

## HAZARDS IDENTIFICATION (ANSI Section 3)

**Primary route(s) of exposure :** Inhalation, skin contact, eye contact, ingestion.

**Effects of overexposure :**

**Inhalation :** Irritation of respiratory tract. Prolonged inhalation may lead to loss of appetite, fatigue, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, chest pain, coughing, sneezing, difficulty with speech, central nervous system depression, intoxication, metallic taste, confusion, anesthetic effect or narcosis, difficulty of breathing, allergic response, asthmatic reaction, neurotoxicity, pneumoconiosis, loss of consciousness. Possible sensitization to respiratory tract.

**Skin contact :** Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting.

**Eye contact :** Irritation of eyes. Prolonged or repeated contact can cause conjunctivitis, blurred vision, tearing of eyes, redness of eyes, severe eye irritation, corneal injury.

**Ingestion :** Ingestion may cause lung inflammation and damage due to aspiration of material into lungs, mouth and throat irritation, fatigue, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, diarrhea, gastro-intestinal disturbances, abdominal pain, central nervous system depression, intoxication, difficulty of breathing, pulmonary edema.

**Medical conditions aggravated by exposure :** Eye, skin, respiratory disorders, lung disorders, asthma-like conditions.

## FIRST-AID MEASURES (ANSI Section 4)

**Inhalation :** Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort. Get medical attention if discomfort or irritation persists.

**Skin contact :** Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use. If irritation occurs, consult a physician.

**Eye contact :** Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

**Ingestion :** If swallowed, obtain medical treatment immediately.

## FIRE-FIGHTING MEASURES (ANSI Section 5)

**Fire extinguishing media :** Dry chemical or foam water fog. Carbon dioxide. Closed containers may explode when exposed to extreme heat or fire. Vapors may ignite explosively at ambient temperatures. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Closed containers may burst if exposed to extreme heat or fire. May decompose under fire conditions emitting irritant and/or toxic gases.

**Fire fighting procedures :** Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

**Hazardous decomposition or combustion products :** Carbon monoxide, carbon dioxide, oxides of nitrogen, oxides of sulfur, toxic gases. Oxides of calcium.

## ACCIDENTAL RELEASE MEASURES (ANSI Section 6)

**Steps to be taken in case material is released or spilled :** Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area with explosion-proof equipment. Use non-sparking tools. Evacuate all unnecessary personnel. Place collected material in proper container. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

## HANDLING AND STORAGE (ANSI Section 7)

**Handling and storage :** Store below 80f. Keep away from heat, sparks and open flame.

**Other precautions :** Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Avoid conditions which result in formation of inhalable particles such as spraying or abrading (sanding) painted surfaces. If such conditions cannot be avoided, use appropriate respiratory protection as directed under exposure controls/personal protection. Empty containers may contain hazardous residues. Ground equipment when transferring to prevent accumulation of static charge.

## EXPOSURE CONTROLS/PERSONAL PROTECTION (ANSI Section 8)

**Respiratory protection :** Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian z94.4) Approved elastomeric sealing- surface facepiece respirator outfitted with organic vapor cartridges and paint spray (dust/mist) prefilters. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian z94.4).

**Ventilation :** Provide dilution ventilation or local exhaust to prevent build-up of vapors. Use explosion-proof equipment. Use non-sparking equipment.

**Personal protective equipment :** Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing.

## STABILITY AND REACTIVITY (ANSI Section 10)

**Under normal conditions :** Stable see section 5 fire fighting measures

**Materials to avoid :** Oxidizers, acids, ammonium salts, nitric acid, magnesium, mineral acids. Nitrates.

**Conditions to avoid :** Elevated temperatures, contact with oxidizing agent, sparks, open flame, ignition sources.

**Hazardous polymerization :** Will not occur

## TOXICOLOGICAL INFORMATION (ANSI Section 11)

**Supplemental health information :** Contains a chemical that may be absorbed through skin. Notice - reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Other effects of overexposure may include toxicity to liver, kidney, lungs, central nervous system, blood, heart, reproductive system.

**Carcinogenicity :** Inhalation of non-asbestiform cosmetic grade talc for 2 years at 6 and 18 mg/m<sup>3</sup> produced clear evidence of carcinogenicity in female rats (lung and adrenal tumors) and some evidence of carcinogenicity in male rats (adrenal tumors). No evidence of carcinogenicity was demonstrated in male and female mice exposed under the same conditions. Microscopic examination of the lungs of rats and mice exposed to talc revealed additional exposure related effects primarily associated with the inflammatory response. The national toxicology program (NTP) has reported that there is sufficient evidence for the carcinogenicity of a related, but different, chlorinated paraffin (c12, 60% chlorine) in rats and mice of both sexes when administered by oral gavage. Under the same conditions, another related, but different, chlorinated paraffin (c23, 43% chlorine) was carcinogenic in male mice. The international agency for research on cancer (IARC) concluded that there is limited evidence for the carcinogenicity of c23, 43% chlorinated paraffins in experimental animals (group 3). The international agency for research on cancer (IARC) has classified carbon black as possibly carcinogenic to humans (group 2b) based on sufficient evidence in animals and inadequate evidence in humans. The international agency for research on cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (group 2b) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. In a 2 year inhalation study conducted by the national toxicology program (NTP), ethylbenzene vapor at 750 ppm produced kidney and testicular tumors in rats and lung and liver tumors in mice. Genetic toxicity studies showed no genotoxic effects. The relevance of these results to humans is not known. The international agency for research on cancer (IARC) has classified cobalt and certain cobalt compounds as possibly carcinogenic to humans (group 2b). Injection of metallic cobalt, cobalt alloys, and certain cobalt compounds has resulted in the development of localized tumors in laboratory animals. In a lifetime inhalation study, exposure to 250 mg/m<sup>3</sup> titanium dioxide resulted in the development of lung tumors in rats. These tumors occurred only at dust levels that overwhelmed the animals' lung clearance mechanisms and were different from common human lung tumors in both type and location. The relevance of these findings to humans is unknown but questionable. The international agency for research on cancer (IARC) has classified titanium dioxide as possibly carcinogenic to humans (group 2b) based on inadequate evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

**Reproductive effects :** High exposures to xylene in some animal studies, often at maternally toxic levels, have affected embryo/fetal development. The significance of this finding to humans is not known. Contains toluene. In laboratory tests, fetotoxicity and, developmental abnormalities have been observed in experimental animals following maternal exposure to toluene.

**Mutagenicity :** No mutagenic effects are anticipated

**Teratogenicity :** No teratogenic effects are anticipated

## ECOLOGICAL INFORMATION

(ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

## DISPOSAL CONSIDERATIONS

(ANSI Section 13)

**Waste disposal :** Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

## REGULATORY INFORMATION

(ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

## Physical Data

(ANSI Sections 1, 9, and 14)

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMIS	DOT, proper shipping name
20083	4900 line zone marking alkyd blue 1 gal	12.69	359.80	n/d	45 f	n/d		UN1263,paint, 3, PGII
20084	4900 line zone marking alkyd blue 5 gall	12.69	359.80	n/d	45 f	n/d		UN1263,paint, 3, PGII
20085	4900 line zone marking alkyd black 1 gal	11.30	391.00	n/d	50 f	n/d		UN1263,paint, 3, PGII
20086	4900 line zone marking alkyd lead free yellow 1 gal	12.60	341.00	n/d	45 f	n/d		UN1263,paint, 3, PGII
20126	4900 line zone marking alkyd lead free yellow 5 gal	12.60	341.00	n/d	45 f	n/d		UN1263,paint, 3, PGII
22693	zone marking alkyd paint - white 5 gal.	12.52	360.00	n/d	50 f	n/d		UN1263,paint, 3, PGII
22694	zone marking alkyd paint - white 1 gal.	12.52	360.00	n/d	50 f	n/d		UN1263,paint, 3, PGII
28744	4900 line zone marking alkyd black 5 gal	11.30	391.00	n/d	50 f	n/d		UN1263,paint, 3, PGII
43619	4900 line zone marking alkyd lead free red 1 gal	11.60	380.00	n/d	50 f	n/d		UN1263,paint, 3, PGII
43620	4900 line zone marking alkyd lead free red 5 gal	11.60	380.00	n/d	50 f	n/d		UN1263,paint, 3, PGII

## Ingredients

Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	20083	20084	20085	20086	20126	22693	22694	28744	43619	43620
benzene, ethyl-	ethylbenzene	100-41-4			.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0
benzene, methyl-	toluene	108-88-3	5-10	5-10		1-5	1-5					
limestone	limestone	1317-65-3				20-30	20-30				20-30	20-30
benzene, dimethyl-	xylene	1330-20-7			.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0	.1-1.0
carbon black	carbon black	1333-86-4			1-5					1-5		
titanium oxide	titanium dioxide	13463-67-7	1-5	1-5		1-5	1-5	5-10	5-10			
hexanoic acid, 2-ethyl-, cobalt(2+) salt	cobalt alkanoate	136-52-7			.1-1.0					.1-1.0	.1-1.0	.1-1.0
talc	talc	14807-96-6	30-40	30-40	20-30	20-30	20-30	20-30	20-30	20-30	30-40	30-40
butanamide, 2-((4-chloro-2-nitrophenyl)azo)-n-(4-methoxyphenyl)-3-oxo-	c.i. pigment yellow 130	23739-66-4				1-5	1-5					

**Ingredients (Continued)**

**Product Codes with % by Weight (ANSI Section 2)**

Chemical Name	Common Name	CAS. No.	20083	20084	20085	20086	20126	22693	22694	28744	43619	43620
2-naphthalenecarboxamide, 4-((4(aminocarbonyl) phenyl)azo)-n-(2-ethoxyphenyl)-3-hydroxy-	monazo red pigment	2786-76-7									1-5	1-5
calcium carbonate	calcium carbonate	471-34-1	20-30	20-30	10-20			20-30	20-30	10-20		
solvent naphtha (petroleum), light aliphatic	light aliphatic solvent naphtha (petroleum)	64742-89-8	10-20	10-20	20-30	10-20	10-20	20-30	20-30	20-30	20-30	20-30
ceramic materials and wares, chemicals	calcined kaolin clay	66402-68-4			5-10	5-10	5-10	1-5	1-5	5-10		
soybean oil, polymer with ethylene glycol, pentaerythritol and phthalic anhydride	alkyd resin	67700-76-9	10-20	10-20								
fatty acids, tall-oil, polymers with ethylene glycol, pentaerythritol, phthalic anhydride and soybean oil	alkyd resin solution	68082-51-9			10-20	10-20	10-20	10-20	10-20	10-20	10-20	10-20

**Chemical Hazard Data**

**(ANSI Sections 2, 8, 11, and 15)**

Common Name	CAS. No.	ACGIH-TLV				OSHA-PEL				S.R. Std.	S2	S3	CC						
		8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S					H	M	N	I	O	
ethylbenzene	100-41-4	100 ppm	125 ppm	not est.	not est.	100 ppm	not est.	not est.	not est.	not est.	n	y	y	y	n	n	y	n	
toluene	108-88-3	20 ppm	not est.	not est.	not est.	200 ppm	not est.	300 ppm	y	not est.	n	y	y	y	n	n	n	n	
limestone	1317-65-3	10 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n	
xylene	1330-20-7	100 ppm	150 ppm	not est.	not est.	100 ppm	not est.	not est.	not est.	not est.	n	y	y	y	n	n	n	n	
carbon black	1333-86-4	3.5 mg/m3	not est.	not est.	not est.	3.5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	y	n	
titanium dioxide	13463-67-7	10 mg/m3	not est.	not est.	not est.	10 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n	
cobalt alkanooate	136-52-7	.02 mg/m3	not est.	not est.	not est.	.05 mg/m3	not est.	not est.	not est.	not est.	n	y	n	y	n	n	n	n	
talc	14807-96-6	2 mg/m3	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n	
c.i. pigment yellow 130	23739-66-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n	
monazo red pigment	2786-76-7	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n	
calcium carbonate	471-34-1	10 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n	
light aliphatic solvent naphtha (petroleum)	64742-89-8	not est.	not est.	not est.	not est.	300 ppm	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n	
calcined kaolin clay	66402-68-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n	

**Footnotes:**

C=Ceiling - Concentration that should not be exceeded, even instantaneously.

S=Skin - Additional exposure, over and above airborne exposure, may result from skin absorption.

n/a=not applicable  
not est=not established  
CC=CERCLA Chemical

ppm=parts per million  
mg/m3=milligrams per cubic meter  
Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS  
S3=Sara Section 313 Chemical  
S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant  
P=Pollutant, S=Severe Pollutant  
Carcinogenicity Listed By:  
N=NTP, I=IARC, O=OSHA, y=yes, n=no