

**PRODUCT CODE AND NAME** : JCLP155 JEFFCOOL® P155  
**DATE ISSUED** : 1/30/98  
**DATE PRINTED** : 1/31/98

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****MATERIAL IDENTITY**

PRODUCT CODE AND NAME

**JCLP155 JEFFCOOL® P155**

Chemical Name and/or Family or Description:

Antifreeze

**COMPANY INFORMATION**

Huntsman Petrochemical Corporation  
P.O. Box 27707  
Houston, TX 77227-7707

**TELEPHONE NUMBERS**

Transportation Emergency

Company: (409) 727-0831

CHEMTREC: (800) 424-9300

Medical Emergency: (409) 722-9673 (24 Hour)

General MSDS Assistance: (713) 235-6432

Technical Information: (512) 459-6543

**2. COMPOSITION AND INFORMATION ON INGREDIENTS**

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.

Product and/or Component(s) Carcinogenic According to:

OSHA IARC NTP OTHER NONE X

**Composition:**

Chemical Name	CAS Number	Exposure Limits	Range in %
1,2- propanediol	57-55-6		50.00-64.99
Deionized water	7732-18-5		35.00-49.99
Phosphoric acid, dipotassium salt	7758-11-4		1.00-2.99

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS ACCORDING TO OSHA (1910.1200).

DATE ISSUED : 1/30/98  
DATE PRINTED : 1/31/98  
COMPANY : HUNTSMAN

### 3. HAZARD IDENTIFICATION

#### EMERGENCY OVERVIEW

**Appearance:**

Clear liquid; may be colored by customer request

**Odor:**

Mild odor

#### WARNING STATEMENT

CAUTION !

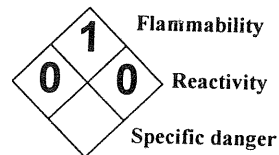
ASPIRATION HAZARD IF SWALLOWED -  
CAN ENTER LUNGS AND CAUSE DAMAGE  
THIS PRODUCT NOT INTENDED FOR INTERNAL USE

**Hazardous Material  
Information System  
(United States)**

Health	0
Fire	1
Reactivity	0
Personal protection	0

**National Fire  
Protection Association  
NFPA (United States)**

Health



#### POTENTIAL HEALTH EFFECTS

**Primary Route of Exposure**

Eye X Skin X Inhalation X Ingestion

**Effects of Overexposure**

**Acute:**

**Eyes:**

May cause minimal irritation, experienced as temporary discomfort.

**Skin:**

Brief contact is not irritating. Prolonged contact, as with clothing wetted with material, may cause defatting of skin or irritation, seen as local redness with possible mild discomfort. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.

**Inhalation:**

Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness.

**Ingestion:**

If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Aspiration may occur during swallowing or vomiting resulting in lung damage.

**Sensitization Properties:** Unknown

**Chronic:**

No adverse effects have been documented in humans as a result of chronic exposure. Section 11 may contain applicable animal data.

**Medical Conditions Aggravated by Exposure:**

There is no evidence that this product aggravates an existing medical condition.

**Other Remarks:**

**DATE ISSUED** : 1/30/98  
**DATE PRINTED** : 1/31/98  
**COMPANY** : HUNTSMAN

None

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#### **4. FIRST AID MEASURES**

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**Eyes:**

Flush eyes with plenty of water for several minutes. Get medical attention if eye irritation persists.

**Skin:**

Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

**Ingestion:**

If person is conscious and can swallow, give two glasses of water (16 oz.) but do not induce vomiting. If vomiting occurs, give fluids again. Have medical personnel determine if evacuation of stomach or induction of vomiting is necessary. Do not give anything by mouth to an unconscious or convulsing person.

**Inhalation:**

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

**Other Instructions:**

Aspiration of this product during induced emesis may result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Center for additional treatment information.

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#### **5. FIRE-FIGHTING MEASURES**

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**Ignition Temperature - AIT (degrees C):**

Not determined.

**Flash Point (degrees C):**

> 100 (>212 F)

**Flammable Limits % (Lower-Upper):**

**Lower:** Not Determined

**Upper:** Not Determined

**Recommended Fire Extinguishing Agents And Special Procedures:**

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

**Unusual or Explosive Hazards:**

None

**Special Protective Equipment for Firefighters:**

No special equipment or procedures required.

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#### **6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)**

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**Procedures in Case of Accidental Release, Breakage or Leakage:**

Contain spill if possible, contain with absorbent materials such as clay or soil, and shovel up. Avoid skin and eye contact.

DATE ISSUED : 1/30/98  
DATE PRINTED : 1/31/98  
COMPANY : HUNTSMAN

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## 7. HANDLING AND STORAGE

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### Precautions to be Taken in

#### Handling:

Minimum feasible handling temperatures should be maintained.

#### Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Protective Equipment (Type)

#### Eye/Face Protection:

Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

#### Skin Protection:

Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be laundered or dry-cleaned.

#### Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

#### Ventilation:

Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate.

#### Exposure Limit for the Total Product:

None established for product.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance:

Clear liquid; may be colored by customer request

### Odor:

Mild odor

### Boiling Point (degrees C):

Not determined.

### Melting/Freezing Point (degrees C):

-34.4 (-30 F)

### Specific Gravity (water=1):

1

### pH:

9.9

### Vapor Pressure:

**DATE ISSUED** : 1/30/98  
**DATE PRINTED** : 1/31/98  
**COMPANY** : HUNTSMAN

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Not determined.

**Viscosity:**

< 20 cSt at 20 C ( 68 F )

**VOC Content:**

Not Determined

**Vapor Density (Air=1):**

>1

**Solubility in Water (%):**

>10

**Other:**

None

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## **10. STABILITY AND REACTIVITY**

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**This Material Reacts Violently With:**

Air Water Heat Strong Oxidizers Others None of these X

**Comments:**

None

**Products Evolved When Subjected to Heat or Combustion:**

Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones.

**Hazardous Polymerizations:**

DO NOT OCCUR

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## **11. TOXICOLOGICAL INFORMATION**

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**TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)**

**Oral:**

LD50 Believed to be > 5.00 g/kg (rat) practically non-toxic

**Inhalation:**

Believed to be practically non-toxic

**Dermal:**

LD50 Believed to be > 2.00 g/kg (rabbit) practically non-toxic

**IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)**

**Skin:**

(Draize) Believed to be < .50 /8.0 (rabbit) no appreciable effect

**Eyes:**

(Draize) Believed to be < 15.00 /110 (rabbit) no appreciable effect

**Sensitization:**

Not determined.

**Other:**

None

DATE ISSUED : 1/30/98  
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## 12. DISPOSAL CONSIDERATIONS:

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### Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

### Remarks:

None

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## 13. TRANSPORT INFORMATION

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### Transportation

#### DOT:

##### Proper Shipping Name:

Not regulated

##### Hazard Class:

Not regulated

##### Identification Number:

Not regulated

##### Packing Group:

Not regulated

##### Label Required:

Not regulated

### IMDG

##### Proper Shipping Name:

Not evaluated

### ICAO

##### Proper Shipping Name:

Not evaluated

### TDG

##### Proper Shipping Name:

Not regulated

##### Hazard Class:

Not regulated

##### Identification Number:

Not regulated

##### Label Required:

Not regulated

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#### 14. REGULATORY INFORMATION

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##### Federal Regulations:

###### SARA Title III:

###### Section 302/304 Extremely Hazardous Substances

Chemical Name	CAS Number	Range in %	TPQ	RQ
None.				

###### Section 311 Hazardous Categorization:

Acute Chronic Fire Pressure Reactive N/A X

###### Section 313 Toxic Chemical

Chemical Name	CAS Number	Concentration
None.		

##### CERCLA 102(a)/DOT Hazardous Substances:

Chemical Name	CAS Number	Range in %	RQ
None.			

##### States Right-to-Know Regulations:

Chemical Name	State Right-to-know
1,2- propanediol	PA, RI

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

##### California Prop. 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name	CAS Number
None.	

##### INTERNATIONAL REGULATIONS:

###### TSCA Inventory Status:

This product, or its components, are listed on or are exempt from the the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

###### WHMIS Classification:

Not regulated

###### Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

###### EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

###### Australian Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

###### Japan Inventory Status:

Not determined

**DATE ISSUED** : 1/30/98  
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## **15. ENVIRONMENTAL INFORMATION**

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**Aquatic Toxicity:**

Not determined.

**Mobility:**

Not determined.

**Persistence and Biodegradability:**

This product is estimated to have a moderate rate of biodegradation; greater than or equal to 30 % degradation over a test period of 28 days or less.

**Potential to Bioaccumulate:**

This product is estimated to have a low potential to bioconcentrate.

**Remarks:**

None

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## **16. OTHER INFORMATION 1/30/98**

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None

*THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION AS PART OF HUNTSMAN'S PRODUCT SAFETY PROGRAM. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN. DATA SHEETS ARE AVAILABLE FOR ALL HUNTSMAN PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL HUNTSMAN PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE AND YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.*

*TO DETERMINE APPLICABILITY OR EFFECTS OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USER SHOULD CONSULT HIS LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. HUNTSMAN DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.*

Date Issued: 1/30/98.

Verified by Phillip B. Valkovich.

Inquiries regarding MSDS should be directed to:

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P.O. Box 27707  
Houston, TX 77227-7707