Safety Data Sheet
(VINEGAR 5 - 6%)

1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ..... VINEGAR 5 - 6%
CHEMICAL NAME/
CLASS/SYNONYMS: Acetic acid, glacial / alcohol of vinegar / carboxylic acid C2 / ethanoic acid / ethylic acid / methanecarboxylic acid / pyroligneous acid / vinegar acid
PRODUCT NUMBER: ..... VINEGAR 5 - 6%
UN/NA NUMBER: ..... None
CHEMICAL FAMILY: ..... Carboxylic acid
CAS NUMBER: ..... Not applicable for mixtures.
FORMULA: Mixture

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 4 - Harmful if swallowed, in contact with skin, inhaled
Skin Corrosion/Irritation: ..... . Catagory 2 - Causes skin irritation
Serious Eye Damage/Irritation: Catagory 2A - Causes eye irritation
Aspiration Hazard: ..... . Catagory 2 - May be harmful if swallowed and enters airways.

WARNING LABEL ITEMS INCLUDING PRECAUTIONARY STATEMENTS:

Pictograms:

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.

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
P312: Call a POISON CENTER or doctor/physician if you feel unwell
P501: Dispose of contents/container: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations, and product characteristics at time of disposal.

TOTAL VOC's: 0.42 pounds per gallon

3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Acetic Acid	5 - 6%	64-19-7
Water	94 - 95%	7732-18-5

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.

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: ..... Inhalation: Consider administration of corticoid spray. 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: 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). Isolate damage area, keep unauthorized personnel out. 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. This Material will not burn.

AUTOIGNITION TEMP: 905°F (485°C) after water evaporation

EXTINGUISHING MEDIA: ..... Fires involving small amount of combustibles may be smothered with suitable dry chemical, soda ash, lime, sand or CO2. Use water spray to keep fire-exposed containers cool.

SPECIAL FIRE FIGHTING PROCEDURES: ..... Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent handling practices should be observed. Product should be treated as a chemical and is not for consumption as it has been stored with other nonfoodgrade chemicals. Spilled product on ground may be slippery. Accordingly, safety precautions should be strictly observed when handling or cleaning it when spilled.

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
Acetic Acid	10 ppm	10 ppm
Water	None Established	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. 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: 224°F (106°C)
FREEZING POINT: 26°F (-3°C)
FLASHPOINT: Not Applicable - no flash when sample of 100-grain white distilled vinegar tested in tag closed cup tester.
UPPER FLAME LIMIT (%): ..... ND
LOWER FLAME LIMIT (%): ... ND
VAPOR PRESSURE: 11 mm Hg @ 20°C
VAPOR DENSITY (AIR=1):..... 2.10 (Air=1)
SPECIFIC GRAVITY: 1.01
pH: 2.4 (6%)
SOLUBILITY IN WATER:..... 100%
VOLATILITY
INCLUDING WATER: 8.42 pounds per gallon
MOLECULAR WEIGHT: ..... No data available (G/MOLE)
EVAPORATION RATE:..... < 1
PHYSICAL STATE: ..... Liquid
COLOR: ..... Clear
ODOR:..... Vinegar odor

10 – STABILITY and REACTIVITY

STABILITY: ..... Stable
HAZARDOUS DECOMP.:..... Will not occur
INCOMPATIBILITY: ..... May react violently with alkalis. May react with bases, copper, silver, mercury, magnesium, zinc and their alloys.
HAZARDOUS REACTIONS: .... On heating: release of corrosive/combustible gases/vapours (acetic acid vapours). Upon combustion: CO and CO2 are formed. Violent to explosive reaction with many compounds e.g.: with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently with (some) bases. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

11 – TOXICOLOGICAL INFORMATION

No teratogenic effects were observed among the offspring of mice, rats, or rabbits that had been given very large doses of apple cider vinegar (containing acetic acid) during pregnancy.

THRESHOLD LIMIT VALUE:.. None Established for this Product
OSHA PEL: 10 ppm
LISTED CARCINOGEN:..... Acetic Acid has produced no genetic changes in standard tests using bacterial cells.
MEDICAL CONDITION
AGGRAVATED: ..... Overexposure to Acetic Acid mist may cause lung damage and aggravate pulmonary conditions. Contact of Acetic Acid with skin may aggravate diseases such as eczema and contact dermatitis.

INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS

ORAL

Product:..... Irritant to mucous membranes, esophagus and stomach. Abdominal pain, nausea, vomiting, general gastro-intestinal upset can be expected.

DERMAL

Product:..... Prolonged or repeated skin contact may cause mild to severe irritation. Skin contact may aggravate existing dermatitis.

INHALATION

Product:..... Respiratory tract irritant. High concentrations of vapor may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, possibly with chest pain and coughing.

REPEATED DOSE TOXICITY

Product:..... Acetic Acid has produced no genetic changes in standard tests using bacterial cells. No data on other effects on Humans.

SKIN CORROSION / IRRITATION

Product:..... Repeated and prolonged exposure to concentrated material may cause dermatitis.

SERIOUS EYE DAMAGE / IRRITATION

Product:..... Eye contact with product may cause mild to severe irritation, possible chemical burns, or eye damage.

RESPIRATORY OR SKIN SENSITIZATION

Product:..... Not expected to be sensitizing based on tests of this product, components, or similar products.

MUTAGENCITY

IN VITRO

Product:..... Salmonella typhimurium assay (Ames test), Bacterial Reverse Mutation Assay : negative +/- activation. Chromosomal aberration, In vitro Mammalian Chromosome Aberration Test : negative +/- activation

IN VIVO

Product:..... Chromosomal aberration Inhalation - vapor (Rat): negative Read-across from a similar material.

Specified Substance(s)	**Information as provided by manufacturer**
Acetic Acid	

CARCINOGENICITY

Product:..... NOT a suspected Human carcinogen.

REPODUCTIVE TOXICITY

Product:..... Based on the available test data, not expected to cause adverse effects on reproduction.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Product: **GENERAL:** Liquid or vapors may be irritating to skin and eyes. **INHALATION:** High concentrations of vapor may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, possibly with chest pain and coughing. Headache, nausea, vomiting, dizziness, and drowsiness may occur. **EYES:** May cause mild to severe irritation experienced as discomfort or pain, excess blinking and tear production, possibly with marked redness and swelling of the conjunctiva. **SKIN:** Brief contact may cause slight irritation with itching and local redness. Prolonged contact, especially with concentrate, may cause more severe irritation, with discomfort or pain. **SWALLOWING:** May cause headache, dizziness, in-coordination, nausea, vomiting, diarrhea, and general weakness.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE

Product:..... The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposure. This product may aggravate existing eye, skin, and respiratory conditions.

ASPIRATION HAZARD

Product:..... Droplets of the product aspirated into the lungs through ingestion or vomiting may cause chemical pneumonia.

OTHER ADVERSE EFFECTS

Product:..... Negligible ecotoxicity

12 – ECOLOGICAL INFORMATION

ACUTE TOXICITY

FISH

Product:..... LC-50 (Fathead Minnow, 96 h): 300.82 mg/l

AQUATIC INVERTEBRATES

Product:..... EC-50 (daphnid, 48 h): > 300.82 mg/l

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

Product:..... EC-50 (Alga, 72 h): 300.82 mg/l

PERSISTENCE AND DEGRADABILITY

BIODEGRADATION

Product:..... Readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil.

BIOLOGICAL OXYGEN DEMAND

Product: BOD-5: 340 - 880 mg/g, BOD-20: 900 mg/g

CHEMICAL OXYGEN DEMAND

Product: 1,030 mg/g

BOD / COD RATIO

Product:..... No data available

BIOACCUMULATIVE POTENTIAL

Product:..... Bioaccumulation: not applicable.

MOBILITY IN SOIL

Product:..... Known or predicted distribution to environmental compartments, Acetic Acid: 0.062 (QSAR model).

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.

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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: Acetic Acid is, with high probability, not acutely harmful to aquatic life and it does not accumulate in the food chain.
REPORTABLE QUANTITY: ..... Quantity containing the equivalent of 5,000# of 100% acetic acid, (e.g.,75,000# of vinegar containing 5% acetic acid).

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.

<u>EPA SRA Title III Chemical Listings:</u>

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:..... Not Listed
SECTION 304:..... Not Listed
SECTION 312:..... Not Listed
SARA SECTION 313:..... Not Listed

ACUTE:..... Yes
CHRONIC: ..... No
FIRE: ..... No
PRESSURE:..... No
REACTIVE:..... No
CLEAN WATER ACT: ..... None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

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	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	C

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.**

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