SAFETY DATA SHEET



DATE ISSUED : 5/21/ **SDS REF. No :** 7260-

5/21/2016 7260-4702

7260-4702 ACETOACETATE/KETIMINE PRIMER

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 7260-4702 ACETOACETATE/KETIMINE PRIMER

PRODUCT CODE:7260-4702**PRODUCT USE:**Industrial Solventborne Paint

MANUFACTURER

Cardinal Industrial Finishes 1329 Potrero Ave

24 HR. EMERGENCY TELEPHONE NUMBER CHEMTREC (US Transportation): (800)424-9300 CHEMTREC (International : 1(202)483-7616 Transportation) WEB: WWW.CARDINALPAINT.COM

S. El Monte, CA, 626 444-9274

2. HAZARDS IDENTIFICATION

PICTOGRAMS



SIGNAL WORD : DANGER

HAZARD STATEMENTS :

H226 Flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

PRECAUTIONARY STATEMENTS:

P233 Keep container tightly closed.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P403 Store in a well-ventilated place.

P501 Dispose of in accordance with Local, Regional, Federal and International Regulations.

R40 Limited evidence of a carcinogenic effect.

S36 Wear suitable protective clothing.

S37 Wear suitable gloves.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %	CAS Number
Parachlorobenzotrifluoride	20% - 25%	98-56-6
Acetone	15% - 20%	67-64-1

Titanium Dioxide	10% - 15%	13463-67-7	
Xylene	1% - 5%	1330-20-7	
Phenylethane	1% - 5%	100-41-4	
Talc	1% - 5%	14807-96-6	
Carbon Black	0.10% - 0.50%	1333-86-4	
Crystalline Silica	0.10% - 0.50%	14808-60-7	

4. FIRST AID MEASURES

Description of first aid measures.

EYES CONTACT : Flush with large quantities of water for 15 to 30 minutes. Remove contact lenses. Keep eyes wide open while rising. If eye irritation persists: Get medical attention.

SKIN CONTACT : Wash exposed area with mild soap and water for 15 to 30 minutes. Remove contaminated clothing. Repeated exposure may cause dryness or cracking.

INGESTION : Rinse mouth. Do NOT induce vomiting. Keep victim warm and seek immediate attention.

INHALATION : Remove to fresh air and keep in a position comfortable to breath. Call a doctor/physician if you feel unwell. Get medical attention.

Most important symptoms and effects, both acute and delayed. Symptoms/injuries: Eye irritation

Symptoms/injuries after inhalation: May cause drowsiness or dizziness.

Symptoms/injuries after eye contact: Cause serious eye irritation.

Symptoms/injuries after ingestion: Ingestion may cause nausea, vomiting and diarrhea.

Indication of any immediate medical attention and special treatment needed.

If medical advise is needed, have product container or label on hand.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : In the event of a fire, use specifically suitable extinguishing agents. Suitable extinguishing media: Foam, alcohol resistant foam, CO2, water fog. Unsuitable extinguishing media: Do not use heavy water stream. A heavy water stream my spread burning liquid.

FIRE FIGHTING PROCEDURE : Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering the environment. Protection during firefighting: Firefighters should wear full protective gear. Do not enter fire area without proper protective equipment, including self-contained breathing apparatus with full face piece operated in pressure demand or other positive pressure modes.

UNUSUAL FIRE AND EXPLOSION HAZARD : Fire hazard: Highly flammable/liquid or vapor. Explosive hazard: May form flammable/explosive vapor-air mixture.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES :

General measures: Remove ignition sources. Use special care to avoid static electric charges. No smoking.

FOR NON-EMERGENCY PERSONNEL :

For non-Emergency procedures: Evacuate unnecessary personnel.

FOR EMERGENCY RESPONDERS :

Equip cleanup crew with proper protection. Avoid breathing fume, vapors.

ENVIRONMENTAL PRECAUTIONS:

Prevent entry to sewers and public waters.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP :

Collect damaged aerosols and use absorbent and/or inert material, then place in suitable container.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING : Additional hazards when processed: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when you are leaving work. Provide good ventilation in process area to prevent formation of vapor. No smoking. Use only non-sparking tools. Use outdoors or in a well ventilated area. Avoid breathing fume, vapors. Hygiene measures: Wash Skin thoroughly after handling.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES : Storage conditions: Store in a dry, cool and well-ventilated place away from: Heat sources. Direct sunlight.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Source of ignition. Direct sunlight. Heat Sources.

8. EXPOSURE CONTROLS\PERSONAL PROTECTION

Acetone(67-64-1)		
USA ACGIH	ACGIH STEL TLV	750 ppm
USA ACGIH	ACGIH TWA TLV	500 ppm
USA NIOSH	NIOSH STEL (Table Z-1)	1,000 ppm, 2,400 mg/m3
USA NIOSH	NIOSH TWA	250 ppm, 590 mg/m3
USA OSHA	OSHA TWA (Table Z-1)	1,000 ppm, 2,400 mg/m3
Aliphatic Solvent(64742-47-8)		
USA ACGIH	ACGIH (TLV) TWA	200 mg/m3
USA NIOSH	NIOSH REL (ST)	
USA NIOSH	NIOSH REL (TWA)	5 mg/m3
USA OSHA	OSHA OEL (TLV) TWA Table Z-1	500 ppm, 2,000 mg/m3
USA OSHA	OSHA OEL Table Z-1	5 mg/m3
Aluminum Hydroxide(21645-51-2)		
USA ACGIH	ACGIH (TLV) TWA	10 mg/m3 (Total dust), 3 mg/m3 (Respirable fraction)
USA OSHA	OSHA (PEL) TWA	15 mg/m3 (Tptal dust), 5 mg/m3 (Respirable fraction)
Barium Sulfate(7727-43-7)		
USA ACGIH	ACGIH (TLV)TWA	10 mg/m3
USA NIOSH	NIOSH (REL) TWA	5 mg/m3
USA OSHA	OSHA (OEL) TWA	15 mg/m3
Carbon Black(1333-86-4)		
USA ACGIH	ACGIH TLV (mg/m3)	3.0 mg/m3
USA OSHA	OSHA PEL (mg/m3)	3.5 mg/m3
Crystalline Silica(14808-60-7)	[· · · · · · · · · · · · · · · · · · ·	
USA ACGIH	ACGIH (TLV) TWA	.025 mg/m3
Cumene(98-82-8)		
USA ACGIH	ACGIH (TLV) TWA	50 ppm
USA NIOSH	NIOSH (TWA) REL	50 ppm, 245 mg/m3
USA OSHA	OSHA (TWA) Table Z-1	50 ppm, 245 mg/m3
Isobutyl Alcohol(78-83-1)		
USA ACGIH	ACGIH TWA	50 ppm
USA OSHA	OSHA PEL	100 ppm, 300 mg/m3
Kaolin(1332-58-7)		
USA ACGIH	ACGIH TWA TLV	2 mg/m3
USA NIOSH	NIOSH TWA REL	10 mg/m3
USA NIOSH	NIOSH TWA REL	5 mg/m3
USA OSHA	OSHA Table Z-1 TWA LAC	10 mg/m3
USA OSHA	OSHA Table Z-1 TWA LAC	15 mg/m3
USA OSHA	OSHA Table Z-1 TWA LAC	5 mg/m3
P.M. Acetate(108-65-6)		
USA AIHA	AIAH (WEEL) TWA	50 ppm
Parachlorobenzotrifluoride(98-56-6)	······································	pp
USA ACGIH	USA ACGIH	Contains no substances with exposure limit values.
Phenylethane(100-41-4)		
USA ACGIH	ACGIH STEL	125 ppm
USA ACGIH	ACGIH TWA	20 ppm
USA NIOSH	NIOSH REL	100 ppm, 435 mg/m3

USA NIOSH	NIOSH REL (ST)	125 ppm, 545 mg/m3		
USA OSHA	OSHA STEL	125 ppm, 545 mg/m3		
USA OSHA	OSHA TWA (Table Z-1)	100 ppm, 435 mg/m3		
Phosphoric Acid(7664-38-2)				
USA ACGIH	ACGIH (TLV) STEL	3 mg/m3		
USA ACGIH	ACGIH (TLV) TWA	1 mg/m3		
USA NIOSH	NIOSH (TWA) REL	1 mg/m3		
USA NIOSH	NIOSH (TWA) ST	3 mg/m3		
USA OSHA	OSHA (TWA) Table Z-1	1 mg/m3		
Pseudocumene(95-63-6)				
USA NIOSH	NIOSH (TWA) REL	25 ppm, 125 mg/m3		
Styrene(100-42-5)				
USA ACGIH	ACGIH STEL (ppm)	40 ppm		
USA ACGIH	ACGIH TWA (ppm)	20 ppm		
USA OSHA	OSHA TWA (ppm)	100 ppm		
Talc(14807-96-6)				
USA ACGIH	ACGIH (TLV) TWA	2 mg/m3		
USA NIOSH	NIOSH (REL) TWA	2 mg/m3		
USA OSHA	OSHA (Table Z-3) Mineral Dusts TWA	20 Millon particles per cubic foot.		
Titanium Dioxide(13463-67-7)	Titanium Dioxide(13463-67-7)			
PEL (Permissible Exposure Limit)	OSHA TWA	15 mg/m3		
TLV	ACGIH TWA	10 mg/m3		
Xylene(1330-20-7)				
USA ACGIH	ACGIH STEL	150 ppm		
USA ACGIH	ACGIH TWA	100 ppm		
USA OSHA	OSHA TWA (Table Z-1)	100 PPM, 435 mg/m3		

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION : If TLV of the product or any component is exceeded, a NIOSH approved dust respirator is advised in absence of environmental control. OSHA Regulations also permit other NIOSH dust respirators under specified conditions. (See your Safety Equipment Supplier) Engineering or administrative controls should be implemented to reduce exposure.

HAND PROTECTION REMARKS : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

EYES PROTECTION : Eye wash bottle with pure water.

Tightly fitting safety goggles.

Where face-shield and protective suit for abnormal processing problems.

SKIN AND BODY PROTECTION : Wear impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

WORK HYGIENIC PRACTICES: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

a		
Physical state	:	Liquid
Color	:	Various colors depending on the pigmentation.
Odor	:	Characteristic. Sweet. Mint like.
Odor threshold	:	No data available.
Ph	:	N/A – See Technical Data Sheet
Evaporation rate	:	Slower Than Ether
Melting point	:	-94.7 C (-138.46 F)
Freezing point	:	No data available.
Boiling point	:	133.0 deg F TO 282.0 Deg F
Flash point	:	-4.00 deg F
Lower explosion limit	:	.8
Upper explosion limit	:	12.8
Vapor pressure	:	185 mm Hg
Vapor density	:	Heavier than air
Relative density	:	No data available.
Density	:	12.5459
Solubility	:	No data available.
Partion coefficient: n-	:	No data available.
octanol/water		

Autoignition temperature	:	No data available.
Decomposition temperature	:	No data available.

10. STABILITY AND REACTIVITY

REACTIVITY : No dangerous reaction known under conditions of normal use.

CHEMICAL STABILITY : Stable under normal conditions.

CONDITIONS TO AVOID : Heat, flames and sparks. Extremely high temperatures and direct sunlight.

INCOMPATIBLE MATERIALS : Avoid contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. TOXICOLOGICAL INFORMATION

Acetone(67-64-1)	
Aspiration toxicity	Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and
	vomiting., Concentrations substantially above TLV value may cause narcotic effects., Solvents
	may degrease the skin.
Carcinogenicity	Species: mouse, (female), Application Route: Dermal; Exposure time: .365 d (90%) or 424 d
	(100%), Dose: 0.1ml 90(71mg) or 100% (79mg), Frequency of Treatment: 3 times a wk,
	NOAEL: 79; Result: did not display carcinogenic properties., Carcinogenicity-Assessment: Not
	classified as a human carcinogen.
Germ cell mutagenicity	Test Type: mammalian cell gene mutation assay. Test species: Mouse Lymphoma, Metabolic
	activation: Without metabolic activation; Method: OECD Guideline 476; Result: negative; Test
	Type: Ames test, Metabolic activation: Without metabolic activation; Method: OECD Guideline
	471; Result: negative, Test Type: Chromosome aberration test in vitro, Test species: Chinese
	hamster ovary (CHO), Metabolic activation: Without metabolic activation; Method: OECD Guideline 473; Result: negative; Genotoxicity in vivo: Test Type: I vivo micronucleus test. Test
	species: Mouse, Application Route: Oral, Exposure: 13 wk, Dose: 5,000, 10,000, 20,000 ppm,
	Result: negative
Germ cell mutagenicity	Animal testing did not show any mutagenic effects.
Assessment	
LC50 (rat) Inhalation	76 mg/l (4 h exposure)
LD50 (rat) Oral	5,800 mg/kg; Symptoms: tremors
LD50 Dermal	>7,426 mg/kg
Repeated dose	Species: mouse, male, NOAEL: 20,000, Application Route: Oral, Exposure time: 13 wk, Number
exposure	of exposures: daily, Dose: 1250, 2500, 5000, 10000, 20000, Method OECD Test Guideline 408,
	GLP: No data available.; Species: mouse, female, NAOEL 20000, LAOEL: 50000; Application
	Route: Oral, Exposure time: 13 wk, Number of exposures: daily, Dose: 1250, 2500, 5000,
	10000, 20000, Method OECD Test Guideline 408, GLP: No data available; Repeated dose toxicity
Doproductivo tovicity	Assessment: causes mild skin irritation., Causes serious eye irritation. Effects on fertility: Species: rat, male; Application Route: oral; Dose: 0, 5,000, 10,000 mg/l;
Reproductive toxicity	Frequency of Treatment: 7 days/week; General Toxicity - Parent: LOAEL: 10,000; Fertility:
	10,000; Effects on fetal development: Species: rat; Application Route: Inhalation; Dose: 0, 440,
	2200, 11,000 ppm; Frequency of Treatment: 7 days/week; General Toxicity Material: NOAEC:
	2,200 ppm; Tetragenicity: NOAEC: 2,200 ppm; Embryo-fetal toxicity:: NOAEC: 2,200 ppm;
	Result: No teratogenic potential. GLP: No data available.; Reproductive toxicity Assessment: Did
	not show teratogenic effects in animal experiments.
Respiratory or skin	Test type: Maximization test, Species: guinea pig, Assessment: Does not cause skin
sensitsation	sensitization. Result: Did not cause sensitization on laboratory animals.
Serious eye	Species: rabbit, Result : Slightly irritating to eyes, Exposure time: 24 h, Classification: Irritating
damage/eye irritation	to eyes, Remarks: Eye irritation.
Skin	Species: rabbit, Exposure time: 24 h, Classification: Not irritating to skin, Method: In vivo,
corrosion/irritation	Result: Mild irritation, Remarks: Repeated or prolonged contact with the mixture may cause
	removal natural fat from the skin resulting in desiccation of the skin.
STOT - single exposure	Exposure routes: Inhalation (vapor); Assessment: May cause drowsiness or dizziness.
STOT- repeated	No data available.
exposure Aliphatic Solvent(64742-	L
Acute Dermal toxicity	No data available.
Acute Inhalation	No data available.
toxicity	
Acute toxicity	No data available.
Additional Information	RTECS: Not available Prolonged or repeated exposure to skin causes defatting and dermatitis.,
	Received extended in repeated exposure to skin eduses delating and dermatitis.

Aspiration hazard I Carcinogenicity I I Germ cell mutagenicity			
Carcinogenicity 1 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Distillates (petroleum), hydrotrated light, kerosene - unspecified) NTP: No component of this product present at levels		
Germ cell mutagenicity	hydrotrated light, kerosene - unspecified) NTP: No component of this product present at levels		
	hydrotrated light, kerosene - unspecified) NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.		
Reproductive toxicity	Reverse mutation assay S. typhimurium Result: negative		
	No data available.		
sensitization	Draize Test - Guinea pig Result: Does not cause skin sensitization.		
damage/eye irritation	Eyes - Rabbit Result: No eye irritation		
corrosion/irritation	Skin - Rabbit Result: No skin irritation - 4 h		
toxicity - repeated exposure	No data available.		
Specific target organ I toxicity - single exposure	No data available.		
Aluminum Hydroxide(2164	45-51-2)		
Additional Information	RTECS: BD0940000 Nausea, Vomiting, and Constipation.		
	No data available.		
	IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen by OSHA.		
Dermal	No data available.		
	Mouse lymphocyte Result- negative Mutagenicity (micronucleus test) Rat - male Result: negative		
	No data available.		
LD50 Oral - Rat - female - Acute toxicity	>5,000 mg/kg, Oral - Rat - female		
	No data available.		
	Maximization Test (GPMT) - Guinea pig Result- Does not cause skin sensitization.(OECD Test		
sensitization	Guideline 406)		
damage/eye irritation	Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)		
Skin Scorrosion/irritation	Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)		
Specific target organ I toxicity - repeated exposure	No data available.		
Specific target organ I toxicity - single exposure	No data available.		
Amorphous Silica(7631-86			
information f	The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and information provided to us.		
	Not irritating (rabbit) (OCED 404)		
	Not irritating (rabbit) (OCED 405)		
	>140->2000 mg/m3 / 4 h (Rat) (OCED 403) >5000 mg/kg (Rabbit)		
	>5000 mg/kg (Rabbit) >5000 mg/kg (Rat) (OECD 401)		
	=> 1340 mg/kg/day		
	Not sensitizating (guinea pig) (OCED 406) 7)		
	No toxic effects known.		
Irritation/corrosion	Product not irritating to eyes or skin.		
toxicity	>15,000 mg/kg		
Sensitsation I Carbon Black(1333-86-4)	No sinsibilisation known.		

ACGIH	ACGIH The American Conference of Governmental Industrial Hygienists classifies carbon black as
Carcinogenicity	A4, Not Classifiable as a Human Carcinogen. GHS- Not a hazardous substance or preparation according to the Global Harmonized System
Classification	(GHS).
Human Epidemiology	Results of epidemiological studies of carbon black production workers suggest that cumulative exposure to carbon black may result in small decrements in lung function, as measured by FEV1. A recent U.S. respiratory morbidity study suggested a 27 mL decline in FEV1 from a 1 mg/m3 (inhalable fraction) exposure over a 40-year period. An older European investigation suggested an exposure to 1 mg/m3 (inhalable fraction) of carbon black over a 40-year working-lifetime will result in a 48 mL decline in FEV1. In contrast, normal age related decline over a similar period of time would be approximately 1200 ml. The relationship between symptoms and exposure to carbon black is less clear. In the U.S. study, 9% of the highest exposure group (in contrast to 5% of the unexposed group) reported symptoms consistent with chronic bronchitis. In the European study, methodological limitations in the administration of the questionnaire limit the drawing of definitive and definitive end was a study suggested and the symptome.
Llumon Enidomiology	drawing of definitive conclusions about symptoms.
Human Epidemiology - cont	Since this IARC evaluation of carbon black, Sorahan and Harrington 16) re-analyzed the UK study data using an alternative exposure hypothesis and found a positive association with carbon black exposure in two of the five plants. The same exposure hypothesis was applied by Morfeld and McCunney 17-18) to the German cohort; in contrast, they found no association between carbon black exposure and lung cancer risk and, thus, no support for the alternative exposure hypothesis used by Sorahan and Harrington 16).
Human Epidemiology - cont.	Morfeld and McCunney 19) applied a Bayesian approach to unravel the role of uncontrolled confounders and identified smoking and prior exposure to occupational carcinogens received before being hired in the carbon black industry as main causes of the observed lung cancer excess risk. Overall, as a result of these detailed investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated. This view is consistent with the IARC evaluation in 2006. Several epidemiological and clinical studies of workers in the carbon black production industries show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black. No dose response relationship was observed in workers exposed to carbon black.
Human Epidemiology -	This study, however, indicated a link between carbon black and small opacities on chest films,
cont.	with negligible effects on lung function. A study on carbon black production workers in the UK 10) found an increased risk of lung cancer in two of the five plants studied; however, the increase was not related to the dose of carbon black. Thus, the authors did not consider the increased risk in lung cancer to be due to carbon black exposure. A German study of carbon black workers at one plant 11-14) found a similar increase in lung cancer risk but, like the 2001 UK study 10), found no association with carbon black exposure. In contrast, a large US study 15) of 18 plants showed a reduction in lung cancer risk in carbon black production workers. Based upon these studies, the February 2006 Working Group at IARC concluded that the human evidence for carcinogenicity was inadequate 1) .l
IARC	IARC In 1995 IARC concluded, "There is inadequate evidence in humans for the carcinogenicity of carbon black." Based on rat inhalation studies IARC concluded that there is, "sufficient evidence in experimental animals for the carcinogenicity of carbon black," IARC's overall evaluation was that, "Carbon black is possibly carcinogenic to humans (Group 2B)". This conclusion was based on IARC's guidelines, which require such a classification if one species exhibits carcinogenicity in two or more studies. IARC performed another review in 2006, and again classified carbon black as possibly carcinogenic to humans (Group 2B). In its 1987 review IARC concluded, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black extracts." Carbon black extracts are classified as, possibly carcinogenic to humans (Group 2B).
LD50 (Rat)	>8000 mg/kg
Mutagenic Effects and Germ Cell Mutagenicity	In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believed to be rat specific and a consequence of "lung overload" which led to chronic inflammation and release of genotoxic oxygen species. This mechanism is considered to be a secondary genotoxic effect and thus, carbon black itself would not be considered to be mutagenic. Carbon black is not suitable to be tested in bacterial (Ames test) and other in vitro systems because of its insolubility in aqueous solutions. When tested, however, results for carbon black showed no mutagenic effects. Organic solvent extracts of carbon black can, however, contain traces of polycyclic aromatic hydrocarbons (PAHs). A study to examine the bioavailability of these PAHs showed that PAHs are very tightly bound to carbon black and not bioavailable.
NIOSH	NIOSH The U.S. National Institute of Occupational Safety and Health (NIOSH) 1978 criteria document on carbon black recommends that only carbon blacks with PAH contaminant levels greater than 0.1% require the measurement of PAHs in air. As some PAHs are possible human carcinogens, NIOSH recommends an exposure limit of 0.1 mg/m3 for PAHs in air, measured as
NTP	the cyclohexane-extractable fraction. NTP Carbon black is not designated a carcinogen by the U.S. National Toxicology Program (NTP), the U.S. Occupational Safety and Health Administration (OSHA) or the European Union (EU).
Reproductive and	No experimental studies on effects of carbon black on fertility and reproduction have been
Teratogenic Effects	located. However, based on toxicokinetic data, carbon black is deposited in the lungs and based Page 7 of 14

	on its specific physicochemical properties (insolubility, low absorption potential), it is not likely to distribute in the body to reach reproductive organs, embryo and/or foetus under in vivo conditions. Therefore, no adverse effects of carbon black to fertility/reproduction or to foetal development are expected. No effects have been reported in long-term animal studies.
Sensitization	No animal data is available. No cases in humans have been reported.
STOT- repeated	Therefore, no STOT, Repeated exposure classification is made.
exposure	
STOT- single exposure	Inhalation studies with the rat showed lung effects (see Section 11.2 and 11.3), these effects are believed to be the effects of "lung overload" 1 and these effects are believed to be specific to the species. In addition, the European CLP Regulation states that no classification is necessary if the mechanism is not relevant to humans. 4) Also, the CLP Guidance on classification and labeling states that the "lung overload" mechanism is not relevant to humans. 4) Therefore, no STOT, Repeated Exposure classification is made
Crystalline Silica(14808-	
Acute toxicity - Dermal	No data available.
Acute toxicity -	No data available.
Inhalation	
Additional Information	RTECS: VV7330000 Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis. In advanced stages, loss of appetite, pleuritic pain, and total incapacity to work. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. Crystalline silica is classified as group 1 "known to be carcinogenic to humans" by IARC and "sufficient evidence" of carcinogenicity by the NTP., The chronic health risks are associated with respirable particles of 3-4 um over protracted periods of time. Currently, there is a limited understanding of the mechanisms of quartz toxicity, including its mechanisms for lung carcinogenicity.
Additional Information (cont.)	Additional studies are needed to determine whether the cell transforming activity of quartz is related to its carcinogenic potential. Liver - Irregularities - Based on Human Evidence Liver - Irregularities - Based on Human Evidence.
Aspiration hazard	No data available.
Carcinogenicity	Limited evidence of carcinogenicity in human studies IARC: 1 - Group 1: Carcinogenic to humans (Quartz) ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: Known to be human carcinogen (Quartz) OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ Cell mutagenicity	No data available.
Reproductive toxicity	No dada available.
Respiratory or skin sensitization	No data available.
Serious eye damage/eye irritation Skin	No data available.
corrosion/irritation	
Specific target organ toxicity - repeated exposure	Inhalation - May cause damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - single exposure	No data available.
Cumene(98-82-8)	
Additional Information	RTECS: GR8575000
Aspiration hazard	No data available.
Carcinogenicity	Carcinogenicity IARC: 2B - Group 2B: Possibly carcinogenic to humans (Cumene) ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Dermal	No data available.
Germ cell mutagenicity	invitro assay, S. typhimurium, Result: negative
Inhalation: LD50 Oral - Rat - Acute toxicity	No data available. 2,260 mg/kg,
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Guinea pig - Result: No skin irritation. (OECD Test Guideline 406)
Serious eye damage/eye irritation	Eyes - Rabbit Result: No skin irritation. (OECD Test Guideline 405)
Skin	Skin - Rabbit Result: No skin irritation. (OECD Test Guideline 404)
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corrosion/irritation	
Specific target organ	No data available.
toxicity - repeated	
exposure	
Specific target organ	No data available.
toxicity - single	
exposure	
Isobutyl Alcohol(78-83-1	
Carcinogenicity Data:	The ingredient(s) of this product is (are) not classified as carcinogenic by ACGIH, IARC, OSHA or NTP.
LC50 Inhalation - Rat	8000 ppm; (4 h)
LD50 Dermal - Rabbit	3400 mg/kg
LD50 Oral - Rat (Acute	2460 mg/kg
Toxicity)	
Mutagenicity Data:	No adverse mutagenicity effects are anticipated.
Reproductive Data:	No adverse reproductive effects are anticipated.
Respiratory / Skin	None known.
Sensitization Data:	
Synergistic Materials:	Alcohols may interact synergistically with chlorinated solvents (example - carbon tetrachloride, chloroform, bromotrichloromethane), dithiocarbamates (example - disulfiram), dimethylnitrosamine and thioacetamide.
Tetragenicity Data:	No adverse Tetragenicity effects are anticipated.
Kaolin(1332-58-7)	
Acute Toxicity	No Data Available
Additional Information	

12. ECOLOGICAL INFORMATION

Acetone(67-64-1)	
Bioacculative potential	Parition coefficient: n-octanol/water: log Pow: -0.24
EC50 (Daphnia magna	7,630 mg/l (Exposure time 48 h); Test substance: Acetone
(Water flea))	, oso mg/r (Exposite time to n), rest substance. Acctone
LC50 (Oncorhynchus	6,100 mg/l (Exposure time: 48 h)
mykiss (rainbow	
trout))	
Mobility in soil	No data available.
Other adverse effects	No data Available. Regulation: 40 CFR Protection of Environment; Part 82 Protection of
	Stratospheric Ozone - CAA Section 602 Class I Substances., Additional ecological information:
	No data available.
Persistence and	Biodegrability: Remarks: No data available
degrability	
Toxicity to algae	Remarks: No data available
Aliphatic Solvent(64742-	-47-8)
Bioaccumulative	No data available.
potential	
EC50 (Daphnia Magna)	1.4 mg/l - 48 h, - Daphnia magna (Water flea), (OECD Test Guideline 202)
Toxicity to daphnia and	
other aquatic	
invertebrates	
LC50 (Rainbow trout)	2.9 mg/l - 96 h, Oncorhynchus mykiss (rainbow trout)
Toxicity to fish	
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
	Toxic to aquatic life. No data available.
Persistence and	No data available.
degradability	
Results of PBT and	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
vPvB assessment	
Aluminum Hydroxide(21	
Bioaccumulative	Inert material.
potential	
EC50 - Daphnia -	>10,000 mg/l, Daphnia magna (Water flea) (OECD Test Guideline 202)
Toxicity to daphnia and	
other aquatic	
invertebrates	>10,000 mg/l, Fish
EC50 - Fish - Toxicity	>10,000 1119/1, FIST
ro fish Mobility in coil	Inert material.
Mobility in soil	חופור חומנכוומו.

NOEC - Toxicity to	>0.004 mg/l, 72 h, Pseudokirchneriella subcapitata (algae) - (OECD Test Guideline 201)
algae Other adverse effects	None known.
Persistence and	Non-degradable
degradability	
Amorphous Silica(7631-	86-9)
Additional ecological	General notes: Do not allow product to reach ground water, water course or sewage system.
information	
Bioaccumulative	No further revelent information available.
potential EC50 - Algae	>10000 mg/l (Scenedesmus subspicatus) (72 h) (OCED 201) comparable substance
EC50 - Daphnia magna	>1000 mg/l (Daphnia magna) (24 h) (OCED 202)
LCO - Zebra fish	10000 mg/l (zebra fish) (96 h) (static) (OCED203)
Mobility in soil	No further revelent information available.
Persistence and	The product is chemically and biologically inert. By the insolubility in water there is a separation
degrability	at every filtration and sedimentation process.
Barium Sulfate(7727-43	
Bioaccumulative	The product is practically insoluble in water and not biodegradable.
potential Mobility in soil	No information.
Other adverse effects	No information.
Persistence and	The methods for determining biodegradability are not applicable to inorganic substances.
degradability	
Results of PBT and	According to Annex XIII of regulation (EC) 1907/2006 a PBT and VPvB shall not be conducted for
vPvB assessment	inorganic substances. Barium sulfate is an inorganic substance, thus a PBT abs vPVb assessment
	is not required.
Toxicity - Aquatic	Not known.
toxicity Carbon Black(1333-86-4	
Behavior in water	/ Activated sludge, EC0 (3 h) > 800 mg/L. DEV L3 (TTC test)
treatment plants	
Bioaccumulation	Potential bioaccumulation is not expected because of the physicochemical properties of the
Potential	substance
EC50 (Scenedesmus	> 10,000 mg/L, OECD (Guideline 201)
subspicatus)	$\sim F(00 m - 1/(24 h) OF(D) (Cuidaline 202)$
EC50 Daphnia magna (waterflea)	>5600 mg/l (24 h) OECD (Guideline 202)
Environmental fate	Carbon black is an inert solid, stable and insoluble in water or organic solvents. Its vapour
	pressure is negligible. Based on these properties it is expected that carbon black will not occur in
	air or water in relevant amounts. Also potential for distribution via water or air can be dismissed.
	The deposition in soil or sediments is therefore the most relevant compartment of fate in the
	environment.
LC50 Brachydanio reio (zebrafish)	>1000 mg/l (96 h) OECD (Guideline 203)
NOEC 50	> 10,000 mg/L, OECD (Guideline 201)
(Scenedesmus	
subspicatus)	
Crystalline Silica(14808-	60-7)
Bioaccumulative	No data available.
potential	
Mobility in soil	No data available.
Other adverse effects Persistence and	No data available. No data available.
degradability	
Results of PBT and	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
vPvB assessment	
Toxicity	No data available.
Cumene(98-82-8)	
Bioaccumulative	No data available.
potential EC50 - Daphnia (water	2 14 mg/l - 48 h (AECD Tost Guideling 202), Danhais (water floa)
flea) - Toxicity to	2.14 mg/l - 48 h (OECD Test Guideline 202), Daphnia (water flea)
daphnia and other	
aquatic invertebrates	
EC50 -	2.60 mg/l - 72 h, Pseudokirchneriella subcapitata (green algae)
Pseudokirchneriella	
subcapitata (green	
algae) - Toxicity to algae	
aiyae	

LC50 - Oncorhynchus	4.8 mg/l - 96 h, Oncorhynchus mykiss (rainbow trout)
mykiss (rainbow trout)	
Toxicity to fish	
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.
Persistence and degradability	Biodegradability Result: - According to the results of tests of biodegradability this product is not readily biodegradable.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Isobutyl Alcohol(78-83-1	
Chronic	No data available.
Degradability / Persistence; Biological / A biological Degradation	Evaluation: Not readily biodegradable (by OECD criteria).
EC50 - Aquatic Plants	>100 mg/l (72 h) The product has not been tested. The statement has been derived from properties of the individual components.
EC50 - Daphnia - Acute	>100 mg/l (48 h) The product has not been tested. The statement has been derived from properties of the individual components.
LC50 - Fish - Acute	>100 mg/l (96 h) The product has not been tested. The statement has been derived from properties of the individual components.
Microorganisms	Toxicity to microorganisms: bacteria EC10 (17 h): >750 mg/l. The product has not been tested. The statement has been derived from properties of the individual components.
Kaolin(1332-58-7)	
Bioaccumulative	
Potential	

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

GENERAL INFORMATION : No data available.

DISPOSAL METHOD: Dispose of waste and residues in accordance with Local, State, and Federal Regulations. Mix with compatible chemical which is less flammable and incenerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind or weld or near this container.

14. TRANSPORT INFORMATION

*CHECK WITH YOUR CARRIER FOR ADDITIONAL RESTRICTIONS THAT MAY APPLY.

USDOT GROUND DOT (DEPARTMENT OF TRANSPORTATION) PROPER SHIPPING NAME (DOT) : Paint HAZARDS CLASS : 3 UN/NA NUMBER : UN1263 PACKING GROUP : PG II EMERGENCY RESPONSE GUIDE (ERG) : 128

IATA (AIR) DOT (INTERNATIONAL AIR TRANSPORTATION ASSOCIATION) PROPER SHIPPING NAME : Paint HAZARDS CLASS : 3 UN/NA NUMBER : UN1263 PACKING GROUP : PG II EMERGENCY RESPONSE GUIDE (ERG) : 128

IMDG (OCEAN) PROPER SHIPPING NAME : Paint HAZARDS CLASS : 3 UN/NA NUMBER : UN1263 PACKING GROUP : PG II EMERGENCY RESPONSE GUIDE (ERG) : 128

MARINE POLLUTANT : No **SPECIAL PRECAUTIONS :** P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P235 Keep cool.

US FEDERAL REGULATIONS All ingredients in Section #3 are TSCA (Toxic Substance Control Act) listed.

OSHA HAZARDS : Flammable liquid, Moderate skin irritant, Moderate eye irritant, Carcinogen. **EPCRA - Emergency CERCLA REPORTABLE QUANTITY**

This product contains:	Chemical CAS#
Xylene	1330-20-7
Phenylethane	100-41-4
Carbon Black	1333-86-4
Isobutyl Alcohol	78-83-1

SARA 304 Extremely Hazardous Substances Reportable Quantity : This material does not contain any components with a section 304 EHS RQ.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SARA 311/312 Hazards : Fire Hazard, Acute Health Hazard, Chronic Health Hazard SARA 313 :

This product contains:	Chemical CAS#
Parachlorobenzotrifluoride	98-56-6
Acetone	67-64-1
Titanium Dioxide	13463-67-7
Xylene	1330-20-7
Phenylethane	100-41-4
Talc	14807-96-6
Carbon Black	1333-86-4

CLEAN AIR ACT :

This product contains:	Chemical CAS#	
Phenylethane	100-41-4	
Styrene	100-42-5	
Cumene	98-82-8	

INTERNATIONAL REGULATIONS

CLASSIFICATION ACCORDING TO REGULATION (EC) No. 1272/2008 (CLP) :

Flam. Liq. Cat. 2;	H226
Eye Irrit. Cat. 2;	H319
STOT SE Cat. 3;	H336

NATIONAL REGULATIONS

This product contains:	Chemical CAS#
#Titanium Dioxide	13463-67-7
#Phenylethane	100-41-4
#Carbon Black	1333-86-4
"Crystalline Silica	14808-60-7

Indicates a chemical listed by IARC as a possible carcinogen.

STATE REGULATIONS **CALIFORNIA PROPOSITION 65**

This product contains:	Chemical CAS#	
*Phenylethane	100-41-4	
*Talc	14807-96-6	
*Kaolin	1332-58-7	
*Crystalline Silica	14808-60-7	
*Aliphatic Solvent	64742-47-8	
*Crystalline Silica	14808-60-7	
*Cumene	98-82-8	

*This product contains (a) chemical (s) known to the State of California to cause cancer.

#This product contains (a) chemical (s) known to the State of California to be carcinogenic.+This product contains (a) chemical (s) known to the State of California to cause birth defects or other reproductive harm.

Massachusetts Right to Know

This product contains	Chemical CAS#
Parachlorobenzotrifluoride	98-56-6
Barium Sulfate	7727-43-7
Acetone	67-64-1
Xylene	1330-20-7
Phenylethane	100-41-4
Talc	14807-96-6
Kaolin	1332-58-7
Carbon Black	1333-86-4
Aliphatic Solvent	64742-47-8
Pseudocumene	95-63-6
Isobutyl Alcohol	78-83-1
Phosphoric Acid	7664-38-2
Cumene	98-82-8

Pennsylvania Right to Know

This product contains	Chemical CAS#
Parachlorobenzotrifluoride	98-56-6
Barium Sulfate	7727-43-7
Acetone	67-64-1
Titanium Dioxide	13463-67-7
Xylene	1330-20-7
Phenylethane	100-41-4
Talc	14807-96-6
Amorphous Silica	7631-86-9
Aluminum Hydroxide	21645-51-2
Kaolin	1332-58-7
P.M. Acetate	108-65-6
Carbon Black	1333-86-4
Aliphatic Solvent	64742-47-8
Pseudocumene	95-63-6
Isobutyl Alcohol	78-83-1
Phosphoric Acid	7664-38-2
Magnesite	546-93-0

Water	7732-18-5
Cumene	98-82-8

New Jersey Right to Know

This product contains	Chemical CAS#
Parachlorobenzotrifluoride	98-56-6
Barium Sulfate	7727-43-7
Acetone	67-64-1
Titanium Dioxide	13463-67-7
Xylene	1330-20-7
Phenylethane	100-41-4
Talc	14807-96-6
Amorphous Silica	7631-86-9
Aluminum Hydroxide	21645-51-2
Kaolin	1332-58-7
P.M. Acetate	108-65-6
Carbon Black	1333-86-4
Aliphatic Solvent	64742-47-8
Pseudocumene	95-63-6
Isobutyl Alcohol	78-83-1
Phosphoric Acid	7664-38-2
Magnesite	546-93-0
Water	7732-18-5
Cumene	98-82-8

16. OTHER INFORMATION

Other Product Information

% Volatile by Volume: 69.28 % Solids by volume: 30.72 % Exempt by Volume: 55.39 % Volatile by Weight: 45.78 % Solids by Weight: 54.22 % Exempt by Weight: 37.79

VOC CONTENT:

Excluding Exempt VOC: 269 Including Exempt VOC: 120

HMIS RATING

Health :	2*
Flammability :	3
Reactivity :	3
Personal Protection :	Н

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