



TMT Tokan Material Technology Co., Ltd.

SAFETY DATA SHEET

Revision date: February 3, 2016

SECTION 1: IDENTIFICATION

Product Name: 42-107A

Chemical Name: Chromium Antimony Titanium Buff Rutile

Synonyms:

C.I. Name: Pigment Brown 24

C.I. No. 77310

EINECS No. 269-052-1

Chemical Formula: (Ti,Sb,Cr)O₂

Chemical Family: Complex Inorganic Color Pigment

Recommend use:

Used the coloration of the various material such as ceramics, paint, plastic, engineering plastic and so on

Manufacture's Name: Tokan Material Technology Co., Ltd.

Address: 1-27, Oyodo Kita 2-chome, Kita-Ku, Osaka, Japan 531-8526

Telephone Number: 81-6-6456-0010

Emergency Telephone Number: 81-6-6456-0010

SECTION 2: HAZARDS IDENTIFICATION

2-1. Classification of the substance(GHS classification)

Physical Hazards

Class 1, Explosives	Not Listed
Class 2, Flammable Gases	Not Listed
Class 3, Aerosols	Not Listed
Class 4, Oxidizing Gases	Not Listed
Class 5, Gases under Pressure	Not Listed
Class 6, Flammable Liquids	Not Listed
Class 7, Flammable Solids	Category, Others
Class 8, Self-Reactive Substances and Mixtures	Not Listed
Class 9, Pyrophoric Liquids	Not Listed
Class 10, Pyrophoric Solids	Category, Others
Class 11, Self-Heating Substances and Mixtures	Category, Others
Class 12, Substances and Mixtures which, in contact with water, emit flammable gases	Category, Others
Class 13, Oxidizing Liquids	Not Listed
Class 14, Oxidizing Solids	Not specified by this basis
Class 15, Organic Peroxides	Not Listed
Class 16, Corrosive to Metals	Not specified by this basis

Health Hazards

Class 1, Acute Oral Toxicity	Category, Others
Class 1, Acute Dermal Toxicity	Not specified by this basis
Class 1, Acute Inhalation Toxicity (Gases)	Not Listed
Class 1, Acute Inhalation Toxicity (Vapours)	Not specified by this basis
Class 1, Acute Inhalation Toxicity (Dusts and Mists)	Not specified by this basis
Class 2, Skin Corrosion / Irritation	Category, Others
Class 3, Serious Eye Damage / Eye Irritation	Not specified by this basis
Class 4, Respiratory Sensitization	Not specified by this basis

Class 4, Skin Sensitization	Not specified by this basis
Class 5, Germ Cell Mutagenicity	Category, Others
Class 6, Carcinogenicity	Not specified by this basis
Class 7, Reproductive Toxicity	Category, Others
Class 8, Specific Target Organ / Systemic Toxicity - Single Exposure	Not specified by this basis
Name of Target Organ	
Class 9, Specific Target Organ / Systemic Toxicity - Repeated Exposure	Not specified by this basis
Name of Target Organ	
Class 10, Aspiration Hazard	Not specified by this basis
Environmental Hazards	
Class 1, Hazardous to the Aquatic Environment , short-term(Acute)	Category, Others
Class 1, Hazardous to the Aquatic Environment , long-term (Chronic)	Not specified by this basis
Class 2, Hazardous to the Ozone Layer	Not specified by this basis

2-2. GHS label elements, including precautionary statements

Symbol: No symbol

Signal word: No signal word

Hazard statement: No hazard statement

2-3. Other hazards identification

Principal Routes of Entry: Inhalation and Ingestion.

Inhalation Health Risks And Symptoms of Exposure:

Dust from product may cause irritation of the respiratory system, nausea or metallic taste in the mouth.

Skin And Eye Contact: Health Risks And Symptoms of Exposure:

Eye contact: Causes eye irritation

Skin contact: May cause mechanical injury.

Ingestion: Health Risks And Symptoms of Exposure:

May be harmful if swallowed.

Chronic Health Effects:

Prolonged exposure to dust may lead to pulmonary problems

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:	CAS No.	Content
Chromium Antimony Titanium Buff Rutile	68186-90-3*	100%

Note:

This product belongs to the complex inorganic color pigment class. Pigments of this class are the result of high temperature calcination. Although they consist of metal atoms and oxygen atoms arranged in unique crystal structures, their toxicological properties are not considered to be those of either the metal or the metal oxides. Although exposure limit values of this pigment are not listed by OSHA and/or ACGIH, occupational exposure limit of ingredients in this pigment are listed below as a guideline for safe use of this product.

HAZARDOUS COMPONENTS	OCCUPATIONAL EXPOSURE LIMITS	CONTENT (%)
Chromium (III) compounds (as Cr)	ACGIH TLV: TWA 0.5 mg/m ³ OSHA PEL: TWA 0.5 mg/m ³	5
Antimony and compounds (as Sb)	ACGIH TLV: TWA 0.5 mg/m ³ OSHA PEL: TWA 0.5 mg/m ³	12

SECTION 4: FIRST AID MEASURES

Eye Contact: Immediately rinse eyes with running water for 15 minutes. If irritation develops, get medical attention.

Skin Contact: Remove contaminated clothing. Wash affected area with large amounts of soap and water. If irritation develops, get medical attention.

Inhalation: Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

Ingestion: If swallowed, immediately rinse mouth with water and give water to drink, but do not induce vomiting. Get immediate medical attention.

Notes to physicians: None known.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: N/A

Flammable Limits: N/A

Extinguishing Media: Water, Fog

Special Firefighting Procedures: None Required

Unusual Fire And Explosion Hazards: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Use suitable a vacuum equipment where reasonably practicable. Otherwise, damp down with water and scoop into a suitable container. Wear suitable respiratory protective equipment.

SECTION 7: HANDLING AND STORAGE

Handling: Protect containers against physical damage.

Storage: Store in dry area away from feed and food products.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Measure: Adequate ventilation should be provided to keep dust below acceptable exposure limits

Personal Protection:

Respiratory protection: Put on mask for dust.

Eye protection: Safety Glasses with side shields, mono goggles.

Hand protection: Rubber, PVC coated gloves, impermeable.

Body protection: Wear appropriate clean, protective clothing, such as, but not limited to coveralls, smocks, aprons, gloves, shoes, and/or hats.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow Powder

Odor: Odorless

Solubility (in water): Negligible

Boiling Point: Not applicable

Melting Point: 1855°C

Specific Gravity: 4.5

Vapor Density: Not applicable

Evaporation Rate: N/A

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable

Conditions Avoid: None

Incompatibility (Materials To Avoid): None

Hazardous Polymerization: Will not occur

Hazardous Decomposition Or Byproduct: None

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: LD50/oral/rat >5000mg/kg

Primary Skin And Eyes Irritation/rabbit: None

Mutation Assay: Negative

Carcinogenicity:

NTP: No

IARC MONOGRAPHS: No

OSHA REGULATED: No

SECTION 12: ECOLOGICAL INFORMATION

Acute fish toxicity: LC0 => 1000 mg/l

Test species : Golden orfe (Leuciscus idus)

Acute bacterial toxicity:

No harmful effect on Pseudomonas Fluorescens: >10000 mg/l

As the product is practically insoluble in water, it is separated in almost any filtration and sedimentation process.

SECTION 13: DISPOSAL CONSIDERATION

According to "Wastes Disposal and Public Cleaning Law", it processes as an industrial waste.

SECTION 14: TRANSPORT INFORMATION

The product does not constitute a hazardous substance in national/international road, rail, sea, and air transport.

DOT Hazard Class: Not Restricted

IMDG Hazard Class: Not Restricted

IATA/ICAO Hazard Class: Not Restricted

UN No. : None

SECTION 15: REGULATORY INFORMATION

Labeling according to EEC Directives: Not Regulated

SARA

SARA 313 Title III Toxic Chemical List:

The following chemicals 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.

100% Chromium Compound

100% Antimony Compound

TSCA Inventory Status: This product (and/or all of its components) is in compliance with the U.S. EPA Toxic Substance Control Act, TSCA.

SECTION 16: OTHER INFORMATION

Reference

The Threshold Limit Values of Chemical Substance, ACGIH, 1999

Hazard Communication Standard, Vol.5, OSHA

IARC MONOGRAPHS

Definitions And Abbreviations

ACGIH	= American Conference of Governmental Industrial Hygienists
CAS	= Chemical Abstract Service Registry
EPA	= Environmental Protection Agency
IARC	= International Agency for Research on Cancer
NTP	= National Toxicology Program
OSHA	= Occupational Safety and Health Administration
PEL	= Permissible Exposure Limit
SARA	= Superfund Amendments and Reauthorization Act
STEL	= Short Term Exposure Limit. Usually a 15-minute time weighted average exposure.
TLV	= Threshold Limit Values
TSCA	= Toxic Substance Control Act
TWA	= Time Weighted Average. Exposure concentration for a normal 8-hour day or 40-hour week.
DOT	=Department of Transportation
IMDG	=International Maritime Dangerous Goods
IATA	=International Air Transportation
ICAO	=International Civil Aviation Organization
UN No.	=United Nations Number

Note

This Safety Data Sheet (SDS) is summarized a necessary subject or a subject to note in order to use this product suitably.

The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products.

The content indicated here may be revised based on a revision of ordinance and the new knowledge.

It provides guidance on health, safety, and environmental aspects of the product and should not be taken as part of a quality assurance.