SAFETY DATA SHEET

Issue Date 11-Jul-2019 **Revision Date** 27-Sep-2019 **Version** 2

TAS **TINTA' SEAL**

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	**Manufacturer Address**
Solomon Colors, Inc.	Solomon Colors, Inc.
4050 Color Plant Road	4050 Color Plant Road
Springfield, IL	Springfield, IL
62702	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 the product component(s) is known to 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

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common name Tinta' Seal ®.
Chemical nature Mixture.

Chemical Name	CAS No.	Weight-%	Trade Secret
Titanium Dioxide	13463-67-7	-	*
Red Iron Oxide	1309-37-1	-	*
Carbon Black	1333-86-4	-	*

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

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.

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.

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

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 bellow 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.

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

Appropriate engineering controls

Engineering Controls
Showers
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

Physical state	Liquid		
Appearance	Color will vary	**Odor**	Slight
Color	Color will vary	**Odor threshold**	No information available

Property	Values	Remarks • Method
pH	no information available	No information available
Melting point/freezing point	No information available	
Boiling point / boiling range	196 - 225 °C / 384.8 - 437 °F	estimated
Flash point	103 °C / 217.4 °F	(based on components)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	

Vapor density	Not Relevant
Specific Gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Red Iron Oxide 1309-37-1	> 10000 mg/kg (Rat)	-	-
Carbon Black 1333-86-4	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

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: 1. Boffetta P, Gaborieau V, Nadon L, Parent M-E, Weiderpass E, Siemiatycki J. (2001). Exposure to titanium dioxide and risk of lung cancer in a population-based study from Montreal. Scand. J. Work Environ. Health 27:227-232. 2. Boffetta P., Soutar A., Cherrie J., Granath F., Andersen A., Anttila A., Blettner M., Gaborieau V., Klug S., Langard S., Luce D., Merletti F., Miller B., Mirabelli D., Pukkala E., Adami H-O., and Weiderpass E. (2004). Mortality among workers employed in the titanium dioxide industry in Europe. Cancer Causes and Control 15(7):697-706. 3. Chen J, and Fayerweather W. (1988). Epidemiologic study of workers exposed to titanium dioxide. J. Occup.Med. 30(12):937-42. 4. Fryzek J, Chadda B, Marano D, White K, Schweitzer S, McLaughlin J, and Blot W. (2003). A cohort mortality study among titanium dioxide manufacturing workers in the United States. J. Occup. Environ. Med. 45(4): 400-09. 5. Garabrant D.H., Fine L.J., Oliver C., Bernstein L., and Peters J.M. (1987). Abnormalities oof pulmonary function and pleural disease among titanium metal production workers. Scand. J. Work Environ. Health 13(1):47-51. 6. Levy L. S. (1994). Squamous Lung Lesions Associated with Chronic Exposure by Inhalation of Rats to p-Aramid Fibrils (Fine Fiber Dust) and to Titanium Dioxide: Findings of a Pathology Workshop. In: Mohr, U (Ed), Toxic and carcinogenic effects of solid particles in the respiratory tract, ILSI Press, 473-478. 7. Ramanakumar AV, Parent ME, Latreille B, Siemiatycki J. (2008). Risk of lung cancer following exposure to carbon black, titanium dioxide and talc: results from two case-control studies in Montreal. Int J Cancer 122:183-9. .

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7	-	Group 2B	-	X
Red Iron Oxide 1309-37-1	-	Group 3	-	-
Carbon Black 1333-86-4	A3	Group 2B	-	X

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

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards** 0	**Flammability** 1	**Reactivity** 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** 0	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Prepared By Solomon Colors - Lab Technical Services
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Revision Note
Initial conversion to SDS

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