

## **1 – PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME:	. SPEC COOL HTF 95
CHEMICAL NAME/	
CLASS/SYNONYMS:	. Closed-loop, water-based Inhibited EG based heat transfer fluid
PRODUCT NUMBER:	. SPEC COOL HTF 95
UN/NA NUMBER:	. None
CHEMICAL FAMILY:	. Glycol
CAS NUMBER:	• Not applicable for mixtures.
FORMULA:	Mixture
COMPANY:	. JMN Specialties, Inc.
COMPANY:	<b>. JMN Specialties, Inc.</b> 1100 Victory Drive – Westwego, Louisiana USA 70094
COMPANY:	•
COMPANY:	1100 Victory Drive – Westwego, Louisiana USA 70094
	1100 Victory Drive – Westwego, Louisiana USA 70094 Phone (504) 341-3749, Fax (504) 341-5868
	1100 Victory Drive – Westwego, Louisiana USA 70094 Phone (504) 341-3749, Fax (504) 341-5868 www.jmnspecialties.com
	<ul> <li>1100 Victory Drive – Westwego, Louisiana USA 70094</li> <li>Phone (504) 341-3749, Fax (504) 341-5868</li> <li>www.jmnspecialties.com</li> <li>CALL CHEMTEL: Toll Free US &amp; Canada: (800) 255-3924, Outside USA +01-813-248-0585.</li> </ul>

# 2 – HAZARDS IDENTIFICATION

#### **GHS HAZARD CLASSIFICATION:**

**Pictograms:** 

#### WARNING LABEL ITEMS INCLUDING PRECAUTIONARY STATEMENTS:



SIGNAL WORD:..... WARNING!

## GHS HAZARD AND PRECAUTIONARY STATEMENTS:

H303 H313 H333: May be harmful if swallowed, in contact with skin or if inhaled

P101+102+103: If medical advice is needed, have product container or label at hand. Keep out of the reach of children. Read label before use.

P202+270+280+281: Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.



P501: Dispose of contents/container: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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# 3 – COMPOSITION / INFORMATION ON INGREDIENTS HAZARDOUS INGREDIENT PERCENT\* CAS NUMBER Ethylene Glycol 95 - 95.5 107-21-1 Inhibitor 2 - 5 Conf. \*Any concentration shown as a range is to protect confidentiality or is due to batch variation.

# 4 – FIRST-AID MEASURES

	Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial resuscitation. Keep person warm and at rest. Treat symptomatically and supportively. Seek medical attention immediately. Qualified medical personnel should consider administering oxygen. Give large amounts of fresh water or milk immediately. Do not give anything by mouth if person is unconscious or otherwise unable to swallow. If vomiting occurs, keep head below hips to prevent aspiration. Treat symptomatically and supportively. Seek medical
EYES:	attention immediately. Flush eye with copious quantities of water. If persistent irritation
	occurs, obtain medical attention. Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Treat symptomatically. Following ingestion admission to hospital should be the first priority. Gastric lavage or emesis should be
	performed as soon as possible to minimise absorption and is recommended within four hours of ingestion. Gastric lavage or emesis should not be attempted unless medical expertise or adequate facilities are available. Ethanol may be given intravenously as an antidote to prevent build-up of toxic metabolites and increase excretion of unchanged ethylene glycol by the kidneys. Uraemia, pulmonary oedema and metabolic acidosis can occur and dialysis, preferably haemodialysis, may be employed to treat these complications and to remove ethylene glycol and its metabolites from the blood. Ethylene glycol can cause central nervous system repression and metabolic acidosis. Consider removal by gastric lavage. Blockade of the diacid/hydroxyacid metabolites may follow competitive inhibition of alcohol dehydrogenase with ethanol or 4-methyl pyrazole. Consider maintenance of a plasma ethanol level of 100 mg/dL to 150 mg/dL.



# **5 – FIRE-FIGHTING MEASURES**

	• On burning will emit toxic fumes, including those of oxides of carbon . Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep containers cool with water spray.
AUTOIGNITION TEMP:	<b>.</b> 773°F (412°C)
EXTINGUISHING MEDIA:	Determined by surrounding material. In case of fire, use water fog, dry chemical, $CO_2$ , or "alcohol" foam. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.
SPECIAL FIRE FIGHTING	
UNUSUAL FIRE AND	
EXPLOSION HAZARDS:	• Containers may explode from internal pressure if confined to fire. Cool with water spray.

#### 6 – ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:	. Slippery when spilt. Begin clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water.
WASTE DISPOSAL:	Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
RCRA STATUS:	If discarded in its purchased form, it is not a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

#### 7 – HANDLING and STORAGE

STORAGE:Keep in a tightly closed container, stored in a cool, dry, ventilated area<br/>below 44°C (110°F). Protect against physical damage. Isolate from<br/>incompatible substances. Containers of this material may be hazardous<br/>when empty since they retain product residues (vapors, liquid); observe<br/>all warnings and precautions listed for the product. Drum must not be<br/>washed out or used for other purposes.



**HANDLING:**...... Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.

## 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **OCCUPATIONAL EXPOSURE LIMITS**

#### HAZARDOUS INGREDIENT

Ethylene Glycol

Inhibitor

40 ppm

TLV-TWA

40 ppm

nhibitor

None Established

PEL

None Established



**EXPOSURE CONTROLS:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

RESPIRATORY PROTECTION: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.
 PROTECTIVE CLOTHING: Eye/face protection: Wear chemical goggles; face shield (if splashing is possible). Skin protection: Chemical resistant, impermeable gloves.

is possible). **Skin protection:** Chemical resistant, impermeable gloves Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron or chemical suit and chemical resistant boots are recommended.

ADDITIONAL MEASURES: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.



# 9 – PHYSICAL / CHEMICAL PROPERITES

BOILING POINT:	386°F (197°C)
FREEZING POINT:	8.6°F (-13°C)
FLASHPOINT:	230°F (110°C)
UPPER FLAME LIMIT (%):	NA
LOWER FLAME LIMIT (%):	NA
VAPOR PRESSURE:	ND
VAPOR DENSITY (AIR=1):	. > 1
SPECIFIC GRAVITY:	1.125 - 1.350
рН:	50% Solution in water: 10.0 - 11.5
SOLUBILITY IN WATER:	Complete
VOLATILITY	
INCLUDING WATER:	9.55 pounds per gallon
MOLECULAR WEIGHT:	No data available (G/MOLE)
EVAPORATION RATE:	< 1
PHYSICAL STATE:	Liquid
COLOR:	Magenta
ODOR:	Bland

# 10 – STABILITY and REACTIVITY

 STABILITY:
 Stable

 HAZARDOUS DECOMP.:
 Will not occur

 INCOMPATIBILITY:
 Oxidizers or Oxidizing Materials.

 HAZARDOUS REACTIONS:
 Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

## 11 – TOXICOLOGICAL INFORMATION

**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 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 by OSHA.

# THRESHOLD LIMIT VALUE:.. None Established for this Product

OSHA PEL:	. 20 ppm
LISTED CARCINOGEN:	This product IS NOT listed in the National Toxicology Program (NTP)
	Report on Carcinogens (latest edition) or has been found to be a
	potential carcinogen in the International Agency for Research on
	Cancer (IARC) Monographs (latest editions) or found to be a potential
	carcinogen by OSHA.
MEDICAL CONDITION	
AGGRAVATED:	Existing dermatitis.



#### INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS

#### ORAL

**Product:** Initial symptoms following a large dose (>100ml) are those of alcohol intoxication progressing to vomiting, headache, stupor, convulsions and unconsciousness. Respiratory system involvement may occur 12 - 24 hours after ingestion. Symptoms may include hyperventilation and rapid shallow breathing. Death may occur from respiratory failure or pulmonary oedema.

#### DERMAL

Product:...... Skin contact may aggravate existing dermatitis.

#### INHALATION

#### **REPEATED DOSE TOXICITY**

Product:..... No Data Available

#### SKIN CORROSION / IRRITATION

#### **SERIOUS EYE DAMAGE / IRRITATION**

#### **RESPIRATORY OR SKIN SENSITIZATION**

Product: ..... No Data Available

#### MUTAGENCITY

#### **IN VITRO**

Product:	No Data Available
IN VIVO	
Product:	No Data Available
Specified Substance(s)	Information as provided by manufacturer
Monoethylene Glycol	No Data Available

#### CARCINOGENICITY

#### **REPODUCTIVE TOXICITY**

#### SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

**Product: INHALATION:** High concentrations of vapor may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, with chest pain and coughing. Headache, nausea, vomiting, dizziness, and drowsiness may occur. **EYES:** Causes severe irritation experienced as discomfort or pain, excess blinking and tear production, with marked excess redness and swelling of the conjunctiva. **SKIN:** Brief contact may cause slight irritation with itching and local redness. Prolonged contact may cause more severe irritation, with discomfort or pain. **SWALLOWING:** Poison, toxic. May cause headache, dizziness, incorrdination, nausea, vomiting, diarrhea, and general weakness. **MAY BE FATAL IF SWALLOWED.** 

#### SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE



#### **ASPIRATION HAZARD**

#### OTHER ADVERSE EFFECTS

## 12 – ECOLOGICAL INFORMATION

#### ACUTE TOXICITY

#### FISH

Product:.....>10,000 mg/L (marine water); 8050 mg/L (fresh water).

#### AQUATIC INVERTEBRATES

#### CHRONIC TOXICITY

#### FISH

**Product:**......NOEC/NOEL > 100 mg/l. (based on similar products / components) AQUATIC INVERTEBRATES

**Product:**......NOEC/NOEL > 100 mg/l. (based on similar products / components) **TOXICITY TO AQUATIC PLANTS** 

#### PERSISTENCE AND DEGRADABILITY

#### BIODEGRADATION

 Product:
 Biodegradability under aerobic static laboratory conditions is high.

 BIOLOGICAL OXYGEN DEMAND
 BOD28/COD = 56-64%

 CHEMICAL OXYGEN DEMAND
 COD = 1.29 g O2/g

 BOD / COD RATIO
 No data available

 BIOACCUMULATIVE POTENTIAL
 Product:

 Product:
 Potential to bioaccumate is low.

 MOBILITY IN SOIL
 Expected to partition to water.

 RESULTS OF PBT AND mPvB ASSESSMENT
 Product:

 Product:
 Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria. Not fulfilling vPvB (very persistent, very bioaccumulative) criteria.

#### **OTHER ADVERSE EFFECTS**

**Product:** ...... No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.



# **13 – DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL:	Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management
RCRA STATUS:	options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements. If discarded in its purchased form, it is not a RCRA hazardous waste. It
KCAA STATES.	is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

## **14 – TRANSPORTATION INFORMATION**

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

 UN/NA NUMBER:
 None

 PROPER SHIPPING NAME:
 Non-Regulated

 HAZARD CLASS:
 None

 PACKAGING GROUP :
 None

 LETTER:
 None

 ENVIRONMENTAL HAZARD:
 Because of modern treatment methods or method of use of this product, only an insignificant amount of the ingredients reaches the environment. That amount is at such levels as to typically not cause any adverse effects.

 DEPODETABLE OUT NEWLY
 5000

REPORTABLE QUANTITY: ..... 5000 pounds, Ethylene glycol / CAS# 107-21-1.

## **15 - REGULATIONS**

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. This SDS complies with 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD). **IMPORTANT:** Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

EPA SRA Title III Chemical Listings:

**TSCA STATUS:**...... This product is listed on the TSCA inventory. If this product is a blend, all ingredients in the product are listed on the TSCA Inventory List. Any impurities present in this product are exempt from listing.



SECTION 302:	This material contains a component(s) with known CAS numbers classified as hazardous substances subject to the reporting of CERCLA (40 CFR 302) and/or to the release reporting requirements of SARA (Section 302) based on reportable quantities (RQs). Component RQ Ethylene glycol / CAS# 107-21-1 5,000 lbs.
SECTION 304:	. This material contains a component(s) with known CAS numbers
	classified as hazardous substances subject to the reporting of CERCLA
	(40 CFR 304) based on reportable quantities (RQs). Component RQ
	Ethylene glycol / CAS# 107-21-1 5,000 lbs.
SECTION 312:	Based upon available information, this material is classified as the
	following health and/or physical hazards according to Section 311 &
	312: Immediate (Acute) Health Hazard. Delayed (Chronic) Health
	Hazard.
SADA SECTION 212.	This material contains the following chemicals with known CAS
SARA SECTION 315.	•
	numbers subject to the reporting requirements of SARATitle III,
	Section 313 and 40 CFR 372: Ethylene glycol / CAS# 107-21-1.
ACUTE:	. Yes (Eyes)
CHRONIC:	No
FIRE:	. No
PRESSURE:	. No
REACTIVE:	. No
CLEAN WATER ACT:	

IMDG – International Marine Dangerous Goods Code

Class Non Regulated - Possible Shipping Description(s): Non Regulated IATA Class Non Regulated - Possible Shipping Description(s): Non Regulated

DEA Chemical Trafficking Act:.. No



## **16 – OTHER INFORMATION**

HMIS*	
HEALTH	2
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTI	ON B

**\*HMIS®HAZARD INDEX: 0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard.** HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS and product label must be considered.

ND = No Data, NA = Not Applicable/Not Available,  $\leq$  = Less than or equal to,  $\geq$  = Greater than or equal to

**REVISION STATEMENT:** Changes have been made throughout this Safety Data Sheet (SDS). Please read the entire document. Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) by the Company Health and Risk Assessment Unit.

#### **DISCLAIMER:**

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving this Safety Data Sheet (SDS) will make their own determination as to its suitability for their intended purposes prior to use. Since the product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal and State Regulations concerning the Product. It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH **INFORMATION REFERS.** 

\*\*\*This is the last page of this SDS\*\*\*