Paint Related Material Not DOT REGULATE
NSN-8010-00-664-1414 513053

JUL 2 8 2009

MATERIAL SAFETY DATA SHEET

888-7214 COLORTREND®PHTHALO BLUE E

EVONIK INDUSTRIES

Material no.	10005486	Version	2.0 / US
Specification	138980	Revision date	07/09/2009
Order Number	02296513	Print Date	07/21/2009
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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name	:	888-7214 COLORTREND®PHTHALO BLUE E
Use of the Substance / Preparation	:	Aqueous colorant Manufactured by Evonik
Company	:	Evonik Degussa Corporation 379 Interpace Parkway Parsippany,NJ 07054 USA
Telephone	:	973-541-8000
Telefax	:	973-541-8040
US: CHEMTREC EMERGENCY NUMBER	:	800-424-9300
CANADA: CANUTEC EMERGENCY NUMBER	:	613-996-6666
Product Regulatory Services	:	973-541-8060

2. HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***

Form-paste *Color-blue* Odor-*Glycol odor.*

May cause eye, skin and respiratory tract irritation.
May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye contact

According to test results on COLORTREND base mixtures, this product is classified as a moderate eye irritant. May cause tearing, reddening and/or swelling.

Skin Contact

Moderately irritating.
Prolonged or repeated contact may result in defatting and drying of the skin causing skin irritation and dermatitis (rash).

Inhalation

COLORTREND colorants may cause irritation.
Overexposure to aerosols or mists containing ethylene glycol may cause lung irritation. See exposure limit (section 8).

Ingestion

May be harmful if swallowed.
Ingestion of ethylene glycol may cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, irritability and central nervous system effects. Swallowing large volumes of ethylene glycol causes severe kidney damage and cardiopulmonary effects (metabolic acidosis) which may be fatal. The human oral lethal dose is approximately 1.6 g/kg.
Ingestion of ethylene glycol can cause neurological impairment.
Repeated ingestion of ethylene glycol can cause bone marrow, liver, and sperm effects.
Ingestion of excessive amounts of diethylene glycol causes abdominal discomfort or pain, nausea, vomiting, dizziness, central nervous system effects, kidney damage and cardiopulmonary effects (metabolic acidosis) which may be fatal (estimated human oral lethal dose, 1.0 to 1.2 g/kg) and may cause liver effects.

Chronic Health Hazard

Ethylene glycol may aggravate an existing kidney disease. Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material.
Repeated inhalation of ethylene glycol mist may produce signs of central nervous system involvement, particularly dizziness and drowsiness.
Overexposure to crystalline silica dust causes lung effects. There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica (IARC 1,OSHA).
Crystalline Silica has been assigned the A2 carcinogen designation by ACGIH, suspected human carcinogen.
Repeated inhalation of crystalline silica may cause kidney disease, auto-immune disease, and lymph node effects.
Short term exposures to talc may cause lung irritation. Long term excessive exposure to talc dust may cause talcosis, a pulmonary fibrosis which in turn may lead to severe and permanent damage to the lungs. NTP Toxicology and Carcinogenesis Studies of Talc revealed that there is some evidence of carcinogenic activity in male rats and clear evidence of carcinogenic activity in female rats. There was no evidence of carcinogenic activity in male or female mice.
Because this product is a free-flowing liquid or paste, dust inhalation is not an expected route of exposure.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on ingredients / Hazardous components

Talc, Magnesium silicate hydrate			
CAS-No.	14807-96-6	Percent (Wt./ Wt.)	30 - 60 %
ethanediol; ethylene glycol			
CAS-No.	107-21-1	Percent (Wt./ Wt.)	10 - 30 %
Copper phthalocyanine			
CAS-No.	147-14-8	Percent (Wt./ Wt.)	5 - 10 %
Diethylene glycol			
CAS-No.	111-46-6	Percent (Wt./ Wt.)	5 - 10 %
NJTSR No.56705700001-5024P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	5 - 10 %
NJTSR No.56705700001-6861P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1 - 5 %
Silica, crystalline (quartz)			

CAS-No. 14808-60-7 Percent (Wt./ Wt.) 0.1 - 1 %

Other information

This material is classified as hazardous under OSHA regulations.

4. FIRST AID MEASURES

Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

Skin contact

Flush skin with plenty of water. Remove contaminated clothing. Obtain medical attention if irritation develops or persists.

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention without delay, preferably from an ophthalmologist.

Ingestion

If swallowed give two glasses of water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flash point	not determined Method: No information available.
Lower explosion limit	not determined
Upper explosion limit	not determined
Autoignition temperature	No data available

Suitable extinguishing media

In case of fire, use water (flood with water), dry chemical, CO2 or "alcohol" foam.

Specific hazards during fire fighting

Contains material that can burn in fire if contained water is evaporated by heat or fire.
Burning will produce hazardous compounds including oxides of: carbon, nitrogen, phosphorus.

Further information

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear personal protective equipment; see section 8.

Environmental precautions

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

Methods for cleaning up

Ventilate area. Absorb spill with inert material and place in a chemical waste container.

7. HANDLING AND STORAGE

Handling

Safe handling advice

Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling.

Storage

Requirements for storage areas and containers

Keep in a dry, cool place.
Keep container closed when not in use.
Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component occupational exposure guidelines

- **ethanediol; ethylene glycol**

CAS-No.	107-21-1	
Control parameters	100 mg/m3 Aerosol.	Ceiling Limit Value:(ACGIH)
	40 ppm 100 mg/m3 Vapor.	Ceiling Limit Value:(US CA OEL)

- **Talc, Magnesium silicate hydrate**

CAS-No.	14807-96-6	
	2 mg/m3 Respirable fraction. The value is for particulate matter containing no asbestos and <1% crystalline silica.	Time Weighted Average (TWA):(ACGIH)
	2 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)

Respirable dust.

20millions of particles per cubic foot of air — Time Weighted Average (TWA):(Z3)

2.4millions of particles per cubic foot of air Respirable. — Time Weighted Average (TWA):(Z3)
The exposure limit is calculated from the equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.

0.1 mg/m3 Respirable. — Time Weighted Average (TWA):(Z3)
The exposure limit is calculated from the equation, 10/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.

0.3 mg/m3 Total dust. — Time Weighted Average (TWA):(Z3)
The exposure limit is calculated from the equation, 30/(%SiO2+2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

- **Silica, crystalline (quartz)**

CAS-No. 14808-60-7

0.05 mg/m3 Respirable particles. — Time Weighted Average (TWA):(ACGIH)

0.1 mg/m3 Respirable dust. — Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)

0.3 mg/m3 Total dust. — Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)

2.4millions of particles per cubic foot of air Respirable. — Time Weighted Average (TWA):(Z3)
The exposure limit is calculated from the equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.

0.1 mg/m3 Respirable. — Time Weighted Average (TWA):(Z3)
The exposure limit is calculated from the equation, 10/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.

0.3 mg/m3 Total dust. — Time Weighted Average (TWA):(Z3)
The exposure limit is calculated from the equation, 30/(%SiO2+2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

0.025 mg/m3 Respirable fraction. — Time Weighted Average (TWA):(ACGIH)

Other Information

The exposure value for ethylene glycol is given as an aerosol.
The AIHA WEEL for diethylene glycol is 50 PPM for total vapor and aerosol and 10 mg/m3 for aerosol alone (eight hour time-weighted averages).
The OSHA TWA and ACGIH TWA exposure values for talc are for asbestos free talc expressed as millions of particles per cubic foot (mppcf).
The exposure value for crystalline silica is for the respirable fraction.

Engineering measures

Use only in well-ventilated areas.

Personal protective equipment

Respiratory protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection

Use impermeable gloves.

Eye protection

Chemical resistant goggles must be worn.

Skin and body protection

A safety shower and eye wash fountain should be readily available.
To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	paste
Color	blue
Odor	Glycol odor.

Safety data

pH	8.0 - 9.2
Boiling point/range	> 100 °C
Flash point	Method: No information available. not determined
Autoignition temperature:	No data available
Lower explosion limit	not determined
Upper explosion limit	not determined
Relative density	1.4

Solubility/qualitative	Solubility in water: Dispersible.
Viscosity, dynamic	65 - 75 KU (25 °C)
Solvents and Volatiles Data	% VOC (gm/l) 630
Evaporation rate	Slower than butyl acetate

10. STABILITY AND REACTIVITY

Conditions to avoid	Not applicable.
Materials to avoid	strong acids, oxidizing substances
Further information	Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Component Acute oral toxicity

ethanediol; ethylene glycol
107-21-1
LD50 Rat(female): 4000 mg/kg

Copper phthalocyanine
147-14-8
LD50 Rat: > 5000 mg/kg

Diethylene glycol
111-46-6
LD50 Rat: 20760 mg/kg

NJTSR No.56705700001-5024P
Trade Secret
LD50 Rat: 1900 mg/kg

NJTSR No.56705700001-6861P
Trade Secret
LD50 Rat: 1836 mg/kg

Component Acute dermal toxicity

ethanediol; ethylene glycol
107-21-1
LD50 Rabbit: 10500 mg/kg

Diethylene glycol
111-46-6
LD50 Rabbit: 13300 mg/kg

NJTSR No.56705700001-5024P
Trade Secret
LD50 Rabbit: 1110 mg/kg

data sheet of the supplier

Component Skin Irritation

NJTSR No.56705700001-6861P
Trade Secret
Rabbit
Moderate skin irritation

Component Eye Irritation

NJTSR No.56705700001-6861P
Trade Secret
Rabbit
Severe eye irritation

Component Repeated dose toxicity

Talc, Magnesium silicate hydrate
14807-96-6
Inhalation Rat(male)
Testing period: 791 d
LOAEL: 0.006 mg/l
target organ/effect: Lungs

ethanediol; ethylene glycol
107-21-1
Chronic ingestion of an ingredient in this product has been shown to cause adverse effects on the peripheral nervous system of laboratory animals.

Component carcinogenicity assessment

Talc, Magnesium silicate hydrate
14807-96-6
Short term exposures to talc may cause lung irritation. Long term excessive exposure to talc dust may cause talcosis, a pulmonary fibrosis which in turn may lead to severe and permanent damage to the lungs. NTP Toxicology and Carcinogenesis Studies of Talc revealed that there is some evidence of carcinogenic activity in male rats and clear evidence of carcinogenic activity in female rats. There was no evidence of carcinogenic activity in male or female mice.

Silica, crystalline (quartz)
14808-60-7
Contains a component which is classified as an IARC Group 1 carcinogen (carcinogenic to humans).

Component teratogenicity assessment

ethanediol; ethylene glycol
107-21-1
Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. However, there is currently no available information to suggest that ethylene glycol has caused birth defects in humans.

Component General Toxicity Information

ethanediol; ethylene glycol
107-21-1
Ethylene glycol may aggravate an existing kidney disease. Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material. Repeated inhalation of ethylene glycol mist may produce signs of central

nervous system involvement, particularly dizziness and drowsiness.

Diethylene glycol
111-46-6
According to long-term animal inhalation studies, very high concentrations of diethylene glycol vapors caused central nervous system effects in mice and rats. However, an extensive review of the literature shows that no such effects have been documented in humans (Patty's Industrial Hygiene and Toxicology, 1982, Third Revised Ed., Vol 2c, p 3838).
In a continuous breeding study of mice, continued ingestion of large amounts of diethylene glycol (6 g/kg/day) caused an adverse effect on fertility and some embryotoxic and fetotoxic effects concurrent with some maternal toxicity. The relevance of these very high doses to humans is uncertain.

NJTSR No.56705700001-5024P
Trade Secret
An ingredient in this product has been shown to cause developmental toxicity in laboratory animals in the presence of maternal toxicity.

Silica, crystalline (quartz)
14808-60-7
Chronic inhalation of crystalline silica dust may cause kidney disease, auto-immune disease, and lymph node effects in humans.
Crystalline silica has shown positive results in "in vitro" screening tests for mutagenicity.

12. ECOLOGICAL INFORMATION

General Ecological Information: There are no ecological data available.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Advice on disposal: Waste must be disposed of in accordance with federal, state, provincial and local regulations. CONTAINER DISPOSAL: Empty containers by removing the top and inverting to allow all free-flowing product to drain. To meet regulatory criteria, the container is considered empty when less than 3% remains in the container. Additional special handling is not typically required and the empty container can be discarded with other non-hazardous trash. Note: Local disposal regulations may be more stringent and require additional restrictions or precautions. Customers should check with their local disposal company, municipal or state authority. Recycle of plastic or metal containers may require clean rather than empty containers. In this case the containers can be rinsed with water until the containers are considered generally product free.

14. TRANSPORT INFORMATION

D.O.T. Road/Rail

Class	9
UN-No	3082
Packing group	III
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.

Loading Instructions/Remarks

IATA_C	Not classified as dangerous in the meaning of transport regulations.
IATA_P	Not classified as dangerous in the meaning of transport regulations.
IMDG	Not classified as dangerous in the meaning of transport regulations.
CFR_INWTR	USA: Not regulated for transport when package contains less than the reportable quantity listed in section 15 of the msds.
CFR_RAIL	USA: Not regulated for transport when package contains less than the reportable quantity listed in section 15 of the msds.
CFR_ROAD	USA: Not regulated for transport when package contains less than the reportable quantity listed in section 15 of the msds.

Transport/further information

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Information on ingredients / Non-hazardous components

This product contains the following non-hazardous components

Water			
CAS-No.	7732-18-5	Percent (Wt./ Wt.)	10 - 30 %
Chlorite			
CAS-No.	1318-59-8	Percent (Wt./ Wt.)	1 - 5 %
NJTSR No.56705700001-5068P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1 - 5 %

US Federal Regulations

OSHA

If listed below, chemical specific standards apply to the product or components:

- None listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- ethanediol; ethylene glycol
  CAS-No. 107-21-1

CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- ethanediol; ethylene glycol
  CAS-No. 107-21-1
  Reportable Quantity 20208 lbs

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Chronic Health Hazard

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- ethanediol; ethylene glycol
  CAS-No. 107-21-1

Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

Other US Federal Regulatory Information

Note: Silica, crystalline (airborne particles of respirable size) is listed as a carcinogen under California Proposition 65. However, the physical form of this product (a free flowing paste) precludes exposure to airborne particles of respirable size.

State Regulations

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

WARNING! This product contains a chemical known in the State of California to cause cancer.

- Silica, crystalline (quartz)
  CAS-No. 14808-60-7

MATERIAL SAFETY DATA SHEET

888-7214 COLORTREND®PHTHALO BLUE E

EVONIK INDUSTRIES

Material no.	10005486	Version	2.0 / US
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International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact the Product Regulatory Services Department.

• Europe (EINECS/ELINCS)	Listed/registered
• USA (TSCA)	Listed/registered
• Canada (DSL)	Listed/registered
• Australia (AICS)	Listed/registered
• Japan (MITI)	Not listed/Not registered
• Korea (TCCL)	Listed/registered
• Philippines (PICCS)	Not listed/Not registered
• China	Listed/registered
• New Zealand	Listed/registered

16. OTHER INFORMATION

HMIS Ratings

Health :	2*
Flammability :	1
Physical Hazard :	0

Further information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.