.1 Toxicity** No data available.
- **12.2 Persistence and degradability** No data available.
- **12.3 Bioaccumulative potential** No data available.
- **12.4 Mobility in soil** No data available.
- 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
- **12.6 Other adverse effects** No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods



Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group ADR/RID: - IMDG: - IATA: -

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no Special precautions for user

No data available.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Authorisations and/or restrictions on use No data available.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.		
HMIS Classification Health hazard: Chronic Health Hazard:	0	
Flammability: Physical Hazard:	0 0	
NFPA Rating Health hazard: Fire Hazard: Reactivity Hazard:	1 0 0	

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