

## Contego Original Formula Reactive Fire Barrier Intumescent (RFB)



Approved  
No. CF 5303

**General Description:** Contego Original Formula RFB is a full-bodied water-based acrylic latex, single component coating designed to protect a wide range of building materials including structural steel, aluminum, dimensional lumber, manufactured wood products, trusses, drywall, spray polyurethane foam insulation, HDPE wall panels, concrete, plaster, solid core doors and more. The product may also be used for conduit, decking and cladding. This updated version of our original formula is an excellent product to use on spray polyurethane foam insulation, or for applications where you have to use a brush or roller to apply. Refer to our architectural specification for more details.

### Technical Data:

Color	White
Specific Gravity	1.32 +/- 0.06
pH Range	8.0 - 8.5
Weight/Gal	11.0 +/- 0.5 lbs (5.0 Kg)
Hazardous Ingredients	N/A
Volume Solids	58.0 +/- 2.0%
Weight Solids	60.0 +/- 2.0%
Viscosity	12,500 +/- 2,500 cPs
Flammability	Not Flammable
VOC. (less Water)	.01 gm/L (Nil)

\*Does not include weight of packaging.



**Application Conditions:** Contego RFB is designed to be applied by roller, brush or spray application. Contego RFB should not be applied when the relative humidity exceeds 80% or the surface to be coated is less than 50°F (10°C) or less than 15°F (9°C) above the current or forecasted dew point. The product is best applied when ambient temperatures are between 50°F (10°C) and 95°F (35°C). Once applied and cured, lower or higher temperatures can be tolerated. On structural steel and other metals such as aluminum, copper, brass, or composites, - a primer is always required. On combustible substrates such as dimensional lumber, manufactured wood (Oriented Strand Board, Particle Board, Plywood, etc.), Polyurethane foam, and drywall (GWB) a primer is not required but may be useful if:

**Dimensional Lumber** The wood is very old and/or dry and would likely absorb too much of the Contego RFB coating.

**Manufactured Wood** The substrate is very old and/or dry or if the resin content is unusually high.

**Polyurethane Foam** The foam is soy-based or made from other organics that emit a vegetable oil.

**Drywall (GWB)** The drywall has been previously painted with oil-based (alkyd) paint or if you're not sure.

Consult your Contego representative for specific information regarding the brand, and types of acceptable primers to be used under Contego RFB. **SEE Application Instructions at [www.contegointernational.com](http://www.contegointernational.com).**

**Drying & Cure Times at Standard Ambient Temperature and Humidity:** As with any water-based acrylic latex coating, drying time is always a function of ambient temperature, ambient humidity and coating thickness. At 60°F (15°C) with a relative humidity of 70%, a 20 mil (500µ) wet film thickness coat should be dry to touch within 3 hours, completely dry in 6 hours and dried hard enough to handle in 8 hours. While our specifications call for a 72 hour cure time, the product is active as soon as it is hard dried.

**DO NOT** apply additional coats until you are sure the underlying coats are completely dry. Applying additional coats on top of product that still has moisture may cause the finish to crack and, if enough moisture is trapped under a surface film, blistering and delamination can occur. A top coat is recommended and permitted after the total amount of required thickness of Contego RFB has been applied and completely dried. **SEE Drying and Cure Times at [www.contegointernational.com](http://www.contegointernational.com).**

### Contego RFB Product Advantages:

- **Exceptional protection from heat and fire.**
- **Smooth, thin, architectural grade finish.**
- **Top coat with a wide range of paints including alkyds, acrylics, water-based epoxy or polyurethane.**
- **Contego RFB commonly requires perhaps half the coating thickness and fewer coats to provide protection equal to or better than the competition. That means HUGE savings!**
- **Nontoxic, nondermatic and noncarcinogenic acrylic latex.**
- **Can be pre-applied to steel and other materials during fabrication and is easy to repair.**
- **Designed specifically for sprayer application. No special equipment is required.**
- **Any qualified contractor can apply it.**
- **Interior or exterior application (use an exterior grade top coat for exterior applications).**
- **Economically priced.**
- **Fast drying and fast curing times.**
- **Cleans up with soap and water.**
- **The longest shelf life in the industry. Does not need to be periodically reapplied.**

**Contego RFB is Truly  
Non-Toxic!**





## Contego Original Formula Reactive Fire Barrier Intumescent (RFB)

**Required Coating Thickness:** Current recommendations are a maximum wet film thickness of 40 mils (1000 $\mu$ ), drying to 28 mils (710 $\mu$ ) - refer to the Contego Original Formula RFB Application Guide. **For structural steel applications**, refer to our Project Planner to determine required thickness for various substrates, densities and required ratings. Contact a qualified Contego representative with further questions.

### General Guidelines for Coating Thickness Requirements:

**Dimensional Lumber** - Up to 2 hours depending on the size of the wood and the thickness of Contego Original Formula RFB applied. (40 mils/500 $\mu$  dft). Based on our ASTM-E84/ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data

**Manufactured Wood** - Up to 1 hour depending on the size of the wood and the thickness of Contego Original Formula RFB applied. (40 mils/500 $\mu$  dft). Based on our ASTM-E84/ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data

**Polyurethane Foam** - Meets or exceeds the 15 minute thermal barrier requirements of IBC-2603 using UL-1715 (20 mils/500 $\mu$  dft). (Under EN-13823, Contego exceeded 25 minutes with no change after 6 minutes). Based on our ASTM-E84/UL-1715/CAN-ULC 9705/UBC 26.3/NFPA 286/ test data.

**Drywall (GWB)** - Contego Original Formula RFB adds 1 hour to any type of GWB. (15 mils/380 $\mu$  dft). Based on our ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data.

**Structural Steel** - \*Contego recommends using Contego High Solids RFB product.

**Aluminum** Columns have been tested for 2 hours. Aviation grade .025 panels for an estimated 4+ hours. (20-50 mils/500-1270 $\mu$  dft). Based on our ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data.

### Precautions:

- Do not mix, thin or dilute the Contego Original Formula RFB product with water or other materials.
- Do not allow the product to freeze. If frozen, the texture will be obviously different. Discard it.
- Do not store at temperatures above 100 F (40°C) for extended periods of time.
- Do not expose the product to rain, snow, dew or extreme humidity until a top coat is applied.

**Warranty:** Contego Original Formula RFB products are warranted for two years from date of application against material defects. Proof of purchase (store receipt and bar code from container) is required for warranty claims. Claims are limited to replacement of product only. The manufacturer accepts no responsibility for other losses or claims and the user waives such claims by breaking the seal on the container.

**Testing:** Contego Original Formula RFB products are tested to a variety of standards including UL, ULC, EN, BS, ASTM, NFPA, UBC, CEN, ISO, and others by the best independent fire testing laboratories available. Contego uses Underwriters Laboratories (UL), Exova/Warrington, Intertek, Western Fire Center, Southwest Research Institute (SwRI), Guardian Laboratories, SGS/US Testing, KTA-Tator, Materials Analytical Services, MAGI and more. All labs are certified, accredited and audited. **Test results are available online at [www.contegointernational.com](http://www.contegointernational.com)** or can be obtained on DVD by contacting our customer services department or your local representative.

#### ICC-ES Certification # 5078

2021, 2018, 2015 International Building Code (IBC, IRC, IFC)

2020 Florida Building Code (FBC, FRC)

2022 California Building Code (CBC, CRC, CFC)

2020 Los Angeles Building Code (LABC, LARC, LAFC)

### Contact: Contego International, Inc.

PO Box 49

Rochester, IN 46975

Toll-Free: 800-434-6444

[info@contegointernational.com](mailto:info@contegointernational.com)

[www.contegointernational.com](http://www.contegointernational.com)



# APPLICATION INSTRUCTIONS

## Contego *Original* Reactive Fire Barrier Intumescent (RFB)

### GENERAL DESCRIPTION

Contego Original (RFB) is a full-bodied water-based acrylic latex, single component coating designed to protect various materials in a fire.

*Application of Contego Original intumescent coating consists of up to three distinct steps.*

**First,** You can prepare the steel substrate by grit blasting to a surface profile of ASA 2.5 or equivalent. An approved, compatible primer is then applied before the cleaned steel can oxidize and form a layer of surface rust. Contego Original can be applied on previously painted steel as long as the coating is in good condition and is tightly bonded to the steel. If the existing coating on the steel is oil based, epoxy, or you are not sure what the existing coating is made of, the steel needs to be abraded and then a layer of bonding primer applied.. We recommend whenever possible that you order steel pre-primed from the fabricator.

**Second,** Contego Original is applied over the primer to the required thickness. Contego Original provides superior protection in a fire scenario.

**Third,** an optional decorative and protective top coat is applied over Contego Original. This topcoat provides protection from abrasion, humidity and other conditions and should always be used for interior applications with unusual challenges such as aquatic centers with high levels of chlorine in the air that can potentially affect the intumescent. Contego is formulated to work with a wide range of top coats, to provide architectural aesthetics and to give a smooth finish with the desired color and gloss level.

### PRE-APPLICATION

Prior to use, Contego Original must be stored in a dry location at temperatures between 50°F (10°C) and 100°F (~40°C). Under these conditions shelf life is up to 24 months in unopened containers. **DO NOT ALLOW THE MATERIAL TO FREEZE.**

Before use, the container should be opened, inspected and stirred.

### WORK SITE CONDITIONS

**Lighting / Ventilation** - Sufficient lighting and ventilation must be provided to ensure proper application and drying of the product both during and after its application. In enclosed spaces, there should be a minimum of four air exchanges per hour, until the coating is dry.

**Application Conditions** - Apply Contego Original when the ambient air temperature is above 50°F (10°C) and below 100°F (~40°C). A minimum substrate and air temperature of 50°F (10°C) must be maintained during and for at least 72 hours after application.

Steel temperature should be at least 4°F (2°C) above the dew point to prevent condensation from forming on the steel. If necessary, the application site should be enclosed and heated to provide proper temperature and humidity levels during and after application.

Relative humidity should be below 75% during application. Do not apply Contego Original if there is condensation on any surface or primer as this will affect adhesion of Contego Original. High humidity will also slow the drying process, reduce maximum wet film thickness per coat before sagging occurs, and can affect surface finish of the coating.

*Contego is Truly  
Non-Toxic!*



### HEALTH AND SAFETY

*Refer to Material Safety Data Sheet for complete Health and Safety Information.*

## APPLICATION INSTRUCTIONS

### Contego *Original* - CONTINUED

#### EQUIPMENT

**Spray Equipment:** It is recommended that Contego Original be applied with an electric, pneumatic, or gas powered airless spray pump capable of spraying at a minimum of 3,000 psi (210.9 Kg/cm<sup>2</sup>).

**Hose:** Rated to match the pump capacity, minimum diameter of 3/8" (10mm) ID. Hose length should be compatible with pump rating.

**Spray Gun and Tip:** A Graco Mastic Spray or Silver gun or equivalent with the diffuser tip removed, and all in-line filters removed, and rated to a minimum of 3,000 psi. Tip size should be a minimum of 0.025" (0.635 mm).

**Brush or Roller:** Use a high quality latex paint brush. Contego Original can also be applied with a roller.

**Masking and Overspray Protection:** Masking usually consists of lightweight polyethylene plastic held in place with duct tape. Install on all surfaces not intended to be coated with Contego Original.

**Mixing Prior to Application:** Contego Original is supplied ready for use and **MUST NOT** be diluted. Thoroughly stir Contego Original with a standard drywall mixing paddle or Jiffy mixer for 3-5 minutes before application. Remove any surface film before stirring. Do not stir surface film back into Contego Original.

#### SURFACE PREPARATION

- **General:** DO NOT paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable paint film. The surface should be prepared to SSPC-SP3 or SSPC-SP-5, depending on the end use application.
- **Primed Surface:** All surfaces to be coated with Contego Original must first be primed with an approved primer. Primed surfaces must be free from any grease, oil, dirt, loose mill scale, rust and any other contaminant that would affect the adhesion of Contego Original to the primer. The primer must be fully cured in accordance with the manufacturer's instructions before applying Contego Original.
- Contego Original is compatible with a wide range of primers including alkyds, silicone modified alkyds, phenolic modified alkyds, 2K epoxy polyamides, acrylic modified epoxy, and acrylics.
- High gloss primers should be avoided. Only flat or matte finish Red Oxide primers or similar should be used.
- Primers should be tested for adhesion to the substrate and to Contego Original prior to use.
- For specific primer recommendations and approvals contact CONTEGO INTERNATIONAL Technical Department.
- Cured primer thickness should be measured and recorded before applying Contego Original.

#### CONTEGO ORIGINAL APPLICATION

Thoroughly mix Contego Original with a Jiffy style mixer or drywall paddle mixer for 3-5 minutes prior to use. Do not dilute.

#### Painting Scheduling

- Apply the first coat of Contego Original to primed surfaces that have been cleaned, pre-treated, or otherwise prepared for painting as soon as practicable after surface preparation and before subsequent surface deterioration.
- Maximum wet film thickness of Contego Original per coat is:

Spray: 20 - 25 mils, (508 $\mu$  - 635 $\mu$ ) - Varies with ambient temperature and humidity

Brush: 10 mils, (0.010", 0.25 mm) - Be sure to keep brush heavily loaded.

- Film thickness required is the same regardless of application method.
- DO NOT apply subsequent coats until previous coat is thoroughly dry, not just dry to the touch. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
- Application thicknesses are dependent on air and steel temperature, relative humidity and air flow.
- Allow enough time between successive coats to permit **complete drying**. DO NOT recoat surfaces until paint has dried thoroughly. Applying additional coats of paint before surface is completely dry will cause the undercoat to retain moisture, which can cause blistering, cracking, and delamination from the primer. If this should happen, the entire coating must be stripped down to the primer and redone.

*Contego is Truly  
Non-Toxic!*



- (NOTE: Waiting 24 hours between coats will insure thorough dryness.)
- Spray gun distance from the substrate should be a minimum of 12-18" (300 - 450 mm).

# APPLICATION INSTRUCTIONS

## Contego *Original* - CONTINUED

### CONTEGO ORIGINAL APPLICATION - Continued

#### Painting Strategy

- For spray application, two thin coats of 20 - 25 mils, (508 $\mu$  - 635 $\mu$ ) offers better control over sagging, thickness, texture and reduces drying time.
- Before applying a second coat, make sure the previous coat is thoroughly dry, not just dry to the touch, particularly in the web and on flange junctions and tips.
- A minimum drying time of 8 hours is recommended between coats. Applying additional coats in less than 8 hours could cause blistering. (Refer to Contego Drying Times Chart).

#### Checking Coating Thickness during Application

- Measure the wet film thickness frequently using a wet film thickness gauge to be sure the proper thickness is being applied evenly.
- To calculate dry film thickness (DFT) from wet film thickness (WFT), multiply WFT by 0.60

**Insert numbered tooth required into freshly applied wet coating system.  
The gauge will show the wet mil thickness on the substrate  
Refer to the illustrations below:**



**Wet Mil Gauge in Coating**



**Wet Mil Gauge  
(Actual Size)**

**\*Indicates 10 Mils Wet Film Thickness**

**DIRECTIONS FOR USE:** Press gauge into wet coating. Withdraw vertically and note deepest tooth having paint on it and the next higher tooth that is not coated with paint. The true wet film thickness lies between these two readings. Clean gauge in suitable solvent after each use.

### FINAL THICKNESS MEASUREMENT

Dry film thickness measurements should be taken at least 5 days after the last coat has been applied, and before any topcoat has been applied. Use an electronic thickness gauge such as an Elcometer or equivalent.

*Contego is Truly  
Non-Toxic!*







Approved No. CF 5303

# APPLICATION INSTRUCTIONS

## Contego *Original* - CONTINUED

### TOP COAT APPLICATION

Contego International recommends for:

**General Purpose Interior Use** for acrylic latex top coat applied to a minimum dry film thickness of 5 mils (0.005", 0.13 mm).

**Unconditioned Interior Space Use** for protection from humidity, surface impact and damage, a silicon alkyd marine enamel, silicone modified alkyd, alkyd or exterior grade acrylic be applied at the manufacturers recommended DFT or 5 mils (0.005", 5 mils, 0.13mm).

**Exterior Space Use** a top coat is required and should be applied before the substrate is exposed to rain, dew, heavy fog, snow or other forms of moisture and/or precipitation.

Check with your Contego International representative for specific recommendations. A minimum of 5 days should be allowed before applying a topcoat the Contego Original to ensure complete cure and drying.

### FINISH COAT

Apply two finish coats of acrylic enamel, silicon alkyd marine enamel, silicon modified alkyd, water-based epoxy, 2K epoxy, acrylic modified epoxy, as recommended by manufacturer to produce a smooth, even surface film. Provide a finish free of laps, runs, color irregularity, brush marks, orange peel, nail holes or other surface imperfections.

### COMPLETED WORK

Match approved samples for texture and coverage. Remove, refinish, or repaint work not complying with requirements.

### MISCELLANEOUS

#### Repairing Damaged Areas:

- Damaged areas should be abraded back to sound material.
- The surface should be cleaned and dried.
- Touch up with primer where needed.
- Apply Contego Original to the required film thickness.
- Spray Equipment Clean Up: Contego Original can be left in the hose for up to one hour.
- If the equipment will not be used for over one hour, it should be cleaned out. To clean, use potable water.

Run the water through the spray pump, hose, spray gun and tips until clean. Do not allow Contego Original to set up in the spray pump, hose or spray gun or tips.

**Information: The Following support materials are available at [www.Contegointernational.com](http://www.Contegointernational.com).**

Architectural Specifications  
Application Video  
Adhesion "E" Book

Product Data Sheet  
Global Certifications  
Technical support

Drying Times Chart  
MSDS

Project Planner  
DFT & WFT Measuring Videos

### CONTACT

Contego International, Inc. (USA/Canada)  
PO Box 684  
Westfield, IN 46074  
800-434-6444 Toll Free in the USA  
317-580-0665 - Office  
317-580-0663 - Fax  
[info@contegointernational.com](mailto:info@contegointernational.com)

Todd Beehler (Finance, Accounting)  
Chief Financial Officer  
1013 Arthur St./ PO Box 49  
Rochester, IN 46975-2449  
317-379-2843 - Direct  
574-223-4442 - Fax  
[todd@contegointernational.com](mailto:todd@contegointernational.com)

Contego International, Inc. (International)  
John M. Schwartz  
Dir., International Operations  
317-966-2189 - Pacific  
[john@contegointernational.com](mailto:john@contegointernational.com)

International Partners:  
[http://www.contegointernational.com/international\\_distributors.html](http://www.contegointernational.com/international_distributors.html)  
[www.contegointernational.com](http://www.contegointernational.com)  
<http://www.facebook.com/pages/Contego/167681133258008> - Facebook  
<http://www.youtube.com/ContegoFireBarrier> - YouTube  
<http://www.twitter.com/contegopaint> - Twitter

*Contego is Truly  
Non-Toxic!*





# SAFETY DATA SHEET

Issuing Date 4-Aug-2016

Revision Date 11-May-2021

Revision Number 1

## 1. IDENTIFICATION

### GHS product identifier

**Product Name** Contego Intumescent Fire Barrier Latex (Original Formula)

### Other means of identification

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Fire barrier paint

**Uses advised against** No information available

### Supplier's details

#### **Supplier Address**

Contego International, Inc.  
P.O. Box 49  
1013 Arthur Street  
Rochester, IN 46975  
TEL: 1-317-580-0655

### Emergency telephone number

**Emergency Telephone Number** 1-800-434-6444

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Not classified

### GHS Label elements, including precautionary statements

#### Emergency Overview

**Signal Word** None

The product contains no substances which at their given concentration are considered to be hazardous to health

**Appearance** White. **Physical State** Liquid. **Odor** Mild.

## 2. HAZARDS IDENTIFICATION - Continued

### Precautionary Statements

#### Prevention

- None

#### General Advice

- None

#### Storage

- None

#### Disposal

- None

### Hazard Not Otherwise Classified (HNOC)

Not applicable.

### Other information

If product is removed by sanding or grinding may produce dust particulates.

<50% of the mixture consists of ingredient(s) of unknown toxicity.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary Formulation

## 4. FIRST AID MEASURES

### Description of necessary first-aid measures

<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Get medical attention if symptoms occur.
<b>Skin Contact</b>	Wash skin with soap and water. Remove and wash contaminated clothing before re-use. If skin irritation occurs: Get medical advice/ attention.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
<b>Protection of First-aiders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### Most important symptoms/effects, acute and delayed

**Most Important Symptoms/Effects**      No information available.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to Physician**                      Treat symptomatically.





## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>	
Pentaerythritol 115-77-5	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust	
Glass, oxide 65997-17-3	TWA: 1 fiber/cm <sup>3</sup> respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m <sup>3</sup> inhalable fraction	-		
Aluminum hydroxide 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-		
Chemical name	Alberta	British Columbia	Ontario TWAEV	Quebec
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Pentaerythritol 115-77-5	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Glass, oxide 65997-17-3	TWA: 5 mg/m <sup>3</sup> TWA: 1 fibre/cm <sup>3</sup>	TWA: 1 fibre/cm <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 1 fibre/cm <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 1 fibre/cm <sup>3</sup>
Aluminum hydroxide 21645-51-2		TWA: 1.0 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	
Propylene Glycol 57-55-6			TWA: 10 mg/m <sup>3</sup> TWA: 50 ppm TWA: 155 mg/m <sup>3</sup>	

#### Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

##### Engineering Measures

Showers  
Eyewash stations  
Ventilation systems

#### Individual protection measures, such as personal protective equipment

##### Eye/Face Protection

At minimum, wear safety glasses with side shields. Goggles are preferred, especially with spray applications

##### Skin and Body Protection

Wear latex, vinyl, or nitrile gloves and a long sleeved work or jump suit such as Tyvek or similar.

##### Respiratory Protection

A dust mask is recommended to protect against exposure to airborne particulates or mists. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

##### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid.	<b>Appearance</b>	White.
<b>Odor</b>	Mild.	<b>Odor Threshold</b>	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks / Method</u>
pH	8.0 - 8.5	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	100 °C / 212 °F	None known
Flash Point	Not flammable.	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	1.1 – 1.3	No units, but stated at a given temperature
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	> 8,000 cTs	None known
<b>Flammable Properties</b>	Not flammable	
<b>Explosive Properties</b>	No data available	
<b>Oxidizing Properties</b>	No data available	

### Other information

VOC Content (%)	Negligible
VOC (g/l)	0.01

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to avoid

Incompatible products.



## 10. STABILITY AND REACTIVITY - Continued

### Incompatible materials

Strong acids. Strong oxidizing agents.

### Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	No known hazard by inhalation.
<b>Eye Contact</b>	Contact with eyes may cause irritation.
<b>Skin Contact</b>	No known hazard in contact with skin.
<b>Ingestion</b>	No known hazard by swallowing.

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide	> 10000 mg/kg ( Rat )	-	= 5.09 mg/L ( Rat ) 4 h
Pentaerythritol	= 19500 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	> 5.15 mg/L ( Rat ) 4 h
Melamine triamino-s-triazine	= 3161 mg/kg ( Rat )	> 1 g/kg ( Rabbit )	-
Aluminum hydroxide	> 5000 mg/kg ( Rat )	-	-
Propylene Glycol	= 20 g/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
2,2,4-Trimethylpentane-1,3-diol monoisobutyrate	= 3200 mg/kg ( Rat )	> 15200 mg/kg ( Rat )	> 3.55 mg/L ( Rat ) 6 h

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Sensitization** Not expected to be a sensitizer.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. However, this product may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X
Melamine triamino-s-triazine 108-78-1	-	Group 2B	-	X
Glass, oxide 65997-17-3	-	Group 3	-	-

#### Legend

##### **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

## 11. TOXICOLOGICAL INFORMATION - Continued

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration Hazard** No information available.

### Numerical measures of toxicity - Product

**Acute Toxicity** <50% of the mixture consists of ingredient(s) of unknown toxicity.

*The following values are calculated based on chapter 3.1 of the GHS document:*

**LD50 Oral** 4425 mg/kg; Acute toxicity estimate

## 12. ECOLOGICAL INFORMATION

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Pentaerythritol	No data available	96h LC50: > 100 mg/L (Oryzias latipes)	No data available	48h EC50: 30477 - 37043 mg/L (Daphnia magna)
Melamine triamino-s-triazine	96h EC50: = 940 mg/L (Scenedesmus pannonicus)	96h LC50: > 3000 mg/L (Poecilia reticulata)	EC50 > 10000 mg/L 30 min	48h EC50: > 2000 mg/L (Daphnia magna)
Propylene Glycol	96h EC50: = 19000 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 41 - 47 mL/L (Oncorhynchus mykiss) 96h LC50: = 51400 mg/L (Pimephales promelas) 96h LC50: = 51600 mg/L (Oncorhynchus mykiss) 96h LC50: = 710 mg/L (Pimephales promelas)	-	48h EC50: > 1000 mg/L (Daphnia magna)
2,2,4-Trimethylpentane-1,3-diol monoisobutyrate	72h EC50: = 18.4 mg/L (Pseudokirchneriella subcapitata)	96h LC50: = 30 mg/L (Pimephales promelas)	No data available	No data available

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

### **Component Information**

Chemical name	Partition coefficient
Melamine triamino-s-triazine	1.14
2,2,4-Trimethylpentane-1,3-diol monoisobutyrate	3.47

### **Other Adverse Effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

<b>Waste Disposal Methods</b>	This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.
<b>Contaminated Packaging</b>	Do not re-use empty containers.
<b>California Waste Codes</b>	331

**14. TRANSPORT INFORMATION**

<b><u>DOT</u></b>	Not regulated
<b><u>TDG</u></b>	Not regulated
<b><u>MEX</u></b>	Not regulated
<b><u>ICAO</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated
<b><u>IMDG/IMO</u></b>	Not regulated
<b><u>RID</u></b>	Not regulated
<b><u>ADR</u></b>	Not regulated
<b><u>ADN</u></b>	Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	All ingredients are on the inventory or exempt from reporting.
<b>DSL</b>	Not determined

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which 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**

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No



**15. REGULATORY INFORMATION - Continued**

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated 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.

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Titanium dioxide	13463-67-7	Carcinogen

**U.S. State Right-to-Know Regulations**

"X" designates that the ingredients are listed on the state right to know list.

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Titanium dioxide 13463-67-7	X	X	X		
Pentaerythritol 115-77-5	X	X	X		
Melamine triamino-s-triazine 108-78-1	X	X	X		
Propylene Glycol 57-55-6	X		X		

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Hazards</b> -
<b><u>HMIS</u></b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal Protection</b> X

**Revision Date** 11-May 2021  
**Revision Note** First revision.

**16. OTHER INFORMATION - Continued**

**General Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

<p><b>PREPARED BY:</b> Comprehensive Safety Compliance, Inc. (CSC) Occupational Health and Safety Consultant (412) 826-5480</p>	<p><b>VERSION NO.:</b> 1</p>	<p><b>APPROVAL DATE:</b> 5/11/21</p>
<p><b>MFR. CONTACT:</b> Contego International, Inc. P.O. Box 49 1013 Arthur Street Rochester, IN 46975 TEL: 1-317-580-0655</p>	<p><b>SUPERSEDES SDS DATED:</b> N/A</p>	

**End of Safety Data Sheet**