

MATERIAL SAFETY DATA SHEET

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCTS: Fire Barrier Intumescent Paint

MSDS CATEGORY: Latex Paint

DESCRIPTION: White, viscous waterborne solution-emulsion. Mild odor.

MANUFACTURER: Contego International, Inc.

334 Greyhound Pass West

Carmel, IN 46032-7007

EMERGENCY PHONE: 1-800-434-6444

Or 1-317-580-0655

DATE OF APPROVAL: 7/8/09

	CAS	PERCENTAGE	OSHA PEL	ACGIH TLV
COMPONENT	NUMBER	BY WEIGHT		
Water	7732-18-5	30 - 40	NE	NE_
Polyvinyl Alcohol	9002-8905	15 - 25	NE	NE
Ammonium Polyphosphate	68333-79-9	15 - 25	NE	NE_
Titanium Dioxide	13463-67-7	6 - 9	15 mg/m³ TP	10 mg/m ³ TP
Triaminotriazine	108-78-1	5 - 10	NE	NE
Pentaerithritol	115-77-5	5 - 10	5 mg/m³ Resp 15 mg/m³ TP	10 mg/m³ TP
Ester Alcohol	25265-77-4	1 - 3	NE	NE
Propylene Glycol	57-55-6	0.5 - 1	NE	NE_
Alkylauryl Polyether	60864-33-7	0.2 - 0.5	NE	NE
Potassium Pyrophosphate	7320-34-5	0.2 - 0.5	NE	NE_
Hydroxyethylcellulose	9004-62-0	0.2 - 0.5	NE	NENE
Alkylamino Alcohol	NE	0.2 - 0.5	NE	NE_
Petroleum Oil	NE	0.1 – 0.2	NE	NE_
Urethane Polymer	NE	0.1 – 0.2	NE	NE
Acrylic Polymer	NE	0.01 - 0.02	NE	NE
Aluminum Oxide	1344-28-1	0.05 - 0.1	5 mg/m ³ Resp 15 mg/m ³ TP	NE_
Aluminum Hydroxide	21645-21-2	0.1 – 0.5	NE	NE
Amorphous Silica	112926-00-8	0.5 – 0.9	80 mg/m ³ % S _i O ₂	NE
sothiazoline	55965-84-9	<0.01	NE	NE

NE - Not Established

TP - Total Particulate

Resp. - Respirable Particulate

NOTES: 1) All exposure limits are 8-hour TWAs unless otherwise specified.

- 2) Abbreviations/Acronyms are defined in SECTION 16 OTHER INFORMATION.
- 3) OSHA PEL Regulatory exposure standard.
- 4) ACGIH TLV Consensus exposure guideline, not a mandatory regulatory requirement.

3 - HAZARDS IDENTIFICATION

GENERAL HAZARD STATEMENT: This material does not present a health or safety hazard under proper conditions of use. Waterborne (Latex) paint products are routinely utilized by industry and public consumers without health and safety consequence. This product contains minimal quantities of volatile organic compounds (VOCs) and presents no fire/explosion hazards. Processing should be performed in well-ventilated areas. High airborne vapor/aerosol/mist concentrations should be addressed by a Certified Industrial Hygienist or other competent professional. If vapor/aerosol concentrations cannot be effectively limited by procedural improvements or ventilation and other engineering controls, respiratory protection and other PPE must be utilized.

HMIS DESIGNATION:

HEALTH 0

FLAMMABILITY 0

REACTIVITY 0

PPE A

WHMIS (Canada) (NPPA 704) CLASSIFICATION:

- HEALTH: 0 No serious health effects under normal use conditions.
- **FLAMMABILITY:** 0 Non-flammable; does not support combustion.
- **REACTIVITY:** 0 Stable under normal conditions of use. May liberate carbon and nitrogen compounds and other decomposition products at decomposition temperature.

PRIMARY ROUTE OF ENTRY: Inhalation of airborne aerosol, mist, vapor or thermal decomposition products

EMERGENCY OVERVIEW:

- Harmful if swallowed in large quantities.
- Harmful if inhaled (aerosol/mist/vapor).
- · May cause eye irritation
- May cause skin irritation
- Vapors/mist/aerosol in high concentrations are irritating to eyes and respiratory tract

POTENTIAL HEALTH EFFECTS:

FVE

• May cause eye irritation due to alkalinity and mechanical abrasion if liquid comes in contact with the eyes.

SKIN:

- May cause skin irritation.
- Repeated and prolonged contact with the skin may cause allergic dermatitis.

INHALATION:

• Exposure to high concentrations of vapors/mist/aerosol may cause headaches or respiratory irritation.

INGESTION:

• May cause stomach discomfort, nausea, vomiting, and diarrhea.

4 - FIRST AID MEASURES

Approval Date: 7/8/09

EYE CONTACT:

• Immediately flush eyes with plenty of water. If irritation persists, seek medical attention.

SKIN:

• Wash thoroughly with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

INHALATION:

• For inhalation overexposure, move person to fresh air. If breathing stops, apply artificial respiration and seek medical attention.

INGESTION:

- This product may contain materials that can cause lung damage if aspirated into the lungs.
- The decision whether to induce by vomiting must be made by a physician after careful consideration of materials ingested.

5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: As appropriate for surrounding materials.

FIRE AND EXPOLSION HAZARD:

- Flammability not flammable.
- Fire Explosion Hazard Liquid paint will not burn but may spatter above boiling point.
- Fire Fighting Equipment Self-contained breathing apparatus.
- Hazardous Decomposition Products Oxides of Carbon and Nitrogen/Hydrocarbon decomposition products.

6 - ACCIDENTAL RELEASE MEASURES

CLEAN-UP AND CONTAINMENT:

- Be aware that spilled paint on floors may result in a slipper condition.
- Shovel large quantities of spilled product into an appropriate container.
- Remove with absorbent materials.
- Store recovered material in sealed containers for recycle or disposal.
- Do not discharge large quantities of paint into the sewer system.

7 - HANDLING AND STORAGE

HANDLING:

• Handle as any latex paint product.

STORAGE:

- Store in sealed containers, in a cool dry area with ventilation suitable for storing materials shown in SECTION 2.
- •Keep away from direct sunlight.
- •Do not store at temperatures above 39°C (102° F).
- •Keep from freezing. Do not store at temperature below 32°F (0°C).

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Sufficient ventilation, in volume and pattern, should be provided to keep air contamination below current applicable OSHA permissible exposure limit.

RESPIRATORY PROTECTION:

If workplace exposure limits are exceeded for any component (see SECTION 2 for components and OSHA permissible exposure limits), a NIOSH/OSHA approved respirator suitable for components listed should be utilized. Respiratory protection requirements should be addressed by a Certified Industrial Hygienist or other competent person.

SKIN PROTECTION:

Chemical resistant plastic or rubber (neoprene) gloves recommended for prolonged or repeated contact.

EYE PROTECTION:

Chemical goggles with side shields or face shield should be utilized if splashing or contact with the eyes is likely.

OTHER PROTECTIVE EQUIPMENT:

Appropriate impervious clothing is recommended if prolonged or repeated contact is likely

HYGIENIC PRACTICES:

Avoid direct skin contact. Wash hands before eating or smoking. Smoke in designated areas only.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Viscous liquid; waterborne emulsion.
Vapor Density:	Less dense than air (water vapor)
Boiling Point:	100 °C (212°F)
Specific Gravity:	1.29
Weight per Volume (Lb/Gal):	10
Percent VOC by Weight:	1 - 2
Percent Volatile by Weight:	
Evaporation Rate:	Same as Water
Vapor Pressure:	17.5 mm Hg at 20°C

10 - STABILITY AND REACTIVITY

STABILITY: stable under most conditions.

HAZARDOUS POLYMERIZATION: will not occur.

INCOMPATIBILITY: avoid strong oxidizing materials, strong acids and alkaline/caustic products.

CONDITIONS TO AVOID: keep from freezing. Avoid temperatures above 39°C (102°F).

11 - TOXICOLOGICAL INFORMATION

INHALATION: Excessive exposure to vapors, aerosol, and mist may cause headaches irritation of eyes, nose, throat and nausea.

EYE CONTACT: This material may be an eye irritant.

SKIN CONTACT: This material may be slightly irritating.

INGESTION: Very low order of toxicity; no hazards are anticipated from ingestion incidental to handling.

CARCINOGENICITY: Not indicated. (Titanium Dioxide has been listed by IARC as a possible human carcinogen.)

MUTAGENICITY: Not indicated.

TERATOGENICITY: Not indicated.

REPRODUCIVE TOXICITY: Not indicated.

In February, 2006, IARC reclassified Titanium Dioxide (TiO₂) from Class 3: Unclassifiable as to carcinogenicity in humans; to 2-B: Possibly carcinogenic to humans. This MSDS is revised accordingly.

The IARC reclassification was based upon animal (rat) studies conducted in 1985 and 1989. This data was derived from animal studies involving extremely high, long duration, airborne respirable TiO₂ concentrations which placed a severe burden upon the lungs of the laboratory animals and overwhelmed the lung clearance mechanism. These animal exposure conditions have no relevance to human occupational exposure. The large volume of historical epidemiological data indicates no correlation between real-world human exposure and this animal exposure data. These animal test results are not confirmed or corroborated by extensive industrial experience.

Titanium dioxide continues to be viewed by OSHA (PEL: 15 mg/m³) and ACGIH (TLV: 10 mg/m³) as a substance of relatively low inhalation toxicity. No changes in the OSHA regulatory exposure standard or the ACGIH consensus guideline have been initiated as of this MSDS writing.

12 - ECOLOGICAL INFORMATION

The discharge of large quantities of paint into waterways may adversely affect fish. The organic constituents are intrinsically biodegradable.

13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

- Place in closed containers.
- Waste should be classified by a competent environmental professional in accordance with 40 CFR 261.20-24, and disposed, processed, or recycled in accordance with federal, state and local regulations.
- Reclamation and recycling should be implemented to the extent feasible.

14 - TRANSPORT INFORMATION

NOT RESTRICTED.

15 - REGULATORY INFORMATION

SARA TITLE III HAZARD CATEGORIZATION: Product is not categorized as an immediate (acute) health hazard or a delayed (chronic) health hazard as defined by 40 CFR 370.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHSs): No components are listed as extremely hazardous substances.

SARA TITLE III SECTION 313 REPORTABLE SUBSTANCES: None.

CERCLA HAZARDOUS SUBSTANCES: None.

16 - OTHER INFORMATION

ABBREVIATIONS/ACRONYMS:

Following are some abbreviations and acronyms that may appear on MSDSs.

ACGIH - American Conference of Governmental Industrial Hygienists	NIA - No Information Available	
NIOSH - National Institute for Occupational Safety and Health	NIF - No Information Found	
AL - Action Level	NTP - National Toxicology Program	
C - Ceiling Concentration	OSHA - Occupational Safety and Health Administration	
CAS - Chemical Abstracts Service	PEL - Permissible Exposure Limit	
CFR - Code of Federal Regulations	PNOR - Particulate Not Otherwise Regulated	
CPR - Cardiopulmonary Resuscitation	PNOC - Particulate Not Otherwise Classified	
EPA (U.S.) -Environmental Protection Administration	POTW - Publicly Owned Treatment Works	
HMIS - Hazardous Materials Identification System	PPE - Personal Protective Equipment	
IARC - International Agency for Research on Cancer	ppm - parts per million	
Mg/m³ - milligrams per cubic meter of air	resp- respirable	
Mppcf - million particles per cubic foot	SARA -Superfund Amendments and Reauthorization Act (EPA)	
MSDS - Material Safety Data Sheet	SCBA - Self-contained Breathing Apparatus	
MSHA - Mine Safety and Health Administration	STEL - Short-term Exposure Limit	
NE – Not Established	TLV - Threshold Limit Value	
N/Ā - Not Applicable	TWA - Time-weighted Average	
NFPA - National Fire Protection Association	<- Less than	
μg/m³ - Micrograms per cubic meter of air	>- Greater than	

NFPA 704 – Health and Safety Standard maintained by the U.S. National Fire Protection Association. This standard is directed toward identification of risks that may be encountered during fire and emergency response conditions and is the basis for WHMIS (Canada) health and safety classification.

WHMIS (Canada) – Workplace Hazardous Materials Information System. The numerical hazard classification methodology of the Canadian WHMIS is based upon U.S. NFPA 704.

DISCLAIMER:

Details presented in this MSDS were derived from literature sources and regulatory documents believed to be accurate and authoritative. The purpose of this MSDS is to serve as a general guide to users of this product. It is the user's responsibility to comply with all federal, state and local regulations. The user must satisfy requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and any other applicable occupational health and environmental regulations. This MSDS is not intended as a total regulatory compliance document, nor should it be construed as a license or a recommendation to violate any law or infringe on any patent. The <u>user</u> (not the supplier) is uniquely positioned to know the conditions of use, and assumes responsibility for process safety and health. Comprehensive Safety Compliance, Inc. (CSC; Occupational Health and Safety Consultant) and Contego International shall not be liable for user errors associated with the use of this product. CSC, Inc. and Contego International make no warranty, expressed or implied, regarding the use by others of this product, and shall not be liable for incidental or consequential damages in connection with this product.

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