



SAFETY DATA SHEET

Revised: 5/27/2016, Vers. 4.1
EMERGENCY: (415) 726-0551

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: THERMO-SEAL®
Material Number: 1500, White
Chemical Family: Acrylic Polymer in Water

The Ultimate Coatings Company
2801-B Vassar Street
Reno, NV 89502
1-800- 226-9180

2. HAZARDS IDENTIFICATION

Emergency Overview

WARNING! Color: White **Form:** liquid **Odor:** AMMONIA.

May cause eye, skin, and respiratory tract irritation. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Harmful if swallowed. May affect nervous system. May cause kidney damage. May cause liver damage.

Potential Health Effects

Primary Routes of Entry: Skin Contact, Eye Contact, Ingestion, Inhalation

Medical Conditions Aggravated by

Exposure: Skin disorders, Respiratory disorders, Eye disorders

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Carcinogenicity:

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
1-5%	Complex Inorganic Color Pigment	68909-79-5

4. FIRST AID MEASURES

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

Skin Contact

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention if irritation develops and persists.

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Inhalation

If inhaled, remove to fresh air. Get medical attention if irritation develops.

Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: All extinguishing media are suitable.

Special Fire Fighting Procedures Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize risk of rupture.

Unusual Fire/Explosion Hazards Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures

Cleanup personnel must use appropriate personal protective equipment. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal.

7. HANDLING AND STORAGE

Storage Temperature:

Minimum: 1 °C (33.8 °F)

Maximum: 49 °C (120.2 °F)

HANDLING STORAGE/PRECAUTIONS

Avoid breathing dust, vapor, or mist. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Protect from freezing.

FURTHER INFO ON STORAGE CONDITIONS

None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Complex Inorganic Color Pigment (68909-79-5)2-Butoxyethanol (111-76-2)

U.S. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 0.5mg/m³ as Cr

U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 0.5 mg as Cr

U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 1 mg/m³ as Cr

US. ACGIH Threshold Limit Values

Hazard Designation: Group A4 Not classifiable as a human carcinogen.

Industrial Hygiene/Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Respiratory Protection

In case of insufficient ventilation wear suitable respiratory equipment.

Hand Protection

Permeation resistant gloves.

Eye Protection

Wear splash-proof goggles.

Skin and body protection

Wear cloth work clothing including long pants and long-sleeved shirts.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: liquid

Color: white

Odor: Ammonia

pH: approximately 9-9.8

Freezing Point: 0 °C (32 °F) similar to water

Boiling Point/Range: 100 °C (212 °F) similar to water

Flash Point: Not applicable (water based product), however, solid material will support combustion if water has been evaporated.

Lower Explosion Limit: not applicable

Upper Explosion Limit: not applicable

Vapor Pressure: 17 mmHg @ 20 °C (68 °F) similar to water

10. STABILITY AND REACTIVITY

Hazardous Reactions

Hazardous polymerization does not occur.

Stability

Stable

Materials to avoid

None known.

Hazardous decomposition products

By Thermal Decomposition: Acrylic monomers, other potentially toxic fumes

11. TOXICOLOGICAL INFORMATION

Toxicity Data for White Pigment

Acute Oral Toxicity

LD50: >5,000 mg/kg (Rat)

Skin Irritation

Rabbit, non-irritating

Eye Irritation

rabbit, Draize, Moderate

Toxicity Data for Proylene Glycol

Acute Oral Toxicity

LD50: > 5,000 mg/kg (Rat)

Acute Dermal Toxicity

LD50:> 5,000 mg/kg (Rabbit)

Skin Irritation

Rabbit, OECD guideline for Testing of Chemicals, No.404, Non-irritating

Eye Irritation

Rabbit, OECD guideline for Testing of Chemicals, No.405, Non-irritating
Human, Slightly irritating

Sensitization

Dermal; non-sensitizer (Human)

Non-Sensitizer (Mouse, mouse ear swelling test)

Repeated Dose Toxicity

90 Days, inhalation: NOAEL: 1 mg/kg, (Rat, male/female, daily)

2 years, Oral: NOAEL: 2,000 mg/kg, (Dog, male/female daily)

2 years: Oral: NOAEL: 50000 ppm, (Rat, male/female, daily)

Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative (Salmonella typhimurium, Metabolic

Activation: with/without)

Negative and Positive results in various in vitro studies

Genetic Toxicity in Vivo:

Dominant Lethal Assay: Negative (Rat, male/female, daily)

Other Assay: Negative (Negative results were reported in various in vivo studies. (Mouse.)

Carcinogenicity

Rat, female, Dermal, 14 months

Dog, male/female. Oral, 2 years, daily

Negative

Rat, male/female, Oral, 2 years, daily

Negative

Animal experiments showed a statistically significant number of tumors.

Toxicity to Reproduction/Fertility

Other method, oral, daily, (Rat, Male/Female) NOAEL (parental): 7.5% in feed

Reproductive effects have been observed in animal studies.

Developmental Toxicity/Teratogenicity

Rabbit, female, oral, gestation, daily, NOAEL (teratogenicity): 1,230 mg/kg, NOAEL (maternal): 1,230 mg/kg,
- No Teratogenic effects observed at doses tested.

Rat, female, oral, gestation, daily, NOAEL (teratogenicity): 1,600 mg/kg, NOAEL (maternal): 1,600 mg/kg, -
- No Teratogenic effects observed at doses tested.

12. ECOLOGICAL INFORMATION

Ecological Data for White Pigment

Acute and Prolonged Toxicity to Fish

LC50: 1,000 mg/l (Golden orfe (Leuciscus idus), 48 h)

Toxicity to Microorganisms

LC50: > 10,000 mg/l, (Pseudomonas putida)

Ecological Data for Propylene Glycol

Biodegradation

Aerobic, 100 %, Exposure time: 1 Days

Anaerobic, 100%, Exposure time: 9 Days

Biological Oxygen Demand (BOD)

5 Days, 1,170 mg/g

Chemical Oxygen Demand (COD)

2,600 mg/g

Theoretical Biological Oxygen Demand (ThBOD)

0.45 mg/g

Bioaccumulation

< 1 BCF

Calculated value

Acute and Prolonged Toxicity to Fish

LC50: 51,400 mg/l (Fathead minnow (*Pimephales promelas*), 96 hrs)

LC50: 23,800 mg/l (Sheepshead minnow (*Cyprinodon variegates*), 96 hrs)

Acute Toxicity to Aquatic Invertebrates

EC50: > 10,000 (Water flea (*Daphnia magna*), 48 hrs)

Toxicity to Aquatic Plants

EC50: > 19,000 mg/l, End Point: growth (Green algae (*Selenastrum capricornutum*), 96 hrs)

Toxicity to Microorganisms

EC50: 25,800 mg/l, (*Photobacterium phosphoreum*, 30 min)

>1,000 mg/l, (Activated sludge microorganisms, 3 hrs)

Ecological Data for Texanol Ester Alcohol

Biodegradation

aerobic, 57 %, Exposure time: 21 Days

Inherently biodegradable

Chemical Oxygen Demand (COD)

2,200 mg/g

Theoretical Biological Oxygen Demand (ThBOD)

2,400 mg/g

Acute and Prolonged Toxicity to Fish

EC50: > 95 mg/l (Water flea (*Daphnia magna*), 96 hrs)

Acute Toxicity to Aquatic Invertebrates

EC50: 18.4 mg/l End Point: biomass (Green algae (*Selenastrum Daphnia magna*), 96 hrs)

Toxicity to Aquatic Plants

EC50: 18.4 mg/l End Point: biomass (Green algae (*Selenastrum capricornutum*), 72 hrs)

Toxicity to Microorganisms

LC50: > 215 mg/l, (Activated sludge microorganisms, 5 hrs)

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions

Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning.

14. TRANSPORTATION INFORMATION

Land Transport (DOT): Non-Regulated
Sea transport (IMDG): Non-Regulated
Air transport (ICAO/IATA): Non-Regulated

15. REGULATORY INFORMATION

United States Federal Regulations

OSHA Hazcom Standard Rating: Hazardous

U.S. Toxic Substances Control Act: Listed on the TSCA Inventory.

U.S. EPA CERCLA Hazardous Substances (40 CFR 302):

Components

Complex Inorganic Color Pigment

SARA Section 311/312 Hazard Categories:

Acute Health Hazard, Chronic Health Hazard

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) - Components: None

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65, Supplier Notification Required) - Components:

Complex Inorganic Color Pigment

U.S. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes And Appendix VIII Hazardous Constituents (40 CFR 261):

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Water	7732-18-5
>=1%	Acrylic Polymer	- - -
>=1%	Nepheline syenite	37244-96-5
>=1%	White Pigment	CAS# is trade secret
>=1%	Propylene glycol	57-55-6
1 - 5%	Complex Inorganic Color Pigment	68909-79-5

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
1 - 5%	Complex Inorganic Color Pigment	68909-79-5
0.1-1%	Ammonium Hydroxide	1336-21-6

California Prop. 65:

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
<20 ppm	Nickel (Ni)	7440-02-0
<5 ppm	Arsenic	7440-38-2

16. OTHER INFORMATION

NFPA 704M Rating

Health 1

Flammability 1

Reactivity 0

Other

0=Insignificant 1=Slight 2=Moderate 3= High 4=Extreme

HMIS Rating

Health 1*

Flammability 1

Physical Hazard 0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

* = Chronic Health Hazard

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The method of hazard communication for The Ultimate Coatings Company LLC is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by The Ultimate Coatings Company LLC as a customer service.

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of The Ultimate Company LLC. The information in this MSDS relates only to the specific material designated herein. The Ultimate Coatings Company LLC assumes no legal responsibility for use of or reliance upon the information in this MSDS.

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