

SAFETY DATA SHEET



DATE ISSUED :	1/22/2019
SDS REF. No :	U1PA-FE02

U1PA-FE02 CLEAR FILLER PUTTY MUSICAL INSTRUMENTS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: U1PA-FE02 CLEAR FILLER PUTTY MUSICAL INSTRUMENTS

PRODUCT CODE: U1PA-FE02

PRODUCT USE: Industrial Solventborne Paint

MANUFACTURER

Cardinal Industrial Finishes
1329 Potrero Ave

S. El Monte, CA,
626 444-9274

24 HR. EMERGENCY TELEPHONE NUMBER

CHEMTREC (US Transportation): (800)424-9300

CHEMTREC (International Transportation): 1(202)483-7616

WEB: WWW.CARDINALPAINT.COM

2. HAZARDS IDENTIFICATION

PICTOGRAMS



SIGNAL WORD : DANGER

HAZARD STATEMENTS :

H315 Causes skin irritation.

H317 May cause an allergic reaction.

H319 Causes serious eye irritation.

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, State, 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
Trimethylolpropane triacrylate	10% - 15%	15625-89-5
1-Hydroxycyclohexyl Phenyl Ketone	1% - 5%	947-19-3

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	1% - 5%	75980-60-8	
Aluminum Disec-Butoide Acetoacetic Ester Chelate	1% - 5%	24772-51-8	

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 advice 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 may 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

Benzene(71-43-2)		
USA ACGIH	ACGIH STEL	2.5 ppm
USA ACGIH	ACGIH TWA	0.5 ppm
USA OSHA	OSHA CARC PEL	1 ppm
USA OSHA	OSHA CARC STEL	5 ppm
USA OSHA	OSHA CIEL (Table Z-1-A)	5 ppm
USA OSHA	OSHA STEL	5 ppm
USA OSHA	OSHA TWA (Table Z-1-A)	1 ppm
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
Dipropylene Glycol Methyl Ether(34590-94-8)		
USA ACGIH	ACGIH TLV STEL	150 ppm
USA ACGIH	ACGIH TLV TWA	100 ppm
USA NIOSH	NIOSH ST	150 ppm , 900 mg/m3
USA NIOSH	NIOSH TWA	100 ppm , 600 mg/m3
USA OSHA	OSHA Table Z-1 TWA	1000 ppm , 600 mg/m3
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
Toluene(108-88-3)		
USA ACGIH	ACGIH TWA	20 ppm
USA NIOSH	NIOSH REL (ST)	150 ppm, 560 mg/m3
USA NIOSH	NIOSH REL TWA	100 ppm, 375 mg/m3
USA OSHA	OSHA STEL (PO)	150 ppm, 560 mg/m3
USA OSHA	OSHA TWA (PO)	100 ppm, 375 ppm
USA OSHA	OSHA TWA (Table Z-2)	200 ppm
Trimethylolpropane triacrylate(15625-89-5)		
USA WEEL	USA WEEL (TWA)	1 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

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	:	277.0 deg F TO 601.0 deg. F
Flash point	:	120.00 DEG F
Lower explosion limit	:	1.7
Upper explosion limit	:	9.8
Vapor pressure	:	185 mm Hg
Vapor density	:	Heavier than air
Relative density	:	No data available.
Density	:	9.6884
Solubility	:	No data available.
Partion coefficient: n-octanol/water	:	No data available.
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 (NO_x), dense black smoke.

11. TOXICOLOGICAL INFORMATION

1-Hydroxycyclohexyl Phenyl Ketone(947-19-3)	
Aspiration Hazard	Not applicable.
Assessment other acute effects	Assessment of STOT single - Based on the available information there is no specific target organ toxicity to be expected after a single exposure.
Carcinogenicity	Assessment of carcinogenicity- No data available concerning carcinogenic effects.
Chronic Toxicity/Effects	Repeated dose toxicity, Assessment of repeated dose toxicity- No adverse effects were observed after repeated exposure in animal studies. Information on- Methadone, (1-hydroxycyclohexyl)phenyl-
Eye	Species: rabbit, Result- non-irritant, Method: OECD Guideline 405
Genetic toxicity	Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and
Irritation / corrosion	Assessment of irritating effects- Not irritating to the skin. Not irritating to the eyes. Information on- Methadone, (1-hydroxycyclohexyl)phenyl- Assessment of irritating effects- Not irritating to the skin. Not irritating to the eyes.
LC50 Inhalation - Rat male/female	> 1 mg/l - 4 h, Species- rat (male/female), (OECD Guideline 403)
LD50 Dermal - Rat male/female	>5,000 mg/kg, Species rat (male/female), (OECD Guideline 402)
LD50 Oral - Rat male/female - Acute toxicity	>2,500 mg/kg, Species- rat (male/female), (OECD Guideline 423)
Other Information	(Mice) Phototoxicity- Not phototoxic
Reproductive toxicity	Assessment of reproduction toxicity- No data available.
Sensitization	Assessment of sensitization: Skin sensitizing effects were not observed in animal studies. Information on: Methanone, (1-hydroxycyclohexyl)phenyl- Assessment of sensitization-Skin sensitizing effects were not observed in animal studies.
Skin	Species: rabbit, Result- non-irritant, Method: other

Symptoms of Exposure	No significant reaction of the human body to the product known.
Teratogenicity	Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen
Aluminum Disec-Butoide Acetoacetic Ester Chelate(24772-51-8)	
Aspiration hazard	Knowledge about health hazard is incomplete.
Carcinogenicity	Not classified. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Germ cell mutagenicity	Ames test <i>S. typhimurium</i> Mutagenicity (micronucleus test) Mouse - male and female Result: negative
LD50 Oral - Rat - Acute toxicity	No data available.
Reproductive toxicity	Knowledge about health hazard is incomplete.
Serious eye damage/eye irritation	Causes serious eye irritation.
Skin corrosion/irritation	Causes skin irritation.
Specific target organ toxicity - repeated exposure	Knowledge about health hazard is incomplete.
Specific target organ toxicity - single exposure	Knowledge about health hazard is incomplete.
Benzene(71-43-2)	
Aspiration toxicity	May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.
Carcinogenicity	Species: rat Sex: female Dose: 0, 25, 50, 250 mg/kg Exposure time: 103 wks Number of exposures: daily, 5 days/week Test substance: yes Remarks: zymbal gland carcinomas, squamous cell papillomas Species: rat Sex: male Dose: 0, 50, 100, 200 mg/kg Exposure time: 103 wks Number of exposures: daily, 5 days/week Test substance: yes Remarks: zymbal gland carcinomas, squamous cell papillomas Species: mouse Sex: male and female Dose: 25, 50, 100 mg/kg Exposure time: 103 wks Number of exposures: daily, 5 days/week Test substance: yes Remarks: Clear evidence of multiple organ carcinogenicity.
CMR effects	Carcinogenicity: Human carcinogen. Mutagenicity: In vivo tests showed mutagenic effects Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: Animal testing did not show any effects on fertility.
Eye irritation	May cause irreversible eye damage.
Further information	Chronic Health Hazard. Solvents may degrease the skin.
LC50 Dermal	44.5 mg/l Exposure time: 4 h Species: rat Sex: Not Specified Test atmosphere: vapor
LD50	> 8,260 mg/kg Species: rabbit
LD50 Oral	> 2,000 mg/kg Species: rat Sex: female
Repeated dose toxicity	Species: rat, female Sex: female. Application Route: oral gavage Dose: 0, 25, 50, 100 mg/kg Exposure time: 103 wk Number of exposures: 5 d/wk NOEL: < 25 mg/kg Lowest observable effect level: 25 mg/kg Species: rat, male Sex: male Application Route: oral gavage Dose: 0, 50, 100, 200 mg/kg Exposure time: 103 wk Number of exposures: 5 d/wk NOEL: < 50 mg/kg Lowest observable effect level: 50 mg/kg Species: mouse Application Route: oral gavage Dose: 0, 25, 50, 100 mg/kg Exposure time: 103 wk NOEL: < 25 mg/kg
Sensitization	Did not cause sensitization on laboratory animals.
Skin irritation	May cause skin irritation in susceptible persons.
Benzophenone(119-61-9)	
Genotoxicity	Assays for gene mutations - Ames Salmonella Assay - No data
LC50 Inhalation - Rat	No data - 4 h (Rat)
LD50 Dermal - Rabbit	>2,000 mg/kg, Dermal - Rabbit
LD50 Oral - Rat - Acute Toxicity	>2,000 mg/kg, Oral - Rat
Other information	The product toxicity information above has been estimated. The toxicological properties of this material have not been fully determined. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms such as redness, blistering, dermatitis, etc.
Skin/Eye Irritation	Dermal - Irritating, Eye - Irritating
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	In vitro assay, <i>S. typhimurium</i> , Result: negative
Inhalation:	No data available.

LD50 Oral - Rat - Acute toxicity	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 corrosion/irritation	Skin - Rabbit Result: No skin irritation. (OECD Test Guideline 404)
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
Dipropylene Glycol Methyl Ether(34590-94-8)	
Additional Information	RTECS: JM 157500 TO the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach , Irregularities , Based on Human evidence. Stomach , Irregularities , Based on Human evidence.
Aspiration Hazard	No Data Available
Carcinogenicity	IARC: No component 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 carcinogen or potential 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	No Data Available
Inhalation	No Data Available
LD50 Oral (RAT)	5,152 mg/kg
Reproductive Toxicity	No Data Available
Respiratory or skin sensitisation	No Data Available
Skin Corrosion / Irritation Serious eye damage / eye irritation (EYES , RABBIT)	24 h
Specific arget organ toxicity - Repeated Exposure	No Data Available
Specific target organ toxicity - Single Exposure	No Data Available
Phenylethane(100-41-4)	
Aspiration toxicity	May be fatal if swallowed and enters airways.
Carcinogenicity	Species: mouse, (male and female) Application Route: Inhalation Exposure time: 103 wk Activity duration: 6 h Dose: 0, 75, 250, 750 ppm Frequency of Treatment: 5 days/week NOAEL: 250 ppm Method: OECD Test Guideline 453 Result: evidence of carcinogenic activity Symptoms: increased incidences of alveolar/bronchiolar neoplasms, increase incidence of hepatocellular carcinomas GLP: yes Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.
Germ cell mutagenicity	Genotoxicity in vitro, Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: no : Test Type: Mammalian cell gene mutation assay Test species: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method : OECD Test Guideline 476 Result: negative GLP: yes Genotoxicity in vivo : Test Type: In vivo micronucleus test species: mouse (male) Application Route: Oral Method: OECD Test Guideline 474 Result: negative GLP: yes Test Type: DNA damage and/or repair Test species: mouse (male and female)Application Route: Inhalation Method: OECD Test Guideline 486 Result: negative GLP: yes Germ cell mutagenicity Assessment : In vivo tests did not show mutagenic effects
LC50 (Mouse, Male)	10 mg/l Assessment: The component/mixture is moderately toxic after short term inhalation.
LD50 (rabbit)	15,433 mg/kg
Repeated dose toxicity	Species: rat, male and female NOAEL: 75 mg/kg Application Route: Oral Exposure time: 28 d Dose: 75, 250 and 750 mg/kg bw/day Method: OECD Test Guideline 407 GLP: yes Symptoms: Increased kidney and liver weights
Reproductive toxicity	Effects on fertility : Test Type: One generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500 and 1000 ppm Duration of Single Treatment: 6 h General Toxicity - Parent: NOAEC: 1,000 ppm General Toxicity F1: NOAEC: 100 ppm Symptoms:

	Reduced foetal weight. Reduced offspring weight gain. Method: OECD Test Guideline 415 Result: No reproductive effects. GLP: yes Effects on foetal development : Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000, 2000 ppm Duration of Single Treatment: 15 d General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: 2,000 ppm Developmental Toxicity: NOAEC: 500 ppm Symptoms: Reduced body weight Method: OECD Test Guideline 414 Result: Developmental toxicity occurred at maternal toxicity dose levels GLP: No data available Reproductive toxicity - Assessment : No toxicity to reproduction Did not show teratogenic effects in animal experiments.
Respiratory or skin sensitization	Remarks: No data available
Serious eye damage/eye irritation	Species: rabbit Result: Mild eye irritation Remarks: No data available
Skin corrosion/irritation	Species: rabbit Result: Mild skin irritation
STOT - repeated exposure	Target Organs: Auditory system Assessment: May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
STOT - single exposure	No data available.
Toluene(108-88-3)	
Aspiration toxicity	Aspiration Toxicity - Category 1
Carcinogenicity	Species: rat, (male and female) Application Route: inhalation (vapour) Exposure time: 103 wks Dose: 0, 600, 1200 ppm Frequency of Treatment: 6.5 h/d, 5 d/wk NOAEL: No observed adverse effect level: 1,200 ppm Method: OECD Test Guideline 453 Result: did not display carcinogenic properties Symptoms: Erosion of nasal epithelium Species: rat, (male and female) Application Route: inhalation (vapour) Exposure time: 103 wks Dose: 0, 600, 1200 ppm Frequency of Treatment: 6.5 h/d, 5 d/wk NOAEL: No observed adverse effect level: 1,200 ppm Method: OECD Test Guideline 453 Result: did not display carcinogenic properties Symptoms: Erosion of nasal epithelium Species: rat, (male and female) Application Route: inhalation (vapour) Exposure time: 103 wks Dose: 0, 600, 1200 ppm Frequency of Treatment: 6.5 h/d, 5 d/wk NOAEL: No observed adverse effect level: 1,200 ppm Method: OECD Test Guideline 453 Result: did not display carcinogenic properties Symptoms: Erosion of nasal epithelium , GLP: yes, Carcinogen
Further information	Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may decrease the skin.
Germ cell mutagenicity	Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay Test species: Mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative : Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative Genotoxicity in vivo : Test Type: Chromosome aberration assay in vivo Test species: rat Cell type: Bone marrow Application Route: Intraperitoneal Exposure time: 1 or 5 d Dose: 0, 0.025, 0.082, 0.247 ml/kg Result: negative Test Type: Dominant lethal assay Test species: mouse (male) Application Route: inhalation (vapour) Exposure time: 6 h/d, 5 d/wk for 8 wks Dose: 0, 100, 400 ppm Method: OECD Test Guideline 478 Result: negative Germ cell mutagenicity Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
LC50 (rat, male and female)	28.1 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403
LD50 (rabbit)	> 5,000 mg/kg
LD50 (rat, male)	> 5,580 mg/kg
Repeated dose toxicity	Species: mouse, male and female NOAEL: 625 mg/kg LOAEL: 1,250 mg/kg Application Route: Oral Exposure time: 13 wks Number of exposures: 5 d/wk Dose: 312, 625, 1250, 2500, 5000 Group: yes GLP: yes Symptoms: death, Increased liver weight, ataxia, hypoactivity, hypothermia Species: rat, male and female NOAEL: 300 Application Route: inhalation (vapour) Exposure time: 6, 12, or 18 mths Number of exposures: 6 h/d, 5 d/wk Dose: 0, 30, 100, 300 ppm Method: OECD Test Guideline 453 Repeated dose toxicity - Assessment : Causes skin irritation.
Reproductive toxicity	Effects on fertility : Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 500 ppm General Toxicity F1: NOAEC: 500 ppm Fertility: NOAEC: 2,000 ppm Symptoms: Reduced maternal body weight gain. Reduced offspring weight gain. Method: OECD Test Guideline 416 Result: Animal testing did not show any effects on fertility. GLP: yes Test Type: Fertility Species: rat, male and female Application Route: inhalation (vapour) Dose: 0, 600, 1200 ppm Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 600 ppm Symptoms: Decreased sperm count Result: Animal testing did not show any effects on fertility.
Reproductive toxicity (cont.)	Effects on foetal development : Species: rat Application Route: inhalation (vapour) Dose: 0, 250, 750, 1500, 3000 ppm Duration of Single Treatment: 10 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 750 ppm Developmental Toxicity: NOAEC: 750 ppm Symptoms: Maternal toxicity, Reduced body weight, Skeletal malformations. GLP: yes Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Respiratory or skin sensitization	Test Type: Maximization Test (GPMT) Species: guinea pig Result: Did not cause sensitization on laboratory animals. GLP: yes
Serious eye damage/eye irritation	Species: rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405
Skin corrosion/irritation	Species: rabbit Exposure time: 4 h Result: Irritating to skin.
STOT - repeated exposure	Inhalation Auditory system, Eyes May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
STOT - single exposure	Exposure routes: Target Organs: Assessment: Remarks: Inhalation Central nervous system May cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
Trimethylolpropane triacrylate(15625-89-5)	
Additional Information	Repeated dose toxicity Rat - male and female - NOAEL - >= 200 mg/kg RTECS- AT4810000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence (Mequinol).
Aspiration hazard	No data available.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. 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.
Germ cell mutagenicity	Ames test S. typhimurium Mutagenicity (micronucleus test) Mouse - male and female Result: negative
LC50 Inhalation - Rat, Male and female	>0.55 mg/l, 6 h
LD50 Dermal - Rabbit	5,170 mg/kg
LD50 Intraperitoneal - Rat	55 mg/kg, Rat, Remarks: Behavioral- Altered sleep time (including change in righting reflex). Behavioral-Convulsions or effect on seizure threshold. Behavioral- Ataxia.
LD50 Oral - Rat - Acute toxicity	>5.000 mg/kg
No data available.	No data available.
Reproductive toxicity	No data available.
Serious eye damage/eye irritation	Eyes - Rabbit Result: Irritating to eyes. Respiratory or skin sensitisation Maximisation Test - Guinea pig Result: May cause sensitisation by skin contact.
Skin corrosion/irritation	Skin - Rabbit Result: Irritating to skin. - 24 h
Specific target organ toxicity - repeated exposure	No data available.

12. ECOLOGICAL INFORMATION

1-Hydroxycyclohexyl Phenyl Ketone(947-19-3)	
Bioaccumulative potential	Assessment bioaccumulation potential. Does not significantly accumulate in organisms. Bioaccumulation potential. Bioconcentration factor: 4 - 12 (56 d), Cyprinus carpio (OECD Guideline 305 C)
EC10 Desmodium subspicatus - Aquatic plants	2.51 mg/l, 72 h, (growth rate), Desmodium subspicatus (OECD Guideline 201, static)
EC20 Microorganisms/Effect on activated sludge	>100 mg/l, 3 h, Toxicity to microorganisms, OECD Guideline 209 aquatic activated sludge.
EC50 Daphnia magna - Aquatic invertebrates	53.9 mg/l, 48 h, Daphnia magna (OECD Guideline 202, part 1, semi static)
EC50 Desmodium subspicatus - Aquatic plants	14.4 mg/l, 72 h, (growth rate), Desmodium subspicatus (OECD Guideline 201, static)
LC50 Brachydanio rerio - Toxicity to aquatic fish	24 mg/l, 96 h, Brachydanio rerio (Directive 92/69/EEC, C.1, static)
Mobility in soil	Assessment transport between environmental compartments. The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected.
Persistence and degradability	Assessment biodegradation and elimination (H2O), Readily biodegradable (according to OECD criteria). Elimination information, 73 % CO2 formation relative to the theoretical value (28 d) (Directive 84/449/EEC, C.5) (aerobic, activated sludge, domestic), Assessment of stability in water in contact with water the substance will hydrolyze slowly. Information on Stability in Water (Hydrolysis) t1/2 77 h, (7 d) (pH value 7), (OECD Guideline 111, pH7)
Aluminum Disec-Butoide Acetoacetic Ester Chelate(24772-51-8)	

Bioaccumulative potential	Knowledge about environmental hazard is incomplete.
Ecotoxicity - Aquatic toxicity	Knowledge about environmental hazard is incomplete.
Ecotoxicity - Terrestrial toxicity	Knowledge about environmental hazard is incomplete.
Mobility in soil	Knowledge about environmental hazard is incomplete.
Other adverse effects	This product immiscible in water.
Persistence and degradability	Knowledge about environmental hazard is incomplete.
Benzene(71-43-2)	
Additional ecological information	Toxic to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.
EC50	10 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test substance: yes Method: OECD Test Guideline 202
Ecotoxicology Assessment	Acute aquatic toxicity Benzene : Toxic to aquatic life. Chronic aquatic toxicity Benzene : Harmful to aquatic life with long lasting effects.
ErC50	100 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae) Test substance: yes Method: OECD Test Guideline 201
LC50	5.3 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) flow-through test Test substance: yes Method: OECD Test Guideline 203
Persistence and degradability	Biodegradability : This material is expected to be readily biodegradable.
Results of PBT assessment	This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
Benzophenone(119-61-9)	
LC50 Fathead Minnow - freshwater - Acute toxicity	13.2 - 15.3 mg/l - 96 h, Fathead Minnow (Pimephales promelas), (OECD 203)
Results of PBT and vPvB Assessment	Not determined.
Toxicity, Persistence and degradability, Bioaccumulative potential, Mobility in soil, Other adverse effects.	Overall Environmental Toxicity - Harmful to aquatic life. Harmful to aquatic life with long lasting effects.
Cumene(98-82-8)	
Bioaccumulative potential	No data available.
EC50 - Daphnia (water flea) - Toxicity to daphnia and other aquatic invertebrates	2.14 mg/l - 48 h (OECD Test Guideline 202), Daphnia (water flea)
EC50 - Pseudokirchneriella subcapitata (green algae) - Toxicity to algae	2.60 mg/l - 72 h, Pseudokirchneriella subcapitata (green algae)
LC50 - Oncorhynchus mykiss (rainbow trout) Toxicity to fish	4.8 mg/l - 96 h, Oncorhynchus mykiss (rainbow trout)
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
Dipropylene Glycol Methyl Ether(34590-94-8)	
Bioaccumulative Potential	No Data Available
EC 50 Toxicity to Daphnia and other aquatic invertebrates	1,919 mg/l , 48 h (Daphnia Magna)
LC 50 Toxicity to Fish	10,000 mg/l , 96 h (Pimephales promelas)
Mobility in Soil	No Data Available
Other Adverse Effects	No Data Available
Persistence and	Biodegradability

degradability	
Results of PBT and vPvB assessment	PBT vPvB assessment not available as chemical safety assessment not required / conducted
Phenylethane(100-41-4)	
Bioaccumulative potential	Partition coefficient: noctanol/water : log Pow: 2.92
EC50 (Daphnia magna (Water flea))	1.8 mg/l Exposure time: 48 h Test Type: static test
EC50 (Pseudokirchneriella subcapitata)	5.4 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: Static GLP: yes
LC50 (Oncorhynchus mykiss (rainbow trout))	4.2 mg/l Exposure time: 96 h Test Type: semi-static test
Mobility in soil	No data available.
Other adverse effects	Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
Persistence and degradability	Biodegradability : Inoculum: activated sludge Concentration: 22 mg/l Result: Readily biodegradable. Biodegradation: 70 % Exposure time: 28 d GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	(Daphnia): 3.6 mg/l Toxicity to bacteria : GLP: Remarks: No data available Ecotoxicology Assessment Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.
Toluene(108-88-3)	
Bioaccumulative potential	Partition coefficient: noctanol/water : log Pow: 2.73
EC50 (Ceriodaphnia dubia)	3.78 mg/l Exposure time: 48 h Test Type: Renewal
EC50 (Chlorella vulgaris (Fresh water algae))	134 mg/l Exposure time: 3 h Test Type: static test
IC50 (Bacteria)	84 mg/l Exposure time: 24 h, Test Type: Static Ecotoxicology Assessment Acute aquatic toxicity : Toxic to aquatic life. Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.
LC50 (Oncorhynchus mykiss (rainbow trout))	5.5 mg/l Exposure time: 96 h Test Type: flow-through test
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	Biodegradability : Inoculum: Sewage Biodegradation: 100 % Remarks: Readily biodegradable
Trimethylolpropane triacrylate(15625-89-5)	
Bioaccumulative potential	No data available.
EC50 Desmodesmus subspicatus - Toxicity to algae	4.86 mg/l - 96 h, Desmodesmus subspicatus (Scenedesmus subspicatus)
LC50 Daphnia magna - Toxicity to daphnia and other aquatic invertebrates	19.9 mg/l - 48 h, Daphnia magna (Water flea)
LC50 Leuciscus idus - Toxicity to fish	1.47 mg/l - 96 h, Leuciscus idus (Golden orfe)
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	Biodegradability aerobic - Exposure time 28 d Result: 82 - 90 % - Readily biodegradable (OECD Test Guideline 301B)
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

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 incinerate. 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) : Combustible Liquid, n.o.s. (Aluminum Disec-Butoide Acetoacetic Ester Chelate)

HAZARDS CLASS : Combustible Liquid

UN/NA NUMBER : NA1993

PACKING GROUP : PG III

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 : Yes

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

15. REGULATORY INFORMATION

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#
Phenylethane	100-41-4

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#
Trimethylolpropane triacrylate	15625-89-5
1-Hydroxycyclohexyl Phenyl Ketone	947-19-3
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8
Aluminum Disec-Butoide Acetoacetic Ester Chelate	24772-51-8

CLEAN AIR ACT :

This product contains:	Chemical CAS#
Toluene	108-88-3
Phenylethane	100-41-4
Benzene	71-43-2
Cumene	98-82-8

INTERNATIONAL REGULATIONS

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

Eye Irrit. Cat. 2; H319
STOT SE Cat. 3; H336

NATIONAL REGULATIONS

IARC KEY

~ Indicates a chemical listed by IARC as a possible carcinogen.

^ Indicates a chemical listed by IARC as a carcinogen.

STATE REGULATIONS

CALIFORNIA PROPOSITION 65

This product contains:	Chemical CAS#
*Benzophenone	119-61-9
+Toluene	108-88-3

PROPOSTION 65 KEY

*  **WARNING** Cancer – www.P65Warnings.ca.gov

 **WARNING** Reproductive Harm – www.P65Warnings.ca.gov

+  **WARNING** Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Massachusetts Right to Know

This product contains	Chemical CAS#
Dipropylene Glycol Methyl Ether	34590-94-8
Phenylethane	100-41-4
Benzene	71-43-2
Cumene	98-82-8

Pennsylvania Right to Know

This product contains	Chemical CAS#
Trimethylolpropane triacrylate	15625-89-5
Dipropylene Glycol Methyl Ether	34590-94-8
Toluene	108-88-3
Phenylethane	100-41-4
Cumene	98-82-8

New Jersey Right to Know

This product contains	Chemical CAS#
Trimethylolpropane triacrylate	15625-89-5
Dipropylene Glycol Methyl Ether	34590-94-8
Phenylethane	100-41-4
Cumene	98-82-8

16. OTHER INFORMATION

Other Product Information

% Volatile by Volume: 0.003
% Solids by volume: 99.997
% Exempt by Volume: 0.00

% Volatile by Weight: 0.002
% Solids by Weight: 99.998
% Exempt by Weight: 0.00

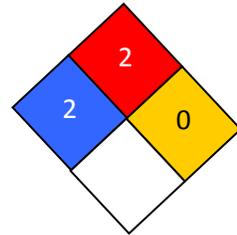
VOC CONTENT:

Excluding Exempt VOC: 0.03
Including Exempt VOC: 0.03

HMIS RATING

Health :	2*
Flammability :	2
Reactivity :	0
Personal Protection :	H

NFPA CODES



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