# Safety Data Sheet
# (SULFURIC ACID 98%)

## 1 – PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** ..... SULFURIC ACID 98%
**CHEMICAL NAME/**
**CLASS/SYNONYMS:** ..... $H_2SO_4$; Oil of Vitriol; Spirit of Sulfur; Hydrogen Sulfate; Oleum
**PRODUCT NUMBER:** ..... SULFURIC ACID 98%
**UN/NA NUMBER:** ..... 1830
**CHEMICAL FAMILY:** ..... Acid, Inorganic
**CAS NUMBER:** ..... 7664-93-9
**FORMULA:** ..... $H_2SO_4$

**COMPANY:** ..... **JMN Specialties, Inc.**
1100 Victory Drive – Westwego, Louisiana USA 70094
Phone (504) 341-3749, Fax (504) 341-5868
www.jmnspecialties.com
**EMERGENCY PHONE:** ..... CALL CHEMTEL: Toll Free US & Canada: (800) 255-3924, Outside USA +01-813-248-0585.
**DATE PREPARED:** ..... February 28, 2019

## 2 – HAZARDS IDENTIFICATION

**GHS HAZARD CLASSIFICATION:**

**Physical Hazards**
**Flammable Liquids:** ..... . No hazard statement
**Health Hazards**
**Acute Toxicity (Oral):** ..... . Category 1 - Fatal if swallowed, in contact with skin, inhaled
**Skin Corrosion/Irritation:** ..... . Category 1A - Causes severe skin burns and eye damage
**Serious Eye Damage/Irritation:** Catagory 1 - Causes severe eye damage
**Aspiration Hazard:** ..... . Catagory 1 - May be fatal if swallowed and enters airways

**WARNING LABEL ITEMS INCLUDING PRECAUTIONARY STATEMENTS:**

**Pictograms:**

**SIGNAL WORD:** ..... DANGER!

**GHS HAZARD AND PRECAUTIONARY STATEMENTS:**

H312 H332: Harmful in contact with skin or if inhaled
H314: Causes severe skin burns and eye damage
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.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
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.

**TOTAL VOC's: .....** < 2%

## 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| HAZARDOUS INGREDIENT | PERCENT | CAS NUMBER |
|---|---|---|
| Sufluric Acid | 98% | 7664-93-9 |

## 4 – FIRST-AID MEASURES

**BREATHING (INHALATION)**: 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.

**SWALLOWING (INGESTION)**: 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 attention immediately.

**EYES: .....** Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention. If liquid sulfuric acid or solutions containing sulfuric acid get into the eyes, flush eyes immediately with a directed stream of water for at least 30 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. **GET MEDICAL ATTENTION IMMEDIATELY.** Contact lenses should not be worn when working with this chemical.

**SKIN (DERMAL):.....** 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.

**NOTE TO PHYSICIAN: .....** Sulfuric acid is reported to cause pulmonary function impairment. Periodic surveillance is indicated. Sulfuric acid may cause acute lung damage. Surveillance of the lungs is indicated. Ingestion may cause gastroesophageal perforation. Perforation may occur within 72 hours, but along with abscess formation, can occur weeks later. Long term complications may include esophageal, gastric or pyloric strictures or stenosis. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## 5 – FIRE-FIGHTING MEASURES

**GENERAL FIRE HAZARDS: ....** Causes severe, deep burns to tissue; very corrosive effect. Sulfuric Acid is extremely slippery. Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage (29CFR 1910.156). In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Water reactive. Contact with water may generate heat. Isolate damage area, keep unauthorized personnel out. If tank, railcar, or tank truck is involved in a fire, isolate for ½ mile in all directions. Consider initial evacuation for ½ mile in all directions. Stop spill/release if it can be done with minimal risk. Move undamaged containers from danger area if it can be done with minimal risk. Fires involving small amounts of combustibles may be smothered with suitable dry chemicals. Use water on combustibles burning but avoid using water directly on acid as it results in evolution of heat and causes splattering.

**AUTOIGNITION TEMP:** No Data Available

**EXTINGUISHING MEDIA: .....** Fires involving small amount of combustibles may be smothered with suitable dry chemical, soda ash, lime, sand or CO2. Use water on combustibles burning in vicinity of this material but use care as water applied directly to this acid result in evolution of heat and causes splattering.

**SPECIAL FIRE FIGHTING PROCEDURES: .....** Sulfuric acid at a high concentration can cause very serious damage upon contact, as it not only causes chemical burns via hydrolysis, but also secondary thermal burns via dehydration. It burns the cornea and can lead to permanent blindness if splashed onto eyes. Spilled product on ground may be slippery. Accordingly, safety precautions should be strictly observed when handling or cleaning it when spilled as the result of a fire.

**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: .....** Wear appropriate personal protective equipment before approaching spill site. For small spills, dilute with water to sewer if allowed by local and state regulations. If unable to wash product with water, absorb with inert material (sand or other approved material) and dispose of in accordance with applicable regulations.

**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, this product is considered 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 below 44°C (110°F). Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Drum must not be 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 | PEL | TLV-TWA |
|---|---|---|
| Sufluric Acid | 1 mg/m$^3$ | 1 mg/m$^3$ |

**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. Self-Contained Breathing Apparatus may be required for use in confined or enclosed spaces.

**PROTECTIVE CLOTHING:** **Eye/face protection:** Wear chemical goggles; face shield (if splashing 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: .....** Avoid contact with the skin and avoid breathing vapors. Do not eat, drink, or smoke in work area. Wash hands before eating, drinking, or using restroom. Do NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible. 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:.....** 547°F (286°C), Initial Boiling Point
**FREEZING POINT: .....** 50°F (10°C)
**FLASHPOINT:.....** Non-flammable
**UPPER FLAME LIMIT (%): .....** NA
**LOWER FLAME LIMIT (%): ...** NA
**VAPOR PRESSURE:.....** <0.00120 mm
**VAPOR DENSITY (AIR=1):.....** 3.4
**SPECIFIC GRAVITY: .....** 1.85
**pH: .....** < 1
**SOLUBILITY IN WATER:.....** 100%
**VOLATILITY**
**INCLUDING WATER: .....** 15.40 pounds
**MOLECULAR WEIGHT: .....** 98.079 g/mol
**EVAPORATION RATE:.....** < 1
**PHYSICAL STATE: .....** Liquid
**COLOR: .....** Clear pale yellow
**ODOR:.....** Bland, Acidic

## 10 – STABILITY and REACTIVITY

**STABILITY:.....** Stable
**HAZARDOUS DECOMP.:.....** Will not occur
**INCOMPATIBILITY: .....** Contact of acid with organic materials (such as chlorates, carbides, fulminates, and picrates), alkaline materials and water may cause fires and explosions. Contact of acid with metals may form toxic sulfur dioxide fumes and flammable hydrogen gas. Contact with hypochlorites (e.g., chlorine bleach), sulfides, or cyanides will produce toxic gases.
**HAZARDOUS REACTIONS: ....** Sulfuric Acid reacts vigorously, violently or explosively with many organic and inorganic chemicals and with water.

## 11 – TOXICOLOGICAL INFORMATION

Suspected Human Carcinogen (Sulfuric Acid contained in strong inorganic acid mists). This product contains Sulfuric Acid, listed as 'Strong inorganic acid mists contain', a chemical known to the State of California to cause cancer.

**THRESHOLD LIMIT VALUE:..** 1 mg/m$^3$
**OSHA PEL:.....** 1 mg/m$^3$
**LISTED CARCINOGEN:** **ACGIH:** A2 - Suspected Human Carcinogen (Sulfuric Acid contained in strong inorganic acid mists), **National Toxicology Program (NTP):** Known carcinogen (listed as 'Strong inorganic acid mists containing Sulfuric Acid). **International Agency for Research on Cancer (IARC) Monograph:** Group 1 carcinogen (Sulfuric Acid) O**ccupational Safety & Health Administration (OSHA) Regulated:** Yes. **Warning:** This product contains Sulfuric Acid, listed as 'Strong inorganic acid mists contain', a chemical known to the State of California to cause cancer.
**MEDICAL CONDITION AGGRAVATED:.....** Overexposure to sulfuric acid mist may cause lung damage and aggravate pulmonary conditions. Contact of sulfuric acid with skin may aggravate diseases such as eczema and contact dermatitis.

**INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS**

**ORAL**
**Product:.....** Corrosive. Causes serious burns of the mouth or perforation of the esophagus or stomach. May be fatal if swallowed.
**DERMAL**
**Product:.....** Corrosive. Splashes on the skin will cause severe skin burns. Burning and charring of the skin are a result of the great affinity for, and strong exothermic reaction with, water. Direct contact can be severely irritating to the skin and may result in redness, swelling, burns and severe skin damage.
**INHALATION**
**Product:.....** Corrosive and highly toxic. May be harmful or fatal if inhaled. May cause severe irritation and burns of the nose, throat and respiratory tract.
**REPEATED DOSE TOXICITY**
**Product:.....** Workers exposed to industrial sulfuric acid mist showed a statistical increase in laryngeal cancer. This suggests a possible relationship between carcinogenesis and inhalation of sulfuric acid mist.
**SKIN CORROSION / IRRITATION**
**Product:.....** Concentrated sulfuric acid destroys tissue due to its severe dehydrating action, whereas the dilute form acts as a mild irritant due to acid properties.
**SERIOUS EYE DAMAGE / IRRITATION**
**Product:.....** Corrosive. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing, redness, swelling, corneal damage and irreversible eye damage. Splashes in the eyes will cause severe burns. Contact lenses should not be worn when working with this chemical.
**RESPIRATORY OR SKIN SENSITIZATION**
**Product:.....** Repeated exposure of workers to the mist causes chronic conjunctivitis, tracheobronchitis, stomatitis, and dermatitis, as well as dental erosion.

**MUTAGENCITY**

**IN VITRO**
**Product:.....** No Data Available
**IN VIVO**
**Product:.....** No Data Available

| **Specified Substance(s)** | **Information as provided by manufacturer** |
|---|---|
| Sulfuric Acid | No Data Available |

**CARCINOGENICITY**
**Product:.....** Sulfuric Acid Mists: Suspected Human Carcinogen
**REPODUCTIVE TOXICITY**
**Product:.....** Based on the available test, not expected to cause adverse effects on reproduction.
**SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE**
**Product:.....** Severe lung damage (pulmonary oedema) may occur after a single short term exposure. Symptoms of which include coughing and shortness of breath and can be delayed until hours or days after the exposure. These symptoms are aggravated by physical exertion. Concentrated sulphuric acid is highly corrosive to all tissues with which it comes in contact. Single, high exposures to sulphuric acid by inhalation, ingestion or dermal routes may be fatal.
**SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE**
**Product:.....** There is sufficient evidence that occupational exposure to strong, inorganic–acid mists containing sulphuric acid is carcinogenic in humans. Inhalation of sulphuric acid mists may cause an increase in upper respiratory tract neoplasms such as cancer of the larynx. This classification is for inorganic acid mists containing sulphuric acid only and does not apply to sulphuric acid or sulphuric acid solutions.
**ASPIRATION HAZARD**
**Product:.....** Droplets of the product aspirated into the lungs through ingestion or vomiting may cause chemical pneumonia.
**OTHER ADVERSE EFFECTS**
**Product:.....** No data available

## 12 – ECOLOGICAL INFORMATION

**ACUTE TOXICITY**

**FISH**
**Product:.....** Bluegill/Sunfish: 49 mg/L; 48 Hr; TLm (tap water @ 20°C), Bluegill/Sunfish: 24.5 ppm; 48 Hr; TLm (fresh water).
**AQUATIC INVERTEBRATES**
**Product:.....** Daphnia magna, exposure time: 24 h, EC50: 29 mg/L (IUCLID)

**CHRONIC TOXICITY**
**FISH**
**Product:.....** Not determined. Keep product out of sewers and waterways.
**AQUATIC INVERTEBRATES**
**Product:.....** Not determined. Keep product out of sewers and waterways.
**TOXICITY TO AQUATIC PLANTS**
**Product:.....** The product may affect the acidity or alkalinity (pH-factor) in water with risk of harmful effects to aquatic plants.

**PERSISTENCE AND DEGRADABILITY**

**BIODEGRADATION**

**Product:.....** Sulfuric acid (98% solution) is soluble in water and remains indefinitely in the environment as sulfate.

**BIOLOGICAL OXYGEN DEMAND**

**Product:.....** No data available

**CHEMICAL OXYGEN DEMAND**

**Product:.....** No data available

**BOD / COD RATIO**

**Product:.....** No data available

**BIOACCUMULATIVE POTENTIAL**

**Product:.....** Sulfuric acid (98% solution) dissociates readily in water in hydrogen ions and sulphate ions that are naturally present in water/sediment and no potential for bioaccumulation is predicted.

**MOBILITY IN SOIL**

**Product:.....** Sulfuric acid (98% solution) is soluble in water and has high mobility in soil. During transport through the soil, sulfuric acid (98% solution) will dissolve some of the soil material; in particular, the carbonate based materials. The acid will be neutralised to some degree with adsorption of the proton also occurring on clay materials. However, significant amounts of acid are expected to remain for transport down towards the ground water table. Upon reaching the ground water table, the acid will continue to move, now in the direction of the ground water flow. Lime addition may be required to rectify low pH resulting from sulfuric acid (98% solution) spillages.

**RESULTS OF PBT AND mPvB ASSESSMENT**

**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 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, this product is considered 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).

## 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: .....** 1830
**PROPER SHIPPING NAME: .....** SULFURIC ACID
**HAZARD CLASS: .....** 8
**PACKAGING GROUP : .....** II
**LETTER: .....** C (Corrosive substances)
**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.
**REPORTABLE QUANTITY: .....** Extremely Hazardous Substance (EHS): CAS # 7664-93-9; 1000 Lbs. (454 Kilograms) (85 Gals.) Reportable Quantity (RQ)

## 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: .....** Extremely Hazardous Substance (EHS): CAS # 7664-93-9; 1000 Lbs. (454 Kilograms) (85 Gals.) Threshold Planning Quantity (TPQ)
**SECTION 304: .....** Extremely Hazardous Substance (EHS): CAS # 7664-93-9; 1000 Lbs. (454 Kilograms) (85 Gals.) Reportable Quantity (RQ)
**SECTION 312: .....** Yes
**SARA SECTION 313: .....** This material contains 20-99% Sulfuric Acid (CAS# 7664-93-9), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373. Sulfuric Acid (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size).
**ACUTE: .....** Yes
**CHRONIC: .....** Yes
**FIRE: .....** No
**PRESSURE: .....** No
**REACTIVE: .....** Yes
**CLEAN WATER ACT: .....** Yes

**IMDG – International Marine Dangerous Goods Code**
UN1830, Sulfuric Acid, 8, C, PGII. EmS F-A, S-B. Marine Pollutant: Yes. Static Accumulator: No.
**IATA**
UN1830, Sulfuric Acid, 8, C, PGII.

**DEA Chemical Trafficking Act:..** List 1 & 2, Essential Chemicals (21CFR 1310.02(b) and 1310.04(f)(2).

## 16 – OTHER INFORMATION

**HMIS***

| | |
|---|---|
| HEALTH | 3 |
| FLAMMABILITY | 0 |
| REACTIVITY | 2 |
| PERSONAL PROTECTION | H |

***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, ≤ = Less than or equal to, ≥ = 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*****