1. Identification

1.1. Product identifier

Trade name: AERODISP® W 740 X

1.2. Recommended use of the chemical and restrictions on use

Relevant applications identified: Catalyst, Ceramics

1.3. Details of the supplier of the safety data sheet

Company: Lapolla Industries, Inc.
15402 Vantage Parkway East, Suite 322
Houston, TX 77032

Telephone: (877) 636-2648

Telex: (281) 219-4106

Email address: SDS@lapolla.com

1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US & CANADA: 800-424-9300

CHEMTREC MEXICO: 01-800-681-9531

CHEMTREC INTERNATIONAL: +1 703-527-3887 (collect calls accepted)

Product Regulatory Services: 973-929-8060

2. Hazards identification

2.1. Classification of the substance or mixture

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
Remarks: Not a hazardous substance or mixture.

2.2. Label elements

Statutory basis: Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
Remarks: Not a hazardous substance or mixture.

2.3. Other hazards

None known

Titanium dioxide: A PBT/vPvB assessment is not applicable, as the product contains only inorganic components.

3. Composition/information on ingredients
3.1. **Substances**  
not applicable

3.2. **Mixtures**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>40%</td>
</tr>
</tbody>
</table>

CAS-No.  13463-67-7

Remarks  Not a hazardous substance or mixture.

**Other information**  
This material is classified as hazardous under OSHA regulations.  
IARC Category 2B (possibly carcinogenic to human).

---

4. **First aid measures**

4.1. **Description of first aid measures**

**Inhalation**  
If aerosol or mists are formed: Take affected persons out into the fresh air.

**Skin contact**  
Wash off with soap and plenty of water.

**Eye contact**  
In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.

**Ingestion**  
If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.

4.2. **Most important symptoms and effects, both acute and delayed**

**Symptoms**  
None known

**Hazards**  
None known

4.3. **Indication of any immediate medical attention and special treatment needed**  
No hazards which require special first aid measures.

---

5. **Fire-fighting measures**

5.1. **Extinguishing media**

Suitable extinguishing media: Water spray, foam, CO2, dry powder. Adapt fire-extinguishing measures to surroundings.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2. **Special hazards arising from the substance or mixture**  
None known.

5.3. **Advice for firefighters**  
As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

---

6. **Accidental release measures**
6.1. **Personal precautions, protective equipment and emergency procedures**
Wear personal protective equipment.

6.2. **Environmental precautions**
Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

6.3. **Methods and material for containment and cleaning up**
Pick up mechanically with an adsorbent and collect in a suitable container. Rinse with water in suitable containers.

7. **Handling and storage**

7.1. **Precautions for safe handling**
Stir and/or shake well before use. Always close container tightly after removal of product.

7.2. **Conditions for safe storage, including any incompatibilities**
**Advice on protection against fire and explosion**
No special measures are required.

**Storage**
Keep containers tightly closed in a dry, cool place.
Avoid heat exposure and frost.

**Storage stability**
Product Information

8. **Exposure controls/personal protection**

8.1. **Control parameters**

<table>
<thead>
<tr>
<th>Type of Exposure</th>
<th>Control Parameter</th>
<th>CAS-No.</th>
<th>Material</th>
<th>Break Through Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total dust</td>
<td>15 mg/m3</td>
<td>13463-67-7</td>
<td>Nitrile rubber</td>
<td>&gt;= 480 min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Natural rubber (NR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PVC</td>
<td></td>
</tr>
</tbody>
</table>

8.2. **Exposure controls**

**Personal protective equipment**

**Respiratory protection**
A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH’s “Respirator Decision Logic” may be useful in determining the suitability of various types of respirators.

**Hand protection**
Wear protective gloves made of resistant material.

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Break Through Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrile rubber</td>
<td>0.35 mm</td>
<td>&gt;= 480 min</td>
</tr>
<tr>
<td>Natural rubber (NR)</td>
<td>0.5 mm</td>
<td>&gt;= 480 min</td>
</tr>
<tr>
<td>PVC</td>
<td>0.5 mm</td>
<td>&gt;= 480 min</td>
</tr>
</tbody>
</table>
The rupture time and material thickness data are guideline values! Exact rupture time / material thickness data can be obtained from the protective glove manufacturer.

Suitability for specific workplaces should be clarified with protective glove manufacturers.

The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use.

Use impermeable gloves.

**Eye protection**

Use chemical splash goggles or face shield.

**Skin and body protection**

A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

**Hygiene measures**

When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work.

To ensure ideal skin protection: use super fatted soaps and skin cream for skin care.

Wash contaminated clothing before re-use.

**Protective measures**

Handle in accordance with good industrial hygiene and safety practice.

If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.

---

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><strong>physical state</strong></td>
<td>liquid</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>white</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>suspension</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>odorless</td>
</tr>
<tr>
<td><strong>Odour Threshold</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>ca. 6 (20 °C)</td>
</tr>
<tr>
<td><strong>Melting point/range</strong></td>
<td>ca. 0 °C</td>
</tr>
<tr>
<td>Tested substance:</td>
<td>Water</td>
</tr>
<tr>
<td><strong>Boiling point/range</strong></td>
<td>ca. 100 °C</td>
</tr>
<tr>
<td>Tested substance:</td>
<td>Water</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>not relevant, since based on water</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>not determined</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>not to be expected, given the composition employed</td>
</tr>
<tr>
<td><strong>Lower explosion limit</strong></td>
<td>not relevant, since based on water</td>
</tr>
<tr>
<td><strong>Upper explosion limit</strong></td>
<td>not relevant, since based on water</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>ca. 23.5 hPa (20 °C)</td>
</tr>
</tbody>
</table>
tested substance: Water

Vapour density not determined

Density 1.41 g/ml

Water solubility partly soluble

Partition coefficient: n-octanol/water not applicable

Autoignition temperature not flammable

Thermal decomposition >= 100 °C

Viscosity, dynamic < 1000 mPa.s

9.2. Other information

Explosiveness not to be expected, given the composition employed

Minimum ignition energy not applicable

10. Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions are known if properly handled and stored.

10.4. Conditions to avoid
Protect from frost, heat and sunlight.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
None known.

Stable under normal conditions. Product will not undergo hazardous polymerization.

11. Toxicological information

11.1. Information on toxicological effects
No toxicological tests are available on the product.

Acute oral toxicity: Acute toxicity estimate: > 5000 mg/kg

Acute inhalation toxicity: Based on available data, the classification criteria are not met.
Acute dermal toxicity

Acute toxicity estimate: \( > 5000 \text{ mg/kg} \)

Skin irritation

Based on available data, the classification criteria are not met.

Eye irritation

Based on available data, the classification criteria are not met.

Repeated dose toxicity

No data available.

Assessment of STOT single exposure

Assessment: No data available

Risk of aspiration toxicity

No aspiration toxicity classification

Mutagenicity assessment

no evidence of mutagenic effects

Carcinogenicity

Inhalative (mouse): 2 years
Method: literature
Test substance: Titanium dioxide
No evidence that cancer may be caused.

Inhalative Rat: 2 years
Method: literature
Test substance: test substance: Titanium dioxide P 25
Increased incidence of lung tumors.

The scientific discussion of the tumorigenic effect of sparingly soluble inorganic particles (fine dusts) such as titanium dioxide is ongoing. It is the opinion of many inhalation toxicologists that the tumor formation observed in rats results from a species-specific mechanism involving overloading of the rat lung (overload phenomenon). Corresponding findings resulting from exposure of humans have not been observed to date. On the other hand, the International Agency for Research on Cancer (IARC) assessed, in February of 2006, the available rat model studies as constituting sufficient proof of the carcinogenicity of titanium dioxide in animal models. For humans, the IARC does not see sufficient evidence of a carcinogenic effect of titanium dioxide. However, the IARC evaluation scheme results in an overall assessment of titanium dioxide as "possibly carcinogenic to humans" (Group 2B).

carcinogenicity assessment

Contains a component which is classified as an IARC 2B carcinogen (possibly carcinogenic to humans).

Toxicity to reproduction

no evidence of reproduction toxic properties

12. Ecological information

12.1. Toxicity

No ecotoxicological data is available for this product.

Toxicity to fish

LC50 Fundulus heteroclitus: \( > 1000 \text{ mg/l} / 96 \text{ h} \)
Test substance: Titanium dioxide
The reported toxic effects relate to the nominal concentration.
literature

Toxicity in aquatic

EC0 Daphnia magna: 1000 mg/l / 48 h
invertebrates

Test substance: Titanium dioxide

The reported toxic effects relate to the nominal concentration.

Toxicity to bacteria

EC0 Pseudomonas fluorescens: 10000 mg/l / 24 h

Test substance: Titanium dioxide

Method: DEV, DIN 38412, T. 8 (modified).

The reported toxic effects relate to the nominal concentration.

12.2. Persistence and degradability

Biodegradability

The methods designed to assess persistence and biodegradability are not applicable to this product, in analogy to inorganic substances.

12.3. Bioaccumulable potential

Bioaccumulation

Not to be expected.

12.4. Mobility in soil

Mobility

No remarkable mobility in soil is to be expected.

12.5. Other adverse effects

Further Information

The data we have at our disposal do not necessitate identification concerning environmental hazard.

13. Disposal considerations

13.1. Waste treatment methods

Product

Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method.

Uncleaned packaging

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. Transport information

Not dangerous according to transport regulations.

14.1. UN number: --
14.2. UN proper shipping name: --
14.3. Transport hazard class(es): --
14.4. Packing group: --
14.5. Environmental hazards (Marine pollutant): --
15. Regulatory information

US Federal Regulations

OSHA
If listed below, chemical specific standards apply to the product or components:

- None listed

Clean Air Act Section (112)
If listed below, components present at or above the de minimus level are hazardous air pollutants:

- None listed

CERCLA Reportable Quantities
If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- None listed

SARA Title III Section 311/312 Hazard Categories
The product meets the criteria only for the listed hazard classes:

- Chronic Health Hazard

SARA Title III Section 313 Reportable Substances
If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- None listed

Toxic Substances Control Act (TSCA)
If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

State Regulations
The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in section 2 and 15 of this MSDS.

California Proposition 65
A warning under the California Drinking Water Act is required only if listed below:

- None listed
An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

**NFPA Ratings**

<table>
<thead>
<tr>
<th>Health</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

16. **Other information**

**Further information**

Revision date 04/16/2016

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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**Legend**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>American Chemistry Council</td>
</tr>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygenists</td>
</tr>
<tr>
<td>ACS</td>
<td>Advisory Committee on Sustainability</td>
</tr>
<tr>
<td>ADI</td>
<td>Acceptable Daily Intake</td>
</tr>
<tr>
<td>ASTM</td>
<td>American Society for Testing and Materials</td>
</tr>
<tr>
<td>ATP</td>
<td>Adaptation to Technical Progress</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical oxygen demand</td>
</tr>
<tr>
<td>c.c.</td>
<td>closed cup</td>
</tr>
<tr>
<td>CAO</td>
<td>Cargo Aircraft Only</td>
</tr>
<tr>
<td>Carc</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Services</td>
</tr>
<tr>
<td>CDN</td>
<td>Canada</td>
</tr>
<tr>
<td>CEPA</td>
<td>Canadian Environmental Protection Act</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response – Compensation and Liability Act</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CMR</td>
<td>carcinogenic-mutagenic-toxic for reproduction</td>
</tr>
<tr>
<td>COD</td>
<td>Chemical oxygen demand</td>
</tr>
<tr>
<td>DIN</td>
<td>German Institute for Standardization</td>
</tr>
<tr>
<td>DM EL</td>
<td>Derived minimum effect level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived no effect level</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>EC50</td>
<td>half maximal effective concentration</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>ErC50</td>
<td>Reduction of Growth Rate</td>
</tr>
<tr>
<td>ERG</td>
<td>Emergency Response Guide Book</td>
</tr>
</tbody>
</table>