



MATERIAL SAFETY DATA SHEET

Revision date: 20-Dec-2010

Supersedes: 15-Jan-2002

MSDS Number: 10661

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: TINT-AYD® CW 5505

Product Use Description: Pigment dispersion

Company/Undertaking Identification:	Elementis Specialties, Inc.	Elementis UK Ltd.
	329 Wyckoffs Mill Road	c/o Elementis GmbH
	Hightstown, NJ 08520	Stolberger Str. 370
	USA	50933 Cologne, Germany
	Tel: (609) 443-2000	Tel. +49 (0) 221 2923 2000

Emergency telephone number: CHEMTREC Emergency Response Number: 1-800-424-9300 (1-703-527-3887)
SGS Emergency Response Number: + 32 (0)3 575 55 55

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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: Liquid
Color: Brown
Odor: Ammonia-like

WARNING

Harmful by inhalation and if swallowed
May cause slight eye irritation
Can cause skin irritation and/or dermatitis.
May cause irritation of respiratory tract
Repeated and/or prolonged exposures may cause lung damage (Silicosis)
Contains crystalline silica (quartz) which may cause cancer
Risk of cancer depends on level and duration of exposure

Potential health effects:

Eye contact: May cause slight eye irritation. Signs and symptoms include burning, tearing, redness and swelling.

Skin contact: May cause skin irritation and/or dermatitis.

Inhalation:	Harmful by inhalation. May cause irritation of respiratory tract. Repeated and/or prolonged exposures may cause lung damage (Silicosis).
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Routes of exposure:	Inhalation, Skin, Ingestion
Target Organs:	Lungs

See Sections 11 & 12 for additional toxicological and ecological information

Environmental hazard: See Section 12, below

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Components	CAS-No	Weight %
Iron oxide	1309-37-1	25 - 50%
Aluminum silicate, hydrated	1332-58-7	< 2.5%
Magnesium silicate	14807-96-6	2.5 - 10%
Crystalline silica (Quartz)	14808-60-7	< 2.5%
Barium sulfate	7727-43-7	2.5 - 10%
Amines, tallow alkyl, ethoxylated	61791-26-2	2.5 - 10%
5-Decyne-4,7-diol,2,4,7,9-tetramethyl	126-86-3	< 2.5%
Nonylphenol, branched, ethoxylated	68412-54-4	< 2.5%

This product is considered hazardous as defined under OSHA's Hazard Communication Standard (29 CFR 1910.1200).

4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen.
Skin contact:	Wash off immediately with soap and plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
Ingestion:	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flash Point:	211 °F / 99 °C
Flash Point Method:	ASTM D3278
Lower Flammable Limit:	2.6 Vol%
Upper Flammable Limit:	12.5 Vol%

Autoignition temperature:	Not selfigniting
Unusual Fire and Explosion Hazards:	Emits toxic fumes under fire conditions.
Reactivity Hazard:	None known
Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Hazardous combustion products:	Carbon monoxide, Nitrogen oxides (NOx), Carbon dioxide (CO2).
Special Fire Fighting Procedure:	Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment.
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
Clean-up methods:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. Prevent product from entering drains. Clean spill area thoroughly. Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

Handling:	Avoid contact with skin, eyes and clothing. Avoid breathing mists, dusts, or vapors. Wash hands thoroughly after handling.
Storage:	DO NOT FREEZE. Keep container tightly closed. Keep product and empty container away from heat and sources of ignition.
Additional Storage:	Not required under normal use

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures:	Maintain adequate ventilation to keep hazardous ingredients below their PELs or TLVs. Use NIOSH/MSHA approved respirator whenever exposure limits exceeded.
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Personal Protective Equipment

Eye protection:	Safety glasses
Skin and body protection:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place

Respiratory protection: In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hand protection: Protective gloves, Neoprene gloves

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Exposure controls

Components	OSHA STEL	OSHA PEL	OSHA TWA	ACGIH STEL	ACGIH TWA
Iron oxide		10 mg/m ³ (dust and fume as Fe)	10 mg/m ³ (dust and fume as Fe)		5 mg/m ³ (respirable fraction)
Aluminum silicate, hydrated			15 mg/m ³ 10 mg/m ³ 5 mg/m ³		2 mg/m ³ (respirable fraction; no asbestos & < 1% crystalline silica)
Magnesium silicate		2 mg/m ³	2 mg/m ³		2 mg/m ³ (no asbestos & < 1% crystalline silica)
Crystalline silica (Quartz)		0.1 mg/m ³ (respirable fraction)	0.1 mg/m ³ (respirable fraction)		0.025 mg/m ³ (respirable fraction)
Barium sulfate		5 mg/m ³ (respirable fraction) 15 mg/m ³ (total dust)	5 mg/m ³ (respirable fraction) 15 mg/m ³ (total dust)		10 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid

Color: Brown

Odor: Ammonia-like

Physical state: Liquid

Vapor pressure: < 1.0 mm Hg @ 25°C
23.0 hPa @ 20°C

Vapor density: 2.62

Boiling point/range: 187 (°C)

Solubility: Water Soluble

Density: 1.52 g/cm³

Bulk density:	12.7 lbs/gal
Flash Point:	211 °F / 99 °C
Ignition temperature:	371.0 (°C)
Solvent content:	
Percent Volatile:	5-10 %
Water content:	35-40 %
VOC content:	1.87 lbs/gal; 224 g/L
Evaporation rate:	< 1.0
Miscibility:	Fully miscible

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions
Conditions to avoid:	Heat, flames and sparks
Materials to avoid:	Oxidizing agents
Hazardous decomposition products:	No decomposition if stored normally
Possibility of Hazardous Reactions:	Will not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components	LC50/inhalation/4h/Rat	LD50/Dermal/Rat	LD50/Oral/Rat
Iron oxide	No data available	No data available	> 10 g/kg
Aluminum silicate, hydrated	No data available	No data available	> 5000 mg/kg (rat)
Crystalline silica (Quartz)	No data available	No data available	500 mg/kg
Amines, tallow alkyl, ethoxylated	No data available	No data available	620 mg/kg (rat)
Nonylphenol, branched, ethoxylated	No data available	No data available	200 - 2000 mg/kg (rat, literature)

Local effects

Skin irritation:	Irritating to skin.
Eye irritation:	Contact with eyes may cause irritation.
Inhalation:	May cause irritation of respiratory tract.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic toxicity: Long-term chronic toxicity studies to evaluate the carcinogenic potential of this product have not been conducted; See table and/or data, below, of individual components

Components	NTP	IARC	OSHA
Iron oxide		Group 3- Unclassifiable as to Carcinogenicity to Humans	
Crystalline silica (Quartz)	Group A - Known to be human carcinogens	Group 1- Carcinogenic to Humans	Present

Specific effects

Carcinogenic effects: Iron oxide (ferric oxide) has been reviewed by IARC. There is inadequate evidence of carcinogenicity in humans and evidence suggesting lack of carcinogenicity in animals for Iron oxide (ferric oxide). Therefore, Iron oxide (ferric oxide) is not classifiable as to its carcinogenicity to humans (Group 3).

Crystalline silica has been reviewed by IARC. IARC working group found sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite from occupational sources. There is sufficient evidence in experimental animals for the carcinogenicity of quartz and cristobalite. Therefore, IARC working group has classified Crystalline Silica as carcinogenic to humans (Group 1).

Target Organs: Lungs

12. ECOLOGICAL INFORMATION

Aquatic toxicity:

Components	LC50/96hr/48hr/24hr	EC50/96hr/48hr/24hr	Bioaccumulation Concentration Factor	No Observable Effect Concentration/96hr/48hr/24hr (NOEC)
Iron oxide	No data available	> 5000 mg/L (Pseudomonas fluorescens)	No data available	No data available
Magnesium silicate	>100 g/L (Fresh water, fish)	No data available	No data available	No data available

Persistence and degradability: No data available

Environmental Fate and Pathways:

Mobility: No data available

Biodegradability: No data available

Bioaccumulative potential: No data available

Physical / Chemical: No data available

BOD/COD:

COD-value: No data available

BOD5-value: No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with Local and National regulations.

RCRA Hazardous Waste:

RCRA: Not listed

14. TRANSPORT INFORMATION**U.S. Department of Transportation Ground (49 CFR):**

Proper shipping name: Not regulated

International Air Transportation (ICAO/IATA):

Proper shipping name: Not regulated

International Maritime Organization (IMO/IMDG):

Proper shipping name: Not regulated

Surface Shipments in Europe (ADR/RID):

Proper shipping name: Not regulated

15. REGULATORY INFORMATION**Heavy metals:**

Heavy metals content (ppm): Not applicable

International Inventories

TSCA/ (USA)	Listed	EINECS/ (EU)	Listed
DSL/ (CANADA)	Listed	NDSL/ (CANADA)	Not applicable
ENCS/ (JAPAN)	Listed	IECSC/ (CHINA)	Listed
PICCS/ (PHILLIPINES)	Listed	KECL (KOREA)	Listed
AICS/ (AUSTRALIA)	Listed	HSNO/ New Zealand:	Not Listed

U.S. Regulations

TSCA Section 12(b) Export Notification

This product does not contain chemicals that are required to be notified under the TSCA 12(b) Export Notification.

SARA Title III:

Section 302 EHS: None

Section 311/312: Chronic Health Hazard

Section 313: Not listed

Barium sulfate (CAS # 7727-43-7)
Listed

California Prop. 65:

This Product contains the following Substance (s) known to the state of California to cause cancer and/or developmental effects.

Components	Carcinogen	Reproductive toxicity	No significant risk level
Crystalline silica (Quartz)	Listed		

Canada

WHMIS hazard class: Contains Propylene glycol @ 6 %

D2A Possible, probable or known human carcinogen according to classifications by IARC or ACGIH.

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

HMIS:

Health: 2 *
Flammability: 1
Reactivity: 0

Previous Revision Date: 15-Jan-2002

Key/Legend:

N/A: Not applicable

N/D: Not determined

ppm: Parts per million

X: Listed

Prepared by: Product Stewardship

The data set forth in these sheets are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. ELEMENTIS SPECIALTIES makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereon.

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