Safety Data Sheet
(FUEL SPEC 25017)

1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ..... FUEL SPEC 25017
CHEMICAL NAME/
CLASS/SYNONYMS: ..... Gasoline engine corrosion inhibitor, lubricity improver
PRODUCT NUMBER: ..... FUEL SPEC 25017
UN/NA NUMBER: 1268
CHEMICAL FAMILY: ..... Compounds, Cleaning Liquid
CAS NUMBER: ..... Mixture
FORMULA: ..... A complex stream of predominately C9 to C12 hydrocarbons; exact composition will vary.

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: ..... . Category 2 - Highly flammable liquid and vapor
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 1 - May be fatal if swallowed and enters airways

WARNING LABEL ITEMS INCLUDING PRECAUTIONARY STATEMENTS:

Pictograms:



SIGNAL WORD: ..... DANGER!

GHS HAZARD AND PRECAUTIONARY STATEMENTS:

H303 H313 H333: May be harmful if swallowed, in contact with skin or if inhaled
H305: May be harmful if swallowed and enters airways

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.

TOTAL VOC's: ..... 6.41 pounds per gallon

3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Aromatic Naphtha	75 - 85	64742-94-5
Amines, polyethylene poly-reaction products with succinic anhydride isobutylene derivatives	5 - 15	84605-20-9
Butanone	1 - 10	78-93-3

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: ..... 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. Material, if aspirated into the lungs, may cause chemical pneumonitis. Skin contact may aggravate an existing dermatitis. Treat appropriately.

5 – FIRE-FIGHTING MEASURES

GENERAL FIRE HAZARDS: .... Flammable liquid and vapor

AUTOIGNITION TEMP:..... 842°F (450°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 PROCEDURES: Spilled product on ground may be slippery.

UNUSUAL FIRE AND EXPLOSION HAZARDS:..... Containers may explode from internal pressure if confined to fire. Cool with water spray. Vapor accumulation could flash or explode if in contact with an open flame.

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
Aromatic Naphtha	10 ppm	10 ppm
Amines, polyethylene poly-reaction products with succinic anhydride isobutylene derivatives	None Established	None Established
Butanone	200 ppm	200 ppm



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: 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:..... 352°F (178°C)
FREEZING POINT: ..... - 4°F (-20°C)
FLASHPOINT:..... 150°F (65.5°C) Open Cup
UPPER FLAME LIMIT (%): 7.0%

LOWER FLAME LIMIT (%): ... 0.6%
VAPOR PRESSURE:..... ND
VAPOR DENSITY (AIR=1):..... > 1
SPECIFIC GRAVITY: ..... 0.89 - 0.90
pH: ..... NA
SOLUBILITY IN WATER:..... < 10%
VOLATILITY
INCLUDING WATER: ..... 7.42 pounds per gallon
MOLECULAR WEIGHT: ..... No data available (G/MOLE)
EVAPORATION RATE:..... < 1
PHYSICAL STATE: ..... Liquid
COLOR:..... Clear to pale yellow/amber
ODOR:..... Aromatic solvent

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

Cancer: Research shows that the Solvents used in the mixture are unlikely to cause cancer. **Reproductive Effects:** There are no indications that the Solvents used in the mixture causes damage to reproductive organs. Solvents may affect the development of unborn babies. **Organ Systems:** Damage to the brain, liver, bone marrow and kidneys can occur with repeated or excessive inhalation of any solvent vapors.

THRESHOLD LIMIT VALUE:.. 10 ppm
OSHA PEL:..... 10 ppm
LISTED CARCINOGEN:..... No data available for the mutagenic, teratogenic, or reproductive effects of the property. No data to designate product to cause specific target organ toxicity through repeated exposure.
MEDICAL CONDITION AGGRAVATED: Existing dermatitis.

INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS

ORAL
Product:..... Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.
DERMAL
Product:..... Frequent or prolonged contact may irritate and cause dermatitis. Low order of toxicity. Skin contact may aggravate an existing dermatitis condition.
INHALATION
Product:..... High vapor/aerosol concentrations (attainable at elevated temperatures well above ambient) are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness, anaesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death effects, including death.

REPEATED DOSE TOXICITY

Product:..... No data available for the mutagenic, teratogenic, or reproductive effects of the property. No data to designate product to cause specific target organ toxicity through repeated exposure.

SKIN CORROSION / IRRITATION

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

SERIOUS EYE DAMAGE / IRRITATION

Product:..... Practically non-irritating. Slightly irritating but does not injure eye tissue.

RESPIRATORY OR SKIN SENSITIZATION

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

MUTAGENCITY

IN VITRO

Product:..... No Data Available

IN VIVO

Product:..... No Data Available

Specified Substance(s)	**Information as provided by manufacturer**
Petroleum Distillates	No data available

CARCINOGENICITY

Product:..... Based on available data, the classification criteria are not met.

REPODUCTIVE TOXICITY

Product:..... No data available for the mutagenic, teratogenic, or reproductive effects of the property.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Product: **GENERAL:** Solvent 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. **NOTICE:** Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. **EYES:** May cause mild to severe rritation 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 may cause more severe irritation, with discomfort or pain. **SWALLOWING:** May cause headache, dizziness, nausea, vomiting, diarrhea, coma, and death.

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:..... There is no information available at this time for this product. Studies have shown that bacteria and fungi have the ability to degrade ingredients in this product thereby decreasing their toxicity to fish. However, a spill may produce significant toxicity to aquatic organisms and ecosystems.

12 – ECOLOGICAL INFORMATION

ACUTE TOXICITY

FISH

Product:..... LC_{50} (Fish, 96hr) >50mg/liter (Pimephelas promelas)

AQUATIC INVERTEBRATES

Product:..... EC_{50} (Crustacea, 48hr) > 140mg/liter (Diatomus forbesi)

CHRONIC TOXICITY

FISH

Product:..... This material has exhibited slight toxicity to terrestrial organisms.

AQUATIC INVERTEBRATES

Product:..... This material has exhibited slight toxicity to terrestrial organisms.

TOXICITY TO AQUATIC PLANTS

Product:..... EC_{50} (Algae) 2.5mg/liter (Skeletonema costatum), 4.2mg/liter (Selenastrum capricornutum)

PERSISTENCE AND DEGRADABILITY

BIODEGRADATION

Product:..... Natural microbe populations may need 2 - 3 weeks of acclimatization before they can metabolize aromatic hydrocarbons efficiently. This product is not considered to be "readily biodegradable", although biodegradation rates can be very high in soil & water "acclimatized" to aromatic hydrocarbons.

BIOLOGICAL OXYGEN DEMAND

Product:.....

CHEMICAL OXYGEN DEMAND

Product:..... No data available

BOD / COD RATIO

Product:..... No data available

BIOACCUMULATIVE POTENTIAL

Product:..... Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

MOBILITY IN SOIL

Product:..... Negligible

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: 1268
PROPER SHIPPING NAME:..... Petroleum Distillates, n.o.s., Contains (Aromatic Naphtha)
HAZARD CLASS:..... 3
PACKAGING GROUP :..... III
LETTER:..... F (Highly flammable)
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:..... None

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:..... None
SECTION 304:..... None
SECTION 312:..... Yes

SARA SECTION 313: ..... None
ACUTE: ..... Yes
CHRONIC: ..... Yes
FIRE: ..... Yes
PRESSURE: ..... No
REACTIVE: ..... No
CLEAN WATER ACT: ..... None

IMDG – International Marine Dangerous Goods Code
UN1268, Petroleum Distillates, N.O.S. Contains (Aromatic Naphtha), 3, PG III. EMS-No: F-E S-E. Marine pollutant: No.
IATA
UN1268, Petroleum Distillates, N.O.S. Contains (Aromatic Naphtha), 3, PG III.
DEA Chemical Trafficking Act: .. No

16 – OTHER INFORMATION

HMIS*

HEALTH	1
FLAMMABILITY	2
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.**

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