



## Material Safety Data Sheet

FOR INDUSTRIAL USE ONLY

### 202728 1% Solution in PGMME

Revision Date 01/11/2012

#### 1. Product and company identification

Product name	202728 1% HQ Solution in PGMME
MSDS Number	300000019701
Product Type	Additive
Product use	Inhibitor
Manufacturer, Importer, Supplier	PCCR USA, INC. 400 EAST COTTAGE PLACE CARPENTERSVILLE IL 60110-1878  MSDS@pccrusa.com
Print date	10-JAN-2012
Telephone	<b>For Emergency Transportation Information</b> CHEMTREC US Domestic (800) 424-9300 CHEMTREC International (703) 527-3887 CANUTEC CA Domestic (613) 996-6666

For additional health and safety or regulatory information, call 1 847-836-3659.

#### 2. Hazards identification

Form	Liquid
Odor	pleasant, ethereal
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	WARNING ! FLAMMABLE LIQUID AND VAPOR. MAY FORM EXPLOSIVE MIXTURES WITH AIR. HARMFUL IF SWALLOWED. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

##### Potential acute health effects

Inhalation	Can cause central nervous system (CNS) depression. Irritating to respiratory system.
Ingestion	Harmful if swallowed. Can cause central nervous system (CNS) depression.
Skin	Irritating to skin.

**Eyes** Irritating to eyes.

**Potential chronic health effects**

**Chronic effects** Contains material that can cause target organ damage.

**Carcinogenicity** No known significant effects or critical hazards.

**Mutagenicity** No known significant effects or critical hazards.

**Teratogenicity** No known significant effects or critical hazards.

**Developmental effects** No known significant effects or critical hazards.

**Fertility effects** No known significant effects or critical hazards.

**Target organs** Contains material which causes damage to the following organs: upper respiratory tract, skin, eyes, central nervous system (CNS), Review Section 2 and 11 for any additional assessments.

**Over-exposure signs/symptoms**

**Inhalation** Adverse symptoms may include the following: nausea or vomiting, respiratory tract irritation, coughing, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness,

**Ingestion** Adverse symptoms may include the following: nausea or vomiting, dizziness/vertigo, drowsiness/fatigue, headache, unconsciousness,

**Skin** Adverse symptoms may include the following: irritation, redness,

**Eyes** Adverse symptoms may include the following: pain or irritation, watering, redness,

**Medical conditions aggravated by over-exposure** Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See section 11 for more detailed information on health effects and symptoms.

### 3. Composition/Information on ingredients

<u>Ingredient name</u>	<u>CAS number</u>	<u>WT %</u>
1-Methoxy-2-Propanol	107-98-2	99.0
Hydroquinone	123-31-9	1.0

*\*\* Any applicable Canadian trade secret numbers will be listed in Section 15.*

### 4. First aid measures

**Eye contact** 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. Get medical attention.

**Skin contact** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Inhalation** Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained

breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if 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. Get medical attention.

**Ingestion**

Wash out mouth with water. 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.

**Protection of first aid personnel**

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. If it is suspected that dust, vapor, mist or gas are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

**Notes to physician**

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

**Flammability of the product**

Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

**Extinguishing media**  
**Suitable**

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Not suitable**

Do not use water jet.

**Special exposure hazards**

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Hazardous combustion products**

Decomposition products may include the following materials: carbon oxides,

**Special protective equipment for fire-fighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Special Remarks on Explosion Hazards**

Liquid and vapor may cause a flash fire or ignite explosively. Vapor is heavier than air and may settle in low places or spread long distances to a source of ignition and flashback. Explosive atmospheres may linger. Closed containers can rupture and release toxic vapors or decomposition products.

## 6. Accidental release measures

**Personal precautions**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through

spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). Do not breathe dust, vapor, mist or gas.

**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).

**Large spill**

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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

**Small spill**

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

## 7. Handling and storage

**Handling**

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Follow US NFPA 30, "Flammable & Combustible Liquids Code", or other national, state and local codes on safe handling of flammable liquids. Train workers in the recognition and prevention of hazards associated with the storage, handling and transfer of flammable liquids in the plant. Empty containers retain product residue and can be hazardous. Do not reuse container. Do not breathe dust, vapor, mist or gas.

**Storage**

Store in an area designated for storage of flammable liquids (See NFPA 30 and OSHA 29 CFR 1910.106). Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that

have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

### Ingredient name

1-Methoxy-2-Propanol

### Occupational exposure limits

#### **ACGIH TLV Time Weighted Average (TWA)**

369 mg/m<sup>3</sup> 100 ppm

#### **ACGIH TLV Short Term Exposure Limit (STEL)**

553 mg/m<sup>3</sup> 150 ppm

**Consult local authorities for acceptable exposure limits.**

### **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.

### **Engineering measures**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### **Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Respiratory**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

### **Hands**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

### **Eyes**

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 or dusts.

### **Skin**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### **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.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

Physical state	: Liquid
Color	: Clear, yellow to reddish-brown
Odor	: pleasant, ethereal
Odor threshold	: Not available
pH	: Not available
Boiling point	: 120 °C (248 °F)
Flash point	: 32.2 °C (90.0 °F) Setaflash Closed Cup ASTM D 3828
Evaporation rate	: Not available
Flammable limits	
Upper:	: Not available
Lower:	: Not available
Vapor pressure	: Not available
Vapor density	: Not available
Relative density	: 0.924 @15.6 °C (60.1 °F )
Solubility	: Appreciable
Partition coefficient: n-octanol/water	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity	: Kinematic-Not available Dynamic- 25 mPa·s @25 °C (77 °F) Not available
Typical % solids	: Not available

#### Other information

Not applicable.

## 10. Stability and reactivity

Reactivity	Stable under normal conditions.
Stability	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
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.
Materials to avoid	Reactive or incompatible with the following materials: oxidizing materials,
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

#### Acute toxicity

##### Ingredient name

1-Methoxy-2-Propanol

LD50 Oral	Mouse	11,700 mg/kg
LD50 Oral	Rabbit	5,700 mg/kg
LD50 Oral	Rat	3,739 mg/kg
LC50 Inhalation	Rat	10000 ppm/5 h

Hydroquinone	LD50 Dermal	Rabbit	13,536 mg/kg
	LD50 Oral	Rat	302 mg/kg
	LD50 Oral	Mouse	245 mg/kg

**Other Toxicological Information****Carcinogenicity****Classification****Ingredient name**

1-Methoxy-2-Propanol

ACGIH	Not classified
IARC	Not classified
NTP	Not listed
OSHA	Not classified
EU	Not classified

Hydroquinone

ACGIH	Confirmed animal carcinogen with unknown relevance to humans.
IARC	Not classifiable as to its carcinogenicity to humans.
NTP	Not listed
OSHA	Not classified
EU	Limited evidence of a carcinogenic effect.

**12. Ecological information****Environmental effects**

This product shows a low bioaccumulation potential.

**Aquatic ecotoxicity****Ingredient name**

Hydroquinone

Fresh water	Acute LC50 0.044 mg/l/96 h	Rainbow trout,donaldson trout
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**Other adverse effects**

No known significant effects or critical hazards.

**12. Ecological information****Environmental effects**

This product shows a low bioaccumulation potential.

**Aquatic ecotoxicity****Ingredient name**

Hydroquinone

Fresh water	Acute LC50 0.044 mg/l/96 h	Rainbow trout,donaldson trout
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**Other adverse effects**

No known significant effects or critical hazards.

**13. Disposal considerations****Waste disposal**

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

### International transport regulations

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR	1993	FLAMMABLE LIQUID, N.O.S. (1-Methoxy-2-Propanol)	Class 3 III	
TDG	1993	FLAMMABLE LIQUID, N.O.S. (1-Methoxy-2-Propanol)	Class 3 III	
IMO/IMDG	1993	FLAMMABLE LIQUID, N.O.S. (1-Methoxy-2-Propanol)	Class 3 III	
IATA (Cargo)	1993	FLAMMABLE LIQUID, N.O.S. (1-Methoxy-2-Propanol)	Class 3 III	

\*PG : Packing group

## 15. Regulatory information

### US regulations

**HCS Classification** Flammable liquid, Irritating material, Target organ effects

### **U.S. Federal regulations**

**SARA 311/312 Classification** Immediate (acute) health hazard, Delayed (chronic) health hazard, Fire hazard

### **SARA 313 - Supplier Notification**

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

The following components are listed: Hydroquinone - 123-31-9 (%),

**SARA 302 Extremely Hazardous Substances** The following components are listed: Hydroquinone,

### **State regulations**

**Massachusetts RTK Substances** The following components are listed: 1-Methoxy-2-Propanol, Hydroquinone,

**New Jersey RTK Hazardous Substances** The following components are listed: 1-Methoxy-2-Propanol, Hydroquinone,

**Pennsylvania RTK Hazardous Substances** The following components are listed: 1-Methoxy-2-Propanol, Hydroquinone,

**California Prop. 65:** None required.

### Canada

### **WHMIS (Canada)**

Class B-2: Flammable liquid  
Class D-1B: Material causing immediate and serious toxic effects (Toxic).  
Class D-2B: Material causing other toxic effects (Toxic).

### **Canadian lists**

**Canadian NPRI:** None required.



**International regulations****Chemical inventories**

Australia inventory (AICS) All components are listed or exempted.  
Canada inventory All components are listed or exempted.  
Japan inventory All components are listed or exempted.  
China inventory (IECSC) All components are listed or exempted.  
Korea inventory All components are listed or exempted.  
New Zealand Inventory (NZIoC) Not determined.  
Philippines inventory (PICCS) All components are listed or exempted.  
United States inventory (TSCA 8b) All components are listed or exempted.

**16. Other information****Hazardous Material  
Information System III  
(U.S.A.)**

Health : 2  
Flammability: 3  
Physical hazards : 0  
Chronic : \*

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**Prepared by** Product Safety & Regulatory Compliance Group  
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