

Conforms to ANSI Z400.1-2010 Standard - HCS 2012



## **SECTION 1:** Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier	
Product name :	ACRYLITHANE 2.8 URETHANE RED TINT BASE
Product identity :	643J907190, 4700-012
Product type :	polyurethane paint (base for multi-component product)

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Field of application :	buildings and metal industry.
Ready-for-use mixture :	Mixing Ratio: 643JB = 643J9 3 Vol. / 941JB 1 Vol.
Identified uses :	Industrial/Professional use
TSCA :	Unless otherwise stated. All components are listed or exempted.

### 1.3 Details of the supplier of the safety data sheet

Company details :	HEMPEL (USA), Inc. 2728 Empire Central Dallas, TX 75235 Phone number: 1-214-353-1600 E-mail: hempel@hempel.com
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### 1.4 Emergency telephone number (with hours of operation)

For Transportation Emergencies : (24 hours)	CHEMTREC: <b>1-800-424-9300</b> (Toll-free in the U.S., Canada and the U.S. Virgin Islands) <b>703-527-3887</b> For calls originating elsewhere (Collect calls are accepted). Contract number: CCN10384 To preserve the effectiveness of arrangements for providing accurate and timely emergency response information, the basic identifying information (shipper name or contract number) must be included on shipping papers. If the purchaser of this product is going to be shipping this product to other locations, the purchaser must arrange for its own Emergency Information Provider to respond to transport incidents. Hempel's 24 hour response contract does not cover non-Hempel shipments.
For all other information :	In USA toll free calling available: 1-800- 678-6641 or (936)-523-6000
(8 AM - 5 PM CST)	See Section 4 of the safety data sheet (first aid measures).

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

OSHA/HCS status :	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
GHS Classification :	FLAMMABLE LIQUIDS - Category 3 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

## 2.2 Label elements

Hazard pictograms :

Signal word :

Warning



## **SECTION 2: Hazards identification**

Hazard statements :	H226 - Flammable liquid and vapor. H317 - May cause an allergic skin reaction. H351 - Suspected of causing cancer.
Precautionary statements :	
Prevention :	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Avoid breathing vapor. Contaminated work clothing must not be allowed out of the workplace.
Response :	IF exposed or concerned: Get medical advice or attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.
Storage :	Store locked up. Store in a well-ventilated place. Keep cool.
Disposal :	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements :	None known.

### 2.3 Other hazards

Hazards not otherwise classified : None known.

### **SECTION 3: Composition/information on ingredients**

Mixture

Product definition :	
Dhysical state :	

Product/ingredient name	Identifiers	%	GHS Classification
barium sulphate	7727-43-7	≥10 - ≤25	Not classified.
dimethyl carbonate	616-38-6	≥10 - ≤25	FLAMMABLE LIQUIDS - Category 2
2-butoxyethyl acetate	112-07-2	≥5 - ≤10	ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
heptan-2-one	110-43-0	≥3 - ≤5	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
n-butyl acetate	123-86-4	≥3 - ≤5	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
xylene	1330-20-7	≥1 - ≤3	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2
bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	≤1	SKIN SENSITIZATION - Čategory 1
ethylbenzene	100-41-4	<1	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
methyl-1,2,2,6,6-pentamethyl- 4-piperidylsebacate	82919-37-7	≤0.3	SKIN SENSITIZATION - Category 1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Occupational exposure limits, if available, are listed in Section 8.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.



## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
	If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and seek medical advice.
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

#### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

Eye contact :	No known significant effects or critical hazards.
Inhalation :	No known significant effects or critical hazards.
Skin contact :	No known significant effects or critical hazards.
Ingestion :	No known significant effects or critical hazards.
Over-exposure signs/symptoms	
Eye contact :	No specific data.
Inhalation :	No specific data.
Skin contact :	No specific data.
Ingestion :	No specific data.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed.Specific treatments :No specific treatment.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO₂, powders, water spray. Not to be used: waterjet.
5.2 Special hazards arising from	n the substance or mixture
Hazards from the substance or mixture :	Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

#### 5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.



## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

#### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.

#### 6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

#### 6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions. This product may be applied using several application techniques and methods of handling may be different for each. Application techniques include [but are not limited to] brushing, rolling, and spray application [conventional, HPLV, airless, pleural component or aerosol can]. Avoid the breathing of vapors and, if spraying, do not breath spray mist or aerosols.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Product/ingredient name	Exposure limit values
barium sulphate	ACGIH TLV (United States, 3/2020). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2016).
	TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total <b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust
2-butoxyethyl acetate	NIOSH REL (United States, 10/2016). TWA: 5 ppm 10 hours. TWA: 33 mg/m <sup>3</sup> 10 hours.



## **SECTION 8: Exposure controls/personal protection**

	ACGIH TLV (United States, 3/2020). TWA: 20 ppm 8 hours.
heptan-2-one	ACGIH TLV (United States, 3/2020). TWA: 233 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours. NIOSH REL (United States, 10/2016). TWA: 465 mg/m <sup>3</sup> 10 hours. TWA: 100 ppm 10 hours. OSHA PEL (United States, 5/2018). TWA: 465 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.
n-butyl acetate	NIOSH REL (United States, 10/2016).           TWA: 150 ppm 10 hours.           TWA: 710 mg/m³ 10 hours.           STEL: 200 ppm 15 minutes.           STEL: 950 mg/m³ 15 minutes.           OSHA PEL (United States, 5/2018).           TWA: 710 mg/m³ 8 hours.           TWA: 710 mg/m³ 8 hours.           STEL: 150 ppm 15 minutes.           STEL: 150 ppm 8 hours.           TWA: 710 mg/m³ 8 hours.           TWA: 710 mg/m³ 8 hours.           STEL: 150 ppm 15 minutes.           TWA: 50 ppm 8 hours.
xylene	ACGIH TLV (United States, 3/2020). TWA: 100 ppm 8 hours. TWA: 434 mg/m <sup>3</sup> 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m <sup>3</sup> 15 minutes. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 435 mg/m <sup>3</sup> 8 hours.
ethylbenzene	ACGIH TLV (United States, 3/2020). TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2016). STEL: 545 mg/m <sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 435 mg/m <sup>3</sup> 10 hours. TWA: 100 ppm 10 hours. OSHA PEL (United States, 5/2018). TWA: 435 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.

#### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Provide local exhaust and general ventilation systems to maintain airborne concentrations below OSHA, ACGIH, and manufacturer recommended exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into work areas by controlling it at its source. Use local and general exhaust ventilation to effectively remove and prevent buildup of mists/vapors/fumes generated from the handling of this product.

Note: Local exhaust ventilation is designed to capture an emitted contaminant at or near its source, before the contaminant has a chance to disperse into the workplace air. General exhaust ventilation, also called dilution ventilation, is different from local exhaust ventilation because instead of capturing emissions at their source and removing them from the air, general exhaust ventilation allows the contaminant to be emitted into the workplace air and then dilutes the concentration of the contaminant to an acceptable level (e.g., to the PEL or below).

#### Individual protection measures

General :	Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.
Hygiene measures :	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.



## **SECTION 8: Exposure controls/personal protection**

Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Hand protection :	Wear chemical-resistant gloves in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.
	Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:
	Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton® May be used: nitrile rubber, butyl rubber
	Short term exposure: neoprene rubber, natural rubber (latex), polyvinyl chloride (PVC)
Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product. Wear suitable protective clothing. Always wear protective clothing when spraying.
Respiratory protection :	If working areas have insufficient ventilation, wear half or totally covering mask equipped with gas filter of type Organic Vapor, when grinding use particle filter of type P95, P99 or P100. When spraying use a combined filter (organic vapor / HEPA or organic vapor / P100 type). Be sure to use approved/certified respirator or equivalent. Always wear an air-fed respirator when spraying in a continuous and prolonged work situation (e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter).
Protective clothing (pictograms) :	

Note: Application of paint products by spraying requires additional safety precautions: Full body suit, Full face respirator with air supplied.

#### **Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state :	Liquid.
Color :	Red.
Odor :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	Testing not relevant or not possible due to nature of the product.
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 26°C (78.8°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Flammable in the presence of the following materials or conditions: oxidizing materials. Slightly flammable in the presence of the following materials or conditions: reducing materials.
Upper/lower flammability or explosive limits :	0.8 - 12.9 vol %
Vapor pressure :	Testing not relevant or not possible due to nature of the product.
Vapor density :	Testing not relevant or not possible due to nature of the product.
Relative density :	1.189 g/cm³
Solubility(ies) :	Easily soluble in the following materials: diethyl ether and acetone. Soluble in the following materials: methanol and n-octanol. Partially soluble in the following materials: cold water and hot water.



## **SECTION 9: Physical and chemical properties**

Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Testing not relevant or not possible due to nature of the product.
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Testing not relevant or not possible due to nature of the product.
Explosive properties :	Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

#### 9.2 Other information

Solvent(s) % by weight (Included excempt solvent(s)):	37.3 % (w/w)
Water % by weight :	Weighted average: 0 %
VOC content (Coatings) :	2.59 lbs/gal (310.9 g/l)
VOC content (Regulatory) :	2.97 lbs/gal(355.3 g/l)
TOC Content (Volatile):	Weighted average: 209 g/l
Solvent Gas :	Weighted average: 0.092 m³/l

### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

#### 10.2 Chemical stability

The product is stable.

#### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

#### 10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials. Slightly reactive or incompatible with the following materials: reducing materials.

#### 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

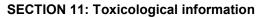
Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

#### Acute toxicity



Product/ingredient name	Result	Species	Dose	Exposure
barium sulphate	LD50 Oral	Rat	>15000 mg/kg	-
dimethyl carbonate	LD50 Dermal	Rabbit	>5 g/kg	-
•	LD50 Oral	Rat	13 g/kg	-
2-butoxyethyl acetate	LD50 Dermal	Rabbit	1500 mg/kg	-
	LD50 Oral	Rat	2400 mg/kg	-
heptan-2-one	LD50 Dermal	Rabbit	12600 uL/kg	-
	LD50 Oral	Rat	1600 mg/kg	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21 mg/l	4 hours
-	LD50 Dermal	Rabbit	>14112 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
	LD50 Oral	Rat	3523 mg/kg	-
bis (1,2,2,6,6-pentamethyl-	LD50 Dermal	Rat	>2000 mg/kg	-
4-piperidyl) sebacate				
	LD50 Oral	Rat	>2000 mg/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
-	LD50 Oral	Rat	3500 mg/kg	-

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### Acute toxicity estimates

Route	ATE value
Oral	35166.16 mg/kg
Dermal	17072.44 mg/kg
Inhalation (gases)	181448.16 ppm
Inhalation (vapors)	89.19 mg/l

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
barium sulphate	Eyes - Mild irritant	Rabbit	-	-
2-butoxyethyl acetate	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams
heptan-2-one	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams
n-butyl acetate	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Eyes - Mild irritant	Rabbit	-	-
	Respiratory - Mild irritant	Rabbit	-	-
xylene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Skin - Irritant	Rabbit	-	-
ethylbenzene	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams
,	Respiratory - Mild irritant	Rabbit	-	-
	Eyes - Mild irritant	Rabbit	-	-

#### Sensitizer

Product/ingredient name	Route of exposure	Species	Result
bis (1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	skin	Guinea pig	Sensitizing

## **Carcinogen Classification**

Product/ingredient name	IARC	NTP	OSHA
xylene ethylbenzene	3 2B	-	-

## Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
n-butyl acetate	Category 3		Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs



## **SECTION 11: Toxicological information**

#### Aspiration hazard

Product/ingredient name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

#### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential chronic health effects

Sensitization :	Contains bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, methyl-1,2,2,6,6-pentamethyl-4-piperidylsebacate. May produce an allergic reaction.
Other information :	No additional known significant effects or critical hazards.

SECTION 12: Ecological information

#### 12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

When spilled, this product may act as an oil, causing a film, sheen, emulsion, or sludge at or beneath the surface of a body of water. Oils of any kind can cause: (a) drowning of waterfowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility; (b) lethal effect on fish by coating gill surfaces, preventing respiration; (c) potential fish kills resulting from alteration in biochemical oxygen demand; (d) asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom; and (e) adverse aesthetic effects of fouled shoreline and beaches.

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute EC50 648 mg/l	Algae	72 hours
	Acute EC50 44 mg/l	Daphnia	48 hours
bis (1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	Acute EC50 1.68 mg/l	Aquatic plants	72 hours
11 37	Acute LC50 0.97 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours
ethylbenzene	Chronic NOEC <1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
n-butyl acetate	- OECD 301D Ready Biodegradability - Closed Bottle Test	90 % - Readily - 28 days - 80 % - Readily - 5 days -		-		-
xylene	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90 - 98 % - Readily - 28 days >60 % - Readily - 28 days		-		-
ethylbenzene	-	>70 % - Read	dily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Bi	odegradability
n-butyl acetate xylene ethylbenzene	- - -		- - -		Readily Readily Readily	

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
dimethyl carbonate	0.354	-	low
2-butoxyethyl acetate	1.51	-	low
heptan-2-one	2.26	-	low
n-butyl acetate	2.3	3.1	low
xylene	3.12	8.1 - 25.9	low
ethylbenzene	3.6	-	low

#### 12.4 Mobility in soil



## **SECTION 12: Ecological information**

 Soil/water partition coefficient (K<sub>OC</sub>) :
 No known data avaliable in our database.

 Mobility :
 No known data avaliable in our database.

#### 12.5 Other adverse effects

No known significant effects or critical hazards.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7 and Section 8 for additional handling information and protection of employees.

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

Transport may take place according to national regulation or DOT for transport by road and by train, IMDG for transport by sea, IATA for Air shipment. Refer to specific Dangerous Goods Transport requirements under 49CFR, ICAO and IATA.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
DOT Code	UN1263	PAINT	3	111	No.	Reportable quantity (xylene) 3626.1 lbs / 1646.3 kg [365.77 gal / 1384.6 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
TDG Code	UN1263	PAINT	<sup>3</sup> -	111	No.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).
SCT Code	UN1263	PAINT	<sup>3</sup> -	111	No.	-
IMDG Code	UN1263	PAINT	<sup>3</sup> -	111	No.	Emergency schedules F-E, S-E
IATA Code	UN1263	PAINT	<sup>3</sup> -	111	No.	-

Code : Classification

PG\* : Packing group

Env.\* : Environmental hazards



## **SECTION 14: Transport information**

#### 14.6 Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

#### 14.7 Transport in bulk according to IMO instruments

Not applicable.

#### **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations :

All components are active or exempted.

TSCA 4(a) final test rules: nonane; octamethylcyclotetrasiloxane (D4) TSCA 8(a) PAIR: 2-methoxy-1-methylethyl acetate; nonane; 3-ethoxy-4-hydroxybenzaldehyde; octamethylcyclotetrasiloxane (D4); decamethylcyclopentasiloxane (D5); naphthalene; Dodecamethylcyclohexasiloxane (D6) TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: ethylbenzene; toluene; naphthalene; benzene

**Clean Water Act (CWA) 311**: n-butyl acetate; xylene; ethylbenzene; toluene; naphthalene; benzene; acetic acid ; formaldehyde

#### Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed

Product/ingredient name	CAS number	Concentration
2-butoxyethyl acetate	112-07-2	5.0324
xylene	1330-20-7	2.7577
2-(2-butoxyethoxy)ethyl acetate	124-17-4	0.87289
ethylbenzene	100-41-4	0.45598
2-(2-butoxyethoxy)ethanol	112-34-5	0.062251
methanol	67-56-1	0.011032
toluene	108-88-3	0.0087947
2-(2-butoxyethoxy)ethanol	112-34-5	0.0066626

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

#### SARA 302/304 :

			SARA 3	02 TPQ	SARA 3	04 RQ
Product/ingredient name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
formaldehyde	<0.1	Yes.	500	74	100	14.8

SARA 304 RQ :

SARA 311/312 Classification :

860607402.2 lbs / 390715760.6 kg [86809238.2 gal / 328608713.7 L]

FLAMMABLE LIQUIDS - Category 3 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

Product/ingredient name	%	Classification
dimethyl carbonate	≥10 - ≤25	FLAMMABLE LIQUIDS - Category 2
ethylester 3-ethoxy propanoicacid	≥5 - ≤10	FLAMMABLE LIQUIDS - Category 3
2-butoxyethyl acetate	≥5 - ≤10	ACUTE TOXICITY (dermal) - Category 4
		ACUTE TOXICITY (inhalation) - Category 4
heptan-2-one	≥3 - ≤5	FLAMMABLE LIQUIDS - Category 3
		ACUTE TOXICITY (oral) - Category 4
		ACUTE TOXICITY (inhalation) - Category 4
n-butyl acetate	≥3 - ≤5	FLAMMABLE LIQUIDS - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
xylene	≥1 - ≤3	FLAMMABLE LIQUIDS - Category 3
		ACUTE TOXICITY (dermal) - Category 4
		ACUTE TOXICITY (inhalation) - Category 4
his (1.2.2.6.6 mentemethy) ( 1. minerialy) echapter	~1	SKIN IRRITATION - Category 2
bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate ethylbenzene	≤1 <1	SKIN SENSITIZATION - Category 1 FLAMMABLE LIQUIDS - Category 2
ethylbenzene		ACUTE TOXICITY (inhalation) - Category 4
		CARCINOGENICITY - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) -
		Category 2
		ASPIRATION HAZARD - Category 1
methyl-1,2,2,6,6-pentamethyl-	≤0.3	SKIN SENSITIZATION - Category 1



## **SECTION 15: Regulatory information**

	4-piperidylsebacate	1	1		
SARA 313 :	SARA 313 notifications must not be of shall include copying and redistribution				
Form R - Reporting requirements :	Product/ingredient	t name		CAS number	Concentration
	2-butoxyethyl acetate xylene ethylbenzene		1	330-20-7 1	- 10 - 3 - 1
Supplier notification :	Product/ingredient	t name		CAS number	Concentration
	2-butoxyethyl acetate xylene ethylbenzene		1	330-20-7 1	- 10 - 3 - 1
State regulations :	Connecticut Carcinogen Reporti Connecticut Hazardous Material Florida substances: None of the of Illinois Chemical Safety Act: Non Illinois Toxic Substances Disclos Louisiana Reporting: None of the Louisiana Spill: None of the comp Massachusetts Substances: The CARBONATE; METHYL (N-AMYL) DIMETHYLBENZENE Massachusetts Spill: None of the Michigan Critical Material: None of Minnesota Hazardous Substance New Jersey Spill: None of the comp New Jersey Hazardous Substance SULFURIC ACID, BARIUM SALT ( CARBONIC ACID, DIMETHYL ES' MONOBUTYL ETHER ACETATE; METHYL PENTYL KETONE; 2-HE ACID, BUTYL ESTER; XYLENES; New York Hazardous Substance New York Toxic Chemical Release Pennsylvania RTK Hazardous Su CARBONIC ACID, DIMETHYL ES' DIMETHYL- Rhode Island Hazardous Substance	Survey: Nor components a le of the com sure to Emp components connents are li following cou ) KETONE; E components of the compo es: None of ti nponents are revention A ces: The follow (1:1); DIMET TER; 2-BUT( ETHANOL; 2 BENZENE, I s: The follow se Reporting ubstances: T TER; 2-HEPT	ne of the comp are listed. ponents are lis <b>loyee Act</b> : No are listed. sted. mponents are listed. are listed. are listed. are listed. ct: None of the wing component listed. ct: None of the DIMETHYL AC PBUTOXY-, A AMYLMETHYL DIMETHYL-; E ing component p: None of the he following co FANONE; ACE	onents are listed. ited. ne of the components listed: BARIUM SULF, TE; N-BUTYL ACETA d. s are listed. e components are listed ents are listed: BARIU ATE; METHYL CARB CETATE; ETHYL CARB CETATE; ETHYL ENE CETATE; METHYL NE- LKETONE; n-BUTYL A- THYL BENZENE; BEI ts are listed: Butyl ace components are listed omponents are listed: ITIC ACID, BUTYL ES	ATE; METHYL TE; XYLENE; d. M SULFATE; ONATE; GLYCOL AMYL KETONE; ACETATE; ACETIC NZENE, ETHYL- tate; Xylene mixed BARIUM SULFATE;
California Prop. 65 PFF :	<b>WARNING</b> : This product can expose of California to cause cancer and by you to chemicals including Ethylbe acrylate, which are known to the St are known to the State of California information go to www.P65Warning	se you to che virth defects o nzene, Naph tate of Califo a to cause bir	emicals includi or other reprod thalene, Silica rnia to cause c	ng Benzene, which is uctive harm. This proc , crystalline, Formalde ancer, and Methanol a	luct can expose hyde and Ethyl and Toluene, which
	Product/ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
	ethylbenzene methanol toluene naphthalene benzene respirable quartz formaldehyde ethyl acrylate	Yes. No. No. Yes. Yes. Yes. Yes. Yes.	No. Yes. No. Yes. No. No. No.	Yes. Yes. Yes. Yes.	Yes. Yes. Yes.



## **SECTION 16: Other information**

	Note: In USA, consult Code of Federal Regulations, Title 29, Labor, Parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable Federal, State or local regulations that apply to safe practices in coating operations. Warning! If you scrape, sand, or remove old paint, you may release lead dust. LEAD is TOXIC.
Validation :	Validated by US - HSE Products Coordinator on 14 July 2021

#### **GHS Classification**

Procedure used to derive the classification.

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2	On basis of test data Calculation method Calculation method
Hazardous Material Information System (U.S.A.) National Fire Protection Association (U.S.A.)	
Health* 2Fire hazard3Physical hazards0Personal protectionX	Health 2 0 Instability Special
Personal Protective Equipment (PPE) shown in this section is a suggestion. Since conditions vary from one work location to another consult the facility safety & health program. Customer or end user is responsible to evaluate worker exposure conditions at the site of application and determine the appropriate PPE suitable for workers at that particular facility or location.	
Abbreviations and acronyms :	

OECD = Organisation for Economic Co-operation and Development

EPCRA = Emergency Planning and Community Right to Know Act

BCF = Bioconcentration Factor DOT = United States Department of Transportation

SCT = Transportation & Communications Ministry, Mexico

TDG = Transport of Dangerous Goods, Canada

IMDG = International Maritime Dangerous Goods IATA = International Air Transport Association SARA = Superfund Amendments Reauthorization Act

ERG = Emergency Response Guide

#### ANSI = American National Standards Institute HCS = Hazardous Communication System TSCA = Toxic Substances Control Act CFR = Code of federal Regulations GHS = Globally Harmonized System of Classification and Labelling of Chemicals

- OSHA = United States Occupational Health and Safety Administration
- NIOSH = National Institute for Occupational Safety and Health
- ACGIH = American Conference of Industrial Hygienists
- IARC = International Agency for Research on Cancer. NTP = National Toxicology Program

ATE = Acute Toxicity Estimate

### Notice to reader

Indicates information that has changed from previously issued version.

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