



# SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II,  
as amended by Regulation (EU) No. 2015/830 - United Kingdom (UK)

## Centrecoat Water Based Line Marking - Yellow

Reference Number:

Issue:

Date: September 2012

### 1. PRODUCT IDENTIFICATION

Centrecoat Water Based Line Marking Paint - Yellow

### 2. COMPOSITION

Chemical Name	CAS#	EINECS	Common Name	*% Content
Titanium Dioxide	13463-67-7	263-675-5	Titanium Dioxide	1-5%
Methyl Alcohol	67-56-1	200-659-6	Methanol	1-5%
Calcium Carbonate	1317-65-3	215-279-6	Limestone	30-40%
Silicon Dioxide	14808-60-7	238-878-4	Sand (Quartz)	0.1-1%
2-Butoxyethanol	111-76-2	203-905-0	EB Solvent	1-5%

### 3. HAZARD IDENTIFICATION

#### Information Regarding Finished Product

#### Potential Health Effects

#### Acute Toxicity

#### EYES

May cause irritation.

#### SKIN

Harmful if absorbed through skin. May cause irritation.

#### INHALATION

Harmful by inhalation. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and in co-ordination. Sanding and grinding dust may be harmful if inhaled.

#### INGESTION

Harmful if swallowed. May cause blindness if swallowed. May cause additional affects as listed under "Inhalation".

#### CHRONIC EFFECTS

Inhalation, ingestion, or skin absorption of methanol can cause blindness. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

## AGGRAVATED MEDICAL CONDITIONS

Respiratory disorders. Lungs. Pre-existing eye disorders. Skin disorders. Liver disorders. Kidney disorders. Central nervous system.

## INTERACTIONS WITH OTHER CHEMICALS

Use of alcoholic beverages may enhance toxic effects.

## ENVIRONMENTAL HAZARD

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*See Section 12 for additional Ecological Information*

## INFORMATION REGARDING CONSTITUENTS

### **TITANIUM DIOXIDE**

#### Emergency Overview:

**OSHA Hazards** Carcinogen

**GHS Classification** Skin irritation (Category 3), Carcinogenicity (Category 2)

#### GHS Label elements, including precautionary statements

**Pictogram**



Signal word **Warning**

**Hazard Statements** H316 Causes mild skin irritation.  
H351 Suspected of causing cancer.

**Precautionary Statements** P281 Use personal protective equipment as required

### **METHYL ALCOHOL**

#### Emergency Overview

**OSHA Hazards** Flammable Liquid, Target Organ Effect, Toxic by ingestion, Toxic by skin absorption, Irritant

**Target Organs** Eyes, Kidney, Liver, Heart, Central Nervous System

#### GHS Classification

Flammable Liquids (Category 2)  
Acute Toxicity, Oral (Category 3)  
Acute Toxicity, Dermal (Category 3)  
Skin Irritation (Category 2)  
Eye Irritation (Category 2A)  
Specific target organ toxicity - single exposure (Category 1)

#### GHS Label elements, including precautionary statements

## Pictogram



Signal word **Danger**

## Hazard statement(s)

H225	Highly flammable liquid and vapour
H301 + H311	Toxic if swallowed or in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H370	Causes damage to organs

## Precautionary statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P260	<b>DO NOT</b> breathe dust/ fume/ gas/ mist/ vapours/ spray
P280	Wear protective gloves/ protective clothing
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/ physician
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P307 + P311	IF exposed: Call a POISON CENTRE or doctor/ physician

## **LIMESTONE (CALCIUM CARBONATE)**

## Emergency Overview

**OSHA Hazards** Eye Irritant, Inhalation Hazard, Target Organ

**Target Organs** Lungs, Kidney

**GHS Classification** Limestone (Calcium Carbonate in its pure form is Non-Hazardous by the GHS Standard, though the material in its natural form does contain more than 0.1% Crystalline Silica.(Quartz or Sand) See Hazards for this material throughout this document.

Serious Eye Irritant (Category 2A), Acute Inhalation (Category 2)

## GHS Label Elements, including Precautionary Statements

## Pictogram



Signal Word **Warning**

## Hazard Statements

H316	Causes mild skin irritation
H319	Causes serious eye irritation
H373	May cause damage to organs (lungs, kidneys) through prolonged or repeated exposure if inhaled

## Precautionary Statements

P281	Use personal protective equipment as required
P337+P313	If eye irritation persists: get medical advice/attention

## **SAND (QUARTZ)**

### **Emergency Overview**

**OSHA Hazards** Target Organ Effect

**Target Organs** Lungs

**GHS Classification** Specific target organ toxicity - repeated exposure, Inhalation (Category 2)

### **GHS Label elements, including precautionary statements**

**Pictogram**



Signal word **Warning**

### **Hazard Statements**

H372 May cause damage to organs (lungs, kidneys) through prolonged or repeated exposure if inhaled

### **Precautionary Statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

## **2-BUTOXYETHANOL**

### **Emergency Overview**

**OSHA Hazards** Combustible Liquid, Target Organ Effect, Harmful by Ingestion, Harmful by Skin Absorption, Irritant, Carcinogen

**Target Organs** Blood, Kidney, Liver, Central Nervous System, Testes

### **Other hazards which do not result in classification**

Rapidly absorbed through skin

### **GHS Classification**

Flammable Liquids (Category 4)  
Acute Toxicity, Oral (Category 4)  
Acute Toxicity, Inhalation (Category 4)  
Acute Toxicity, Dermal (Category 4)  
Skin Irritation (Category 2)  
Eye Irritation (Category 2A)

### **GHS Label elements, including precautionary statements**

**Pictogram**



Signal word **Warning**

### **Hazard statement(s)**

H227 Combustible liquid

H302 + H312 Harmful if swallowed or in contact with skin  
H315 Causes skin irritation  
H319 Causes serious eye irritation  
H332 Harmful if inhaled

**Precautionary statement(s)**

P280 Wear protective gloves/ protective clothing  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**4. FIRST AID MEASURES**

**EYES** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

**SKIN** Wash off immediately with plenty of water. Remove and wash contaminated clothing before reuse. If symptoms persist, call a physician.

**INHALATION** Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

**INGESTION** **DO NOT** induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If symptoms persist, call a physician.

**NOTES TO PHYSICIAN** Treat symptomatically.

**5. FIRE FIGHTING MEASURES**

**FLASH POINT** >201° F/ 93.8° C  
**AUTO-IGNITION TEMPERATURE** Not Determined  
**LIMITS OF FLAMMABILITY** LEL: Not Determined UEL: Not Determined  
**EXTINGUISHABLE MEDIA** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**PPE FOR FIRE FIGHTERS** Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with full-face piece when there is the possibility of exposure to smoke, fumes or hazardous decomposition products.

**SPECIFIC HAZARDS** May emit toxic fumes when burning.

**6. ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS AND PPE** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**ENVIRONMENTAL PRECAUTIONS** **DO NOT** allow product to enter drains or meet the sanitary sewer system.

**METHOD FOR CONTAINMENT AND CLEAN UP AND EMERGENCY CLEAN UP** Use personal protective equipment. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Clean up

promptly by sweeping or vacuum. Keep in suitable and closed containers for disposal.

## 7. HANDLING & STORAGE

### PRECAUTIONS FOR SAFE HANDLING

Ensure adequate ventilation. Avoid breathing vapours or mists. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. **DO NOT** eat, drink or smoke when using this product.

Practice good personal hygiene.

### CONDITIONS FOR SAFE STORAGE

Keep in properly labelled container.  
Store in a cool dry place. Keep out of reach of children.

### INCOMPATIBLE MATERIALS

None known for this product.

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Chemical Name	ACGIH	NIOSH	OSHA
2-Butoxyethanol	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm(vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>
Titanium Dioxide	TVL TWA= 10mg/m <sup>3</sup> Total Nuisance Dust/PONS TLV TWA= 3mg/m <sup>3</sup> Respirable TLV TWA= 10mg/m <sup>3</sup> inhalable	Appendix A	TWA PEL=15mg/m <sup>3</sup> Total Dust
Methyl alcohol	STEL = 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m <sup>3</sup> (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 325 mg/m <sup>3</sup> STEL: 250 ppm
Sand (Quartz)	TLV TWA= 0.025mg/m <sup>3</sup> Respirable	TLV-TWA 0.05mg/m <sup>3</sup>	PEL TWA = 10mg/m <sup>3</sup> (Respirable) %SiO <sub>2</sub> +2 PEL TWA = 30mg/m <sup>3</sup> (Total Dust) - % SiO <sub>2</sub> +2
Limestone (Calcium Carbonate)	No Data (withdrawn in 2006)	TWA-10mg/m <sup>3</sup> Total dust TWA-5mg/m <sup>3</sup> Total Respirable	PEL TWA=15mg/m <sup>3</sup> total dust PEL TWA=5mg/m <sup>3</sup> Respirable Dust

**ACGIH** American Conference of Governmental Industrial  
**NIOSH** Hygienists National Institute of Occupational Safety and  
**OSHA** Health Occupational Safety and Health Administration

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

**ENGINEERING MEASURES** Showers, Eyewash stations, Ventilation system

#### PERSONAL PROTECTIVE EQUIPMENT

**EYE/FACE PROTECTION** Safety glasses with side-shields.

**SKIN AND BODY PROTECTION** Protective gloves.

**RESPIRATORY PROTECTION** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**HYGIENE MEASURES** **DO NOT** eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

### 9. PHYSICAL & CHEMICAL PROPERTIES

TEST	RESULT
Appearance	Yellow, Emulsion
Odour	Slight , Ammonia
Odour Threshold	NA
pH	ND
Melting pt./Freezing pt.	ND
Initial boiling.pt. and boiling. range	ND
Flash pt.	>201°F / 93.8°C
Evaporation Rate	ND
Flammability in Air	ND

TEST	RESULT
Explosion Limits	LEL= NA UEL=NA
Vapour Pressure	NA
Vapour Density	NA
Relative Density	ND
Solubility	Yes
Partition Coefficient	NA
Auto-ignition temp.	NA
Decomposition temp.	ND
VOC Content (%)	3.8081

### 10. STABILITY & REACTIVITY

**REACTIVITY** This material is non-reactive.

**STABILITY** Material is stable.

**POSSIBILITY OF HAZARDOUS REACTION**  
None Known

**CONDITIONS TO AVOID** Dust Formation

**INCOMPATIBLE MATERIALS** None Known

**HAZARDOUS DECOMPOSITION PRODUCTS**  
Carbon Oxides, Nitrogen Oxides

**HAZARDOUS POLYMERIZATION** Will not occur

## 11. TOXICOLOGICAL INFORMATION

**Product Information** Harmful if swallowed, inhaled, or absorbed through the skin.

### Component Information:

#### Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sand(Quartz)	500 mg/kg (Rat)	ND	ND
Titanium Dioxide	>10000 mg/kg (Rat)	>10000 mg/kg (Rabbit)	>6820 mg/m <sup>3</sup>
Limestone (Calcium Carbonate)	6450 mg/kg (Rat)	ND	ND
Methyl Alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	83.2 mg/L (Rat) 4h 64000 ppm (Rat) 4h
2-Butoxyethanol	=470 mg/kg (Rat)	=400 mg/kg (Rabbit) =2270 mg/kg (Rat)	=2.21 mg/L (Rat) 4h =450 ppm (Rat) 4h

### Product Information

#### CHRONIC TOXICITY

Inhalation, ingestion, or skin absorption of methanol can cause blindness. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

#### Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol	ND	Group 3	ND	ND
Titanium Dioxide	ND	Group 2B	ND	X
Sand (Quartz)	A2	Group 1	Known	X

#### Regulatory Legend

##### ACGIH: (American Conference of Governmental Industrial Hygienists)

- A2 Suspected Human Carcinogen
- A3 Animal Carcinogen
- A4 Not Classifiable as a Human Carcinogen

##### IARC: (International Agency for Research on Cancer)

- Group 1 Carcinogenic to Humans
- Group 2A Probably carcinogenic to humans
- Group 2B Possibly Carcinogenic to Humans
- Group 3 Not Classifiable as to its Carcinogenicity to Humans

##### NTP: (National Toxicity Program)

Known - Known Carcinogen

##### OSHA: (Occupational Safety & Health Administration)

X – Present



**Target Organ Effects**

Respiratory system. Liver. Kidney. Central nervous system (CNS).

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna
Methyl Alcohol	ND	LC50 96 h: 13500 – 17600 mg/L flow-through (Lepomis macrochirus) LC50 96 h: 18 - 20 mL/L static (Oncorhynchus mykiss) LC50 96 h: 19500 - 20700mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: = 28200 mg/L flow-through (Pimephales promelas) LC50 96 h: > 100 mg/L static (Pimephales promelas)	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	
2-Butoxyethanol	ND	LC50 96 h: = 1490 mg/L static (Lepomis macrochirus) LC50 96 h: = 2950 mg/L (Lepomis macrochirus)	ND	EC50 24 h: 1698 - 1940 mg/L (Daphnia magna) EC50 48 h: > 1000 mg/L (Daphnia magna)

**Persistence and Degradability** No Data**Bioaccumulative Potential** No Data**Mobility in the Soil** No Data**Other Adverse Effects** No Data

This substance does not leach metals or other RCRA (Resource Conservation and Recovery Act) listed TCLP (Toxic Characteristic Leaching Procedure) hazardous substances at concentrations that would make the product a hazardous waste.

**13. DISPOSAL INFORMATION**

**Waste Disposal Methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR261). 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 the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging** **DO NOT** re-use empty containers.**US EPA Waste Number** U154

## 14. TRANSPORT INFORMATION

This product is not classified as dangerous for carriage according to international transport regulations.

**DOT** Not regulated (Product as shipped)

**Annex II of MARPOL 73/78 and IBC** Not considered a noxious liquid

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations:

**SARA 313** This product contains chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

2-Butoxyethanol, Methyl Alcohol

### SARA 311/312 Hazard Categories

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

**Clean Water Act** This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

None

**CERCLA** This material, as supplied, contains 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.

Methyl Alcohol

### U.S. State Regulations:

**California Proposition 65** This product contains the following Proposition 65 chemicals:

**Chemical Name CAS-No California Prop. 65**  
Sand (Quartz) 14808-60-7 Carcinogen

### International Regulations Legend:

<b>Country or Region</b>	<b>Inventory Name</b>
Australia	Australian Inventory of Chemical Substance (AICS)

Canada	Domestic Substance List (DSL)
Canada	Non-Domestic Substance List (NDSL)
China	Inventory of Existing Chemical Substances in China (IECSC)
Europe	European Inventory of New and Existing Chemicals (EINECS)
Europe	European List of Notified Chemical Substances (ELINCS)
Japan	Inventory of Existing and New Chemical Substances (ENCS)
Korea	Existing Chemical List (ECL)
New Zealand	New Zealand Inventory (NZI)
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory

See Matrix Below for Listings:

**ND** equals No Data

**X** equals Listed

Chemical Name	AICS	DSL	NDSL	IECSC	EINECS	ELINCS	ENCS	ECL	NZI	PICCS	TSCA
2-Butoxyethanol	X	X	ND	X	X	ND	X	X	X	X	X
Titanium Dioxide	X	X	ND	X	X	ND	X	X	X	X	X
Methyl Alcohol	X	X	ND	X	X	ND	X	X	X	X	X
Calcium Carbonate	X	X	ND	X	X	ND	X	X	X	X	X
Sand (Quartz)	X	X	ND	X	X	ND	X	X	X	ND	X

### Mexico (Exposure Limits):

#### 2-Butoxyethanol

- Mexico: TWA 26 ppm
- Mexico: TWA 120 mg/m<sup>3</sup>
- Mexico: STEL 75 ppm
- Mexico: STEL 360 mg/m<sup>3</sup>

#### Methyl Alcohol

- Mexico: TWA= 200 ppm
- Mexico: TWA= 260 mg/m<sup>3</sup>
- Mexico: STEL= 250 ppm
- Mexico: STEL= 310 mg/m<sup>3</sup>

#### Titanium Dioxide

- Mexico: TWA= 10 mg/m<sup>3</sup>
- Mexico: STEL= 20 mg/m<sup>3</sup>

#### Quartz

- Mexico: TWA= 0.1 mg/m<sup>3</sup>

### Canada:

**The classification below is based on constituent data not the finished product.**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

### WHMIS Hazard Class

D2A Very toxic materials  
D2B Toxic Materials



## 16. OTHER INFORMATION

### NFPA Hazard Classification

Health: 1      Flammability: 1      Reactivity: 0      Special Hazards: None

### HMIS Hazard Classification

Health: 2      Flammability: 1      Physical Hazard: 0      PPE: B

The above data is provided for your information and your attention is drawn to the appropriate package labelling. Users of the product must ensure its proper use in accordance with good industrial practice, proper medical advice and any official or Government notices or publications. This information is furnished gratuitously independent of any sale or the product and does not form part of any contract for sale, nor does it constitute any representation, warranty or condition of merchantability or fitness for a particular purpose.