1. IDENTIFICATION

Product identifier
Product Name TINTA’ SEAL

Other means of identification
Product Code TAS

Recommended use of the chemical and restrictions on use
Recommended Use Restricted to professional users.
Uses advised against Consumer use

Details of the supplier of the safety data sheet
Supplier Address
Solomon Colors, Inc.
4050 Color Plant Road
Springfield, IL
62702

Manufacturer Address
Solomon Colors, Inc.
4050 Color Plant Road
Springfield, IL
62702

Company Phone Number 800-624-0261 (US & Canada); 217-522-3112 (Outside North America)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This product is NOT classified as hazardous according to the criteria contained in the Hazard Communication Standard 29 CFR 1910.1200 (known as HCS 2012). However, one or more of the product component(s) is known to be listed as an OSHA 29 CFR 1910.1000 Air Contaminant. Occupational exposure limits are subsequently provided in section 8 of this SDS.

Label elements

Emergency Overview

Health injuries are not known or expected under normal use.

Appearance Color will vary
Physical state Liquid
Odor Slight

Hazard not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS
Common name: Tinta’ Seal ®.
Chemical nature: Mixture.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>1309-37-1</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>-</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret or due to batch variation.

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### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**
No hazards which require special first aid measures. If symptoms persist, call a physician.

**Eye contact**
Rinse thoroughly with plenty of water, also under the eyelids.

**Skin Contact**
Wash skin with soap and water.

**Inhalation**
Remove to fresh air.

**Ingestion**
Clean mouth with water and drink afterwards plenty of water.

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

**Symptoms**
None known.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

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### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Dry chemical, Carbon Dioxide, Foam, Sand. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

**Specific hazards arising from the chemical**
No information available.

**Hazardous combustion products**
Thermal decomposition can lead to the release of irritating gases and vapors. Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx).

**Explosion data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

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

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### 6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective equipment and emergency procedures

Personal precautions
Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

Environmental precautions
See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials
None known based on information supplied.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product does not present an inhalation hazard in its current physical form. However, activities such as spraying, misting, burning, welding (high temperature), sawing, brazing, machining, grinding, etc. may produce fumes and/or particulates and in those cases the exposure limits listed below would apply. Each Tinta' Seal composition will vary from one color to the next. Depending on the color, the components listed below may not be present.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 15 mg/m³</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>total dust</td>
<td>(vacated) TWA: 10 mg/m³ total dust</td>
<td>TWA: 2.4 mg/m³ CIB 63 fine</td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>TWA: 5 mg/m³ respirable</td>
<td>TWA: 10 mg/m³ fume</td>
<td>TWA: 0.3 mg/m³ CIB 63 ultrafine,</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>particulate matter</td>
<td>TWA: 15 mg/m³ total dust</td>
<td>including engineered nanoscale</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>TWA: 3 mg/m³ inhalable particulate matter</td>
<td>TWA: 10 mg/m³ fume</td>
<td>IDLH: 2500 mg/m³ Fe dust and fume</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>(vacated) TWA: 3.5 mg/m³</td>
<td>TWA: 5 mg/m³ respirable fraction regulated under Rouge</td>
<td>TWA: 5 mg/m³ Fe dust and fume</td>
</tr>
<tr>
<td></td>
<td>TWA: 3.5 mg/m³ (vacated)</td>
<td>TWA: 5 mg/m³ respirable fraction Iron oxide</td>
<td>IDLH: 1750 mg/m³ Carbon black in</td>
</tr>
<tr>
<td></td>
<td>TWA: 0.1 mg/m³</td>
<td>TWA: 3.5 mg/m³</td>
<td>presence of Polycyclic aromatic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 0.1 mg/m³</td>
<td>hydrocarbons PAH</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls

Shower
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Color will vary</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Color will vary</td>
<td>Odor</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
<td>Odor threshold</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>no information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>196 - 225 °C / 384.8 - 437 °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>103 °C / 217.4 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td>estimated</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td>(based on components)</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
Explosive properties
No information available

Oxidizing properties
No information available

Other Information
Softening point
No information available
Molecular weight
No information available
VOC Content (%)
No information available
Density
No information available
Bulk density
No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx).
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
The product has not been tested. The product is not known to present an acute toxicity hazard based on known or supplied information for the mixture components.

Inhalation
No known effect based on information supplied.

Eye contact
No known effect based on information supplied. (Based on components).

Skin Contact
No known effect based on information supplied.

Ingestion
No known effect based on information supplied.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13463-67-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1309-37-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black</td>
<td>&gt; 15400 mg/kg (Rat)</td>
<td>&gt; 3 g/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>1333-86-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Not classified. (Based on mixture components).

Serious eye damage/eye irritation
Not classified. (Based on mixture components).

Corrosivity
Not expected to be corrosive.

Sensitization
Not Classified. This product does not contain known sensitizers at levels > or equal to 0.1%.

Germ cell mutagenicity
Not classified. (Based on mixture components).

Carcinogenicity
This product exists in a liquid form which prevents particles within the fine fraction size range from becoming airborne. Carbon Black and Titanium Dioxide is intrinsically bound to the product matrix. Carbon Black - Not a hazardous substance or preparation according to the Global Harmonized System (GHS). In 1995 IARC concluded, “There is inadequate evidence in humans for the carcinogenicity of carbon black.” Based on rat inhalation studies IARC concluded that there is “sufficient evidence in experimental animals for the carcinogenicity of carbon black”. IARC’s overall evaluation was that “Carbon black is possibly carcinogenic to humans (Group 2B).” This conclusion was based on IARC’s guidelines, which require such a classification if one animal species exhibits carcinogenicity in two or more studies. Lung tumors in rats are the result of exposure under “lung overload” conditions. The development of lung tumors in rats is specific to this species. Mouse and hamster showed no carcinogenicity in similar studies. In 2006 IARC re-affirmed its 1995 classification of carbon black as Group 2B (possibly carcinogenic to humans). Overall, as a result of the detailed epidemiological investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated. This view is consistent with the IARC evaluation in 2006. Furthermore, several epidemiological and clinical studies of workers in the carbon black production industries show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black. No dose response relationship was observed in workers exposed to carbon black. Applying the rules of the Globally Harmonized System of Classification and Labeling (GHS, e.g. UN ‘Purple Book’, EU CLP Regulation) the results of repeated dose toxicity and carcinogenicity studies in animals do not lead to classification of Carbon Black for Specific Target Organ Toxicity (Repeated exposure) and carcinogenicity. UN GHS says, that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Furthermore, the CLP guidance on classification and labeling states, that “lung overload” in animals is listed under mechanism not relevant to humans. Titanium Dioxide - In 2006, the International
Agency for Research on Cancer (IARC) evaluated TiO2 as “possibly carcinogenic to humans” (Group 2B) based primarily on studies in rats. Inhalation exposures to TiO2 in rats can result in lung effects and lung tumors. However, it is generally recognized that the rat is uniquely sensitive to the effects of “lung overload” which is not observed in other species including humans (Ref. 6). These facts are supported by the results from four large epidemiology studies involving more than 20,000 workers in the titanium dioxide manufacturing industry in North America and Europe which indicate no association with an increased risk of cancer or with any other adverse lung effects (Ref. 1,2,3,4,5,7). These studies did not specifically differentiate between the ultrafine and pigmentary TiO2.

References:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>-</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>13463-67-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1309-37-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black</td>
<td>A3</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>1333-86-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Not classified. (Based on mixture components).

STOT - single exposure Not classified. (Based on mixture components).

STOT - repeated exposure Not classified. (Based on mixture components).

Aspiration hazard Not classified. (Based on mixture components).

Numerical measures of toxicity - Product Information
12. ECOLOGICAL INFORMATION

Ecotoxicity
This product has not been fully evaluated on the product level.

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT
Not regulated

TDG
Not regulated

MEX
Not regulated

ICAO (air)
Not regulated

IATA
Not regulated

IMDG
Not regulated

RID
Not regulated

ADR
Not regulated

ADN
Not regulated
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td></td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td></td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td></td>
</tr>
<tr>
<td>ENCS</td>
<td></td>
</tr>
<tr>
<td>IECSC</td>
<td></td>
</tr>
<tr>
<td>KECL</td>
<td></td>
</tr>
<tr>
<td>PICCS</td>
<td></td>
</tr>
<tr>
<td>AICS</td>
<td></td>
</tr>
</tbody>
</table>

Legend:

- **TSCA**: United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL**: Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS**: European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS**: Japan Existing and New Chemical Substances
- **IECSC**: China Inventory of Existing Chemical Substances
- **KECL**: Korean Existing and Evaluated Chemical Substances
- **PICCS**: Philippines Inventory of Chemicals and Chemical Substances
- **AICS**: Australian Inventory of Chemical Substances

US Federal Regulations

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA): This product does not contain chemicals at levels that are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**
See section 2 for more information

**CWA (Clean Water Act)**
This material, as supplied, does not contain substances that would exceed the reportable quantity as hazardous substances under the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**
This material, as supplied, does not contain substances that would exceed the reportable quantity as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

**California Proposition 65**
WARNING: This product can expose you to chemicals including Nickel Compounds which are known to the State of California to cause cancer, and chemicals including Hexavalent Chromium which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

**U.S. State Right-to-Know Regulations**
This product contains substances regulated by state right-to-know regulations. For more information, please contact your sales or technical representative.
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet