



# Material Safety Data Sheet

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## Section 1. Chemical product and company identification

**Prepared For**

**Prepared by**

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**IN CASE OF EMERGENCY (HEALTH OR SPILLS):**

**CHEMTREC (US and Canada) (800) 424-9300**

**Product no. : 1670**

**Product - Class : Synteko Retarder**

**Customer Part Numbe :**

**Customer ShipTo ID:**

## Section 2. Hazards identification

**Emergency overview** : Warning!

**Effects of Overexposure** : HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.

CAUSES SEVERE EYE AND SKIN IRRITATION.

CAUSES RESPIRATORY TRACT IRRITATION.

CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: EYE, LENS OR CORNEA.

FLAMMABLE LIQUID AND VAPOR.

VAPOR MAY CAUSE FLASH FIRE.

CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: KIDNEYS, LUNGS, LIVER, HEART, BRAIN, CENTRAL NERVOUS SYSTEM.

Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.

### **Potential acute health effects**

**Eyes** : Severely irritating to the eyes.

Other effects of eye contact may include : burning, eye damage, redness, tearing,

**Skin** : Toxic in contact with skin. Severely irritating to the skin.

Other effects of skin contact may include: dehydration, dermatitis, discoloration,

Effects due to absorption through skin may include: CNS effects, cramps, cyanosis, diarrhea, dizziness, fatigue, headache, nausea, vomiting, weakness,

**Inhalation** : Irritating to respiratory system.

Other effects of inhalation may include: blindness, blurred vision, CNS effects, cramps, cyanosis, dizziness, drowsiness, fatigue, headache, nausea, shortness of breath, weakness,

**Ingestion** : Toxic if swallowed.

Other effects of ingestion may include : abdominal pain, blindness, CNS effects, cramps, cyanosis, diarrhea, dizziness, drowsiness, fatigue, gastric disturbances, headache, incoordination, irritation, nausea, vomiting, weakness,

**Potential chronic health effects** : CARCINOGENIC EFFECTS: Classified None. by NIOSH [methyl alcohol].  
 MUTAGENIC EFFECTS: None by OSHA standard.  
 TERATOGENIC EFFECTS: Classified POSSIBLE for human [methyl alcohol].  
 Contains material which causes damage to the following organs: eye, lens or cornea.  
 Contains material which may cause damage to the following organs: kidneys, lungs, liver, heart, brain, central nervous system (CNS).

**Medical conditions aggravated by over-exposure** : skin disorders, eye disorders, liver conditions, kidney conditions, cardiovascular diseases,

NOTICE: Reports have associated repeated and prolonged OVEREXPOSURE to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful or fatal.

**See toxicological information (section 11)**

### Section 3. Composition, information on ingredients

Name	CAS #	% by weight	Vapor pressure	Exposure Limits (ACGIH-TLV/OSHA-PEL)
ethyl alcohol	64-17-5	10 - 25	5.5 kPa (41.4 mm Hg) (at 20°C)	<b>ACGIH TLV (United States).</b> TWA: 1000 ppm 8 hour(s). <b>OSHA PEL (United States).</b> TWA: 1000 ppm 8 hour(s).
n-propanol	71-23-8	10 - 25	1.9 kPa (14.5 mm Hg) (at 20°C)	<b>ACGIH TLV (United States).</b> TWA: 200 ppm 8 hour(s). STEL: 400 ppm 15 minute(s). <b>OSHA PEL (United States).</b> TWA: 200 ppm 8 hour(s).
dimethyl succinate	106-65-0	5 - 10	Not available.	Not available.
methyl alcohol	67-56-1	1 - 5	13 kPa (97.7 mm Hg) (at 20°C)	<b>ACGIH TLV (United States). Skin</b> TWA: 200 ppm 8 hour(s). STEL: 250 ppm 15 minute(s). <b>OSHA PEL (United States).</b> TWA: 200 ppm 8 hour(s).

### Section 4. First aid measures

- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.
- Skin contact** : Get medical attention immediately if symptoms occur. Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing, or wear gloves. Wash clothing before reuse. Thoroughly clean shoes before reuse.
- Inhalation** : Get medical attention immediately if symptoms occur. Move exposed person to fresh air. If fumes are still suspected to be present, the rescuer should wear an appropriate mask or a self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if irregular breathing, or respiratory arrest occurs provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

## Section 5. Fire fighting measures

- Flammability of the product** : Flammable.
- Auto-ignition temperature** : The lowest known value is 398.85°C (749.9°F) (ethyl alcohol).
- Flash points** : Closed cup: 18°C (64°F). (Setaflash.)
- Flammable limits** : The greatest known range is Lower: 6% Upper: 44% (methyl alcohol)
- Products of combustion** : These products are carbon oxides (CO, CO<sub>2</sub>).
- Fire Hazards in Presence of Various Substances/Conditions** : Highly flammable in presence of open flames, sparks and static discharge.  
Flammable in presence of oxidizing materials.
- Explosion Hazards in Presence of Various Substances/Conditions** : Not available.
- Fire-fighting media and instructions** : SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: During emergency conditions, overexposure to products of combustion may cause a health hazard; symptoms may not be immediately apparent. Obtain medical attention.
- Protective clothing (fire)** : Be sure to use an approved/certified respirator or equivalent.

## Section 6. Accidental release measures

- Spill and Leak** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Do not touch or walk through spilled material.  
If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.
- Dispose of as in Section 13.**

## Section 7. Handling and storage

- Handling** : Do not ingest. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Wash thoroughly after handling.
- Storage** : Store in an approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

OTHER PRECAUTIONS: All precautions must be observed. Empty container may retain product residues.

## Section 8. Exposure controls, personal protection

Selection of personal protective equipment (PPE) is to be established by the employer performing a PPE hazard assessment. In the U.S.A, OSHA requires completion of a documented PPE hazard assessment as described in 29 CFR 1910.132.

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the work-station location.

### Personal protection

- Eyes** : Safety glasses.
- Body** : Synthetic apron.
- Respiratory** : Wear appropriate respirator when ventilation is inadequate.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flattening should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

**Hands** : Impervious gloves.

**Protective clothing (pictograms)** :



**HYGIENIC PRACTICES:** Good personal hygiene practices are required at all times when handling chemicals. These practices include, but are not limited to, washing when safety equipment is removed, at the end of each shift or when going on breaks and especially if contamination occurs.

## Section 9. Physical and chemical properties

<b>Physical state and Appearance</b>	: Liquid.
<b>Color</b>	: Not available.
<b>Odor</b>	: Not available.
<b>pH</b>	: Not available.
<b>Boiling/condensation point</b>	: The lowest known value is 63.8889°C (147°F) (methyl alcohol).
<b>Melting/freezing point</b>	: May start to solidify at -98°C (-144.4°F) based on data for: methyl alcohol.
<b>Specific gravity</b>	: Weighted average: 0.92 (Water = 1)
<b>Vapor pressure</b>	: The highest known value is 13 kPa (97.7 mm Hg) (at 20°C) (methyl alcohol).
<b>Vapor density</b>	: Heavier than air
<b>Volatility</b>	: 100% (v/v), 100% (w/w)
<b>Odor threshold</b>	: The lowest known value is 100 ppm (methyl alcohol)
<b>Evaporation rate</b>	: The highest known value is Greater than 1. (ethyl alcohol) compared to butyl acetate
<b>VOC</b>	: 936 to 937 (g/l).
<b>Solubility</b>	: Easily soluble in cold water, hot water.

## Section 10. Stability and reactivity

<b>Stability and reactivity</b>	: Stable.
<b>Conditions of instability</b>	: heat, open flame, sparks, moisture,
<b>Incompatibility with various substances</b>	: Reactive with oxidizing agents, reducing agents, acids, alkalis. Slightly reactive to reactive with metals.
<b>Hazardous Reaction Products</b>	: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Hazardous polymerization</b>	: Will not undergo hazardous polymerization.

## Section 11. Toxicological information

### Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
ethyl alcohol	LD50	7060 mg/kg	Oral	Rat
	LD50	20000 mg/kg	Dermal	Rabbit
	LD50	20000 mg/kg	Dermal	Rabbit
	LC50	20000 ppm (10 hour(s))	Inhalation	Rat
n-propanol	LD50	1870 mg/kg	Oral	Rat
	LD50	4000 mg/kg	Dermal	Rabbit
	LC50	>20000 mg/m <sup>3</sup> (1 hour(s))	Inhalation	Rat
dimethyl succinate	LD50	>5000 mg/kg	Oral	Rat
	LD50	>5000 mg/kg	Dermal	Rabbit
methyl alcohol	LD50	5600 mg/kg	Oral	Rat
	LD50	7300 mg/kg	Oral	Mouse

LD50	7300 mg/kg	Oral	Mouse
LD50	15800 mg/kg	Dermal	Rabbit
LDLo	143 mg/kg	Oral	human
LDLo	428 mg/kg	Oral	human
LDLo	6422 mg/kg	Oral	man
LDLo	393 mg/kg	Dermal	Monkey.
LC50	64000 ppm (4 hour(s))	Inhalation	Rat

## Section 12. Ecological information

### Ecotoxicity data

#### Ingredient name

Ingredient name	Species	Period	Result
ethyl alcohol	Daphnia magna (EC50)	48 hour(s)	2 mg/l
	Daphnia magna (EC50)	48 hour(s)	9.3 mg/l
	Daphnia magna (EC50)	48 hour(s)	>100 mg/l
	Daphnia magna (LC50)	96 hour(s)	>100 mg/l
	Pimephales promelas (LC50)	96 hour(s)	>100 mg/l
n-propanol	Oncorhynchus mykiss (LC50)	96 hour(s)	13000 mg/l
	Daphnia magna (EC50)	48 hour(s)	3644 mg/l
	Daphnia magna (EC50)	48 hour(s)	4620 mg/l
	Pimephales promelas (LC50)	96 hour(s)	4480 mg/l
	Pimephales promelas (LC50)	96 hour(s)	4630 mg/l
methyl alcohol	Daphnia magna (EC50)	48 hour(s)	>10000 mg/l
	Oncorhynchus mykiss (EC50)	48 hour(s)	13200 mg/l
	Lepomis macrochirus (EC50)	48 hour(s)	16000 mg/l
	Daphnia magna (LC50)	96 hour(s)	>100 mg/l
	Pimephales promelas (LC50)	96 hour(s)	>100 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	15400 mg/l

**Products of degradation** : These products are carbon oxides (CO, CO<sub>2</sub>) and water.

**Toxicity of the products of biodegradation** : The products of degradation are less toxic than the product itself.



## Section 13. Disposal considerations



**Waste information** : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. 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.

**Consult your local or regional authorities.**

## Section 14. Transport information

**Note:** Information contained in this section may vary from the actual shipping description depending on quantity in containers, mode of shipment and use of exemptions.

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>DOT Classification</b>	UN1263	PAINT RELATED MATERIAL (including paint thinning or reducing compound) (ethyl alcohol)	3	II		<b>Packaging instruction</b> <b>Passenger Aircraft</b> Quantity limitation: 5 L  <b>Cargo Aircraft</b> Quantity limitation: 60 L
<b>TDG Classification</b>	UN1263	PAINT RELATED MATERIAL (including paint thinning or reducing compound) (ethyl alcohol)	3	II		-

<b>IMDG Class</b>	1263	P A I N T R E L A T E D MATERIAL (including paint thinning or reducing compound) (ethyl alcohol)	3	II		-
<b>IATA-DGR Class</b>	1263	P A I N T R E L A T E D MATERIAL (including paint thinning or reducing compound) (ethyl alcohol)	3	II		<p><b>Quantity limitation - Passenger Aircraft - Limited quantity</b> 1 L</p> <p><b>Quantity limitation - Passenger Aircraft</b> 5 L</p> <p><b>Quantity limitation - Cargo Aircraft</b> 60 L</p>

## Section 15. Regulatory information

**U.S. Federal regulations** : All components in this product have been verified as being on the TSCA Inventory.  
(HAPS) Clean air act (CAA) 112 regulated toxic substances: methyl alcohol; methyl isobutyl ketone; toluene; ethyl benzene; xylene, mixed isomers

**SARA 313**

**Form R - Reporting requirements** : methyl alcohol 1.00 - 3.00

**State regulations** : WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.: ethyl benzene, toluene

**International regulations**

**International lists** : All components of this product are on the CEPA DSL inventory.

\*\* All values in this section reported as percentage by weight, unless otherwise specified.

## Section 16. Other information

**HMIS III ® Hazardous Material Information System (U.S.A.)**

Health	*	1
Flammability		4
Physical Hazard		0
Personal protection		

**WHMIS (Canada)**



Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).  
 Class D-1B: Material causing immediate and serious toxic effects (TOXIC).  
 Class D-2A: Material causing other toxic effects (VERY TOXIC).  
 Class D-2B: Material causing other toxic effects (TOXIC).

**Notice to reader**

The absence of a positive finding indicates that we believe, to the best of our knowledge, that the negative is true.

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