## **Diamond Nanoparticles (C)**

## **US Research Nanomaterials, Inc.**

## Material Safety Data Sheet

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acc. to OSHA and ANSI

1 Identification of substance:
Product details:
Trade name: Diamond powder
Stock number: US1062
<ul> <li>Manufacturer/Supplier:</li> <li>US Research Nanomaterials, Inc.</li> <li>3302 Twig Leaf Lane</li> <li>Houston, Texas 77084, USA</li> <li>www.us-nano.com</li> </ul>
2 Composition/Data on components:
Chemical characterization: <u>Description: (CAS#)</u> diamond (CAS# 7782-40-3); 98+%
<pre>Identification number(s):</pre>
<b>EINECS Number:</b> 231-953-2
4 Hazards identification
Hazard description: Not applicable
Information pertaining to particular dangers for man and environment Not applicable
5 First aid measures
☐ General information No special measures required.
□ After inhalation Seek medical treatment in case of complaints.
After skin contact Generally the product does not irritate the skin.
After eye contact
Rinse opened eye for several minutes under running water. If symptoms
persist, consult a doctor.

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After swallowing Seek medical treatment.
6 Fire fighting measures
Suitable extinguishing agents
   Product is not flammable. Use fire fighting measures that suit the
   surrounding fire.
□ Protective equipment: No special measures required.
7 Accidental release measures
Person-related safety precautions: Not required.
Measures for environmental protection:
   Do not allow material to be released to the environment without proper
   governmental permits.
□ Measures for cleaning/collecting: Pick up mechanically.
Additional information:
   See Section 7 for information on safe handling
   See Section 8 for information on personal protection equipment.
   See Section 13 for disposal information.
8 Handling and storage
Handling
Information for safe handling:
   Keep container tightly sealed.
   Store in cool, dry place in tightly closed containers. No
   special precautions are necessary if used correctly.
\hfill\square Information about protection against explosions and fires:
   No special measures required.
Storage
Requirements to be met by storerooms and receptacles:
   No special requirements.
□ Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
9 Exposure controls and personal protection
Additional information about design of technical systems:
   No further data; see
                          item 7.
   Components with limit values that require monitoring at the workplace:
   Not required.
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Additional information: No data
Personal protective equipment
General protective and hygienic measures
   The usual precautionary measures for handling chemicals should be
   followed.
Breathing equipment: Not required.
Protection of hands: Not required.
Eye protection: Safety glasses
□ Body protection: Protective work clothing.
10 Physical and chemical properties:
Form: Powder
Color: Black
Odor: Odorless
\square
                                  Value/Range Unit
                                                     Method
Change in condition
                                           3727 °C
Melting point/Melting range:
Boiling point/Boiling range:
                               Not determined
Sublimation temperature / start: Not determined
Flash point:
                                 Not applicable
□ Flammability (solid, gaseous) Product is not flammable.
Ignition temperature:
                                 Not determined
Decomposition temperature:
                                Not determined
Danger of explosion:
   Product does not present an explosion hazard.
Explosion limits:
Lower:
                                 Not determined
Upper:
                                Not determined
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Vapor pressure:
                                    Not determined
                                     3.05-3.30 \text{ g/cm}^3 (at 20 °C)
 Density:
 □ Solubility in / Miscibility with
 Water:
                                     Insoluble
10 Stability and reactivity
 □ Thermal decomposition / conditions to be avoided:
    Decomposition will not occur if used and stored according to
    specifications.
 Materials to be avoided: None known.
 Dangerous reactions No dangerous reactions known
 Dangerous products of decomposition:
    No dangerous decomposition products known
12 Toxicological information
 Acute toxicity:
 Primary irritant effect:
 □ on the skin: Generally the product does not irritate the skin.
 on the eye: Powder: irritant effect
 □ Sensitization: No sensitizing effects known.
 Subacute to chronic toxicity:
    Elemental carbon/carbon black is mainly a nuisance dust. It is
    irritating to the eyes and may cause conjunctivitis, cornea damage, and
    inflammation of the eyelids.
 Additional toxicological information:
    To the best of our knowledge the acute and chronic toxicity of this
    substance is not fully known.
    No classification data on carcinogenic properties of this material is
    available from the EPA, IARC, NTP, OSHA or ACGIH.
13 Ecological information:
 General notes:
    Do not allow material to be released to the environment without proper
    governmental permits.
14 Disposal considerations
 Product:
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Recommendation
    Consult state, local or national regulations for proper disposal.
 Uncleaned packagings:
 Recommendation:
    Disposal must be made according to official regulations.
15 Transport information
 Not a hazardous material for transportation.
 DOT regulations:
 Hazard class:
                             None
 Land transport ADR/RID (cross-border)
 ADR/RID class:
                                None
 Maritime transport IMDG:
 IMDG Class:
                             None
 Air transport ICAO-TI and IATA-DGR:
 ICAO/IATA Class:
                             None
 Transport/Additional information:
    Not dangerous according to the above specifications.
16 Regulations
 Product related hazard informations:
    Observe the general safety regulations when handling chemicals
 National regulations
    All components of this product are listed in the U.S. Environmental
    Protection Agency Toxic Substances Control Act Chemical Substance
    Inventory.
 □ Information about limitation of use:
    For use only by technically qualified individuals.
17 Other information:
 Employers should use this information only as a supplement to other
 information gathered by them, and should make independent judgement of
 suitability of this information to ensure proper use and protect the
 health and safety of employees. This information is furnished without
 warranty, and any use of the product not in conformance with this Material
 Safety Data Sheet, or in combination with any other product or process, is
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the responsibility of the user.
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