SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Description: Sodium Titanium Oxide (Na₄Ti₅O₁₂)
CAS Number: The CAS number is unknown or has not been assigned to this material

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses: Laboratory chemicals; synthesis of substances; R&D

1.3 Details of the Supplier of the Safety Data Sheet

Company: NEI Corporation
Address: 400 Apgar Drive, Unit E – Somerset, NJ 08873 – United States of America
Phone: +1 (732) 868-3141
Fax: +1 (732) 868-3143
Email: productinfo@neicorporation.com

1.4 Emergency Telephone Number

Manufacturer: +1 (732) 868-3142 (9am to 6pm EST / UTC -0500)
U.S. Poison Control Center: 1-800-222-1222

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Not a hazardous substance or mixture

2.2 GHS Label elements, including precautionary statements

Hazard Statement(s):
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

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Synonyms</th>
<th>Formula</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Titanium Oxide</td>
<td>NTO, Sodium Titanate</td>
<td>Na₄Ti₅O₁₂</td>
<td>n/a</td>
<td>≤ 100%</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

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

After Inhalation:
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

After Skin Contact:
Wash off with soap and plenty of water.

After Eye Contact:
Flush eyes with water as a precaution.

After Swallowing:
Never give anything by mouth to an unconscious person. Rinse mouth with water.

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 11)
4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed
No data available

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special Hazards Arising from the Substance or Mixture
Titanium/titanium oxides, Sodium oxides

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

5.4 Other Information
No Data Available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures
Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.

6.2 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 where dust is formed. For precautions see section 2.2.

7.2 Conditions for Safe Storage (including any incompatibilities)
Keep container tightly closed in a dry and well-ventilated place. Keep away from moisture.
Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific End Uses
A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure Controls
Appropriate Engineering Controls
Handle in accordance with good industrial hygiene and safety 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid (powder)</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>pH (20 °C)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point / Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point / Range</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper Explosion Limit</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>

9.2 Other Safety Information
None

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
Moisture
10.5 Incompatible Materials
Strong oxidizing agents

10.6 Hazardous Decomposition Products
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
Oral LD50: No Data Available
Inhalation LC50: No Data Available
Dermal LD50: No Data Available
Other Information: No Data Available

Skin corrosion/irritation
No Data Available

Serious eye damage/eye irritation
No Data Available

Respiratory or skin sensitization
No Data Available

Germ cell mutagenicity
No Data Available

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

Teratogenicity
No Data Available

Specific target organ toxicity - single exposure (Globally Harmonized System)
No Data Available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No Data Available

Aspiration hazard
No Data Available

Additional Information
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 PBT and vPvB Assessment
No Data Available

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. Contact a licensed professional waste disposal service to dispose of this material.

13.2 Waste Treatment Methods – Contaminated Packaging
Dispose of as unused product, clean residue from packaging, & dispose of properly.

SECTION 14: TRANSPORT INFORMATION

14.1 Department of Transportation (DOT - US)
Not dangerous goods

14.2 International Maritime Dangerous Goods (IMDG)
Not dangerous goods

14.3 International Air Transport Association (IATA)
Not dangerous goods

14.4 Additional Transport Information
HS Code: 2805.11 Schedule B: 2805.11.0000

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

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.

SARA 311/312 Hazards
Acute Health Hazard

CALIFORNIA PROPOSITION 65
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
A chemical safety assessment was not carried out for this product.

SECTION 16: OTHER INFORMATION

REACH Number
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
Further Information
NEI has attempted to provide current and accurate information to the best of its knowledge. NEI makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person. Employers should use this information only as a supplement to other information gathered by them and should make independent judgment 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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

- END OF SDS -