

1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:SPEC HIB 2230

CHEMICAL NAME/

CLASS/SYNONYMS: Corrosion Inhibitor PRODUCT NUMBER:.....SPEC HIB 2230

UN/NA NUMBER:.....None

CHEMICAL FAMILY:Scale / Corrosion Inhibitor **CAS NUMBER:**Not applicable for mixtures.

FORMULA:.....Proprietary

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: April 20, 2023

2 - HAZARDS IDENTIFICATION

GHS HAZARD CLASSIFICATION:

Physical Hazards

Health Hazards

Acute Toxicity:......Category 4 - Harmful if swallowed, in contact with skin, inhaled

Skin Corrosion/Irritation:Catagory 2 - Causes skin irritation **Eye Damage/Irritation:**Catagory 2A - Causes eye irritation **Aspiration Hazard:**Category 3 - Respiratory tract irritation

Carcinogen:Category 1B - Presumed to have carcinogenic potential for

humans

Specific Target Organ

Toxicity Single Exposure......Category 2: May cause damage to organs through prolonged or

repeated exposure.

Specific Target Organ

Toxicity Repeated Exposure . The effects of long-term, low-level exposures to this product

have not been determined.

Hazardous to the Environment

Aquatic (Acute) Catagory 3, Greater than 10 and less than or equal to 100 mg/L
Aquatic (Chronic) Catagory 3, Greater than 10 and less than or equal to 100 mg/L

See Section 11 for additional Toxicological information



EMERGENCY OVERVIEW:

Pictograms:





Signal Word (GHS-US):WARNING!

Hazard Statements:

Physical Hazards (GHS-US):

No Hazard Statement established for this Product

Health Hazards (GHS-US):

H302+H312+H315+H320: Harmful if swallowed, in contact with skin. Causes skin irritation.

Causes eye irritation.

Environmental Hazards (GHS-US):

H402: Harmful to aquatic life

Precautionary Statements (GHS-US):

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.

P261+P264+P270+P271+P280: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands and clean any skin contact thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

P233+P403: Keep container tightly closed. Store in a well ventilated place. P405: Store locked up.

Response Statements (GHS-US):

P301+P310+P330+P331: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. P303+P310+P361+P353: IF ON SKIN (or hair): Gently wash with plenty of soap and water. Remove / Take off immediately all contaminated clothing. P332+P313: If skin irritation occurs: Get medical advice / attention. P304+P340+P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P305+P351+P338+337+P313: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/attention. P362+P363 Take off contaminated clothing. Wash contaminated clothing before reuse.

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:.....< 5%



3 - COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT*	CAS NUMBER
Ethylene Glycol	18 - 22	107-21-1
Methanol	< 5	67-56-1
Tall Oil Fatty Acid Reaction Products	18 - 22	68153-60-6

^{*}Any concentration shown as a range is to protect confidentiality or is due to batch variation. When not listed, mixtures may contain water [CAS No. 7732-18-5] to 100%.

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.

5 – FIRE-FIGHTING MEASURES

GENERAL FIRE HAZARDS: Flammable liquid and vapor

AUTOIGNITION TEMP:.....None to boiling point

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.

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, 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 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

Ethylene Glycol Methanol

Tall Oil Fatty Acid Reaction Products

PEL 50ppm 200 ppm

None Established

TLV-TWA

50 ppm 200 ppm

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.

ADDITONAL 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:..... 212°F (100°C)

FREEZING POINT:..... 28°F (-2.2°C)

FLASHPOINT:125 – 145F

UPPER FLAME LIMIT (%):.....NA
LOWER FLAME LIMIT (%):.....NA

VAPOR PRESSURE:Similar to water

VAPOR DENSITY (AIR=1):.....> 1

SPECIFIC GRAVITY:0.96 - 1.0

pH:.....4 - 6

SOLUBILITY IN WATER:....Complete

VOLATILITY

INCLUDING WATER:7.8 - 8.0 pounds per gallon

MOLECULAR WEIGHT:.....No data available (G/MOLE)

EVAPORATION RATE:.....Similar to Water

PHYSICAL STATE:.....Liquid

COLOR:Clear Amber / Brown

ODOR:Mild / 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

THRESHOLD LIMIT VALUE:......None Established for this Product
OSHA PEL:.....None Established for this Product

LISTED CARCINOGEN:.....Suspected of causing cancer. Risk of cancer depends on

duration and level of exposure. This product contains

ingredients listed as carcinogenic or a potential carcinogen by the National Toxicology Program, by the I.A.R.C. monographs,

or by OSHA.

MEDICAL CONDITION

AGGRAVATED:.... Existing 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: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:No Data Available

SKIN CORROSION / IRRITATION

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

SERIOUS EYE DAMAGE / IRRITATION

Product:May cause mild to severe eye 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

Ethylene Glycol Overexposure may cause reproductive disorder(s)

based on tests with laboratory animals.



CARCINOGENICITY

Product:IARC has classified some ingredients in this product as possibly carcinogenic to humans (Group 2B). IARC regards it prudent to treat a material for which there is sufficient evidence of carcinogenicity in animals as if it is possibly carcinogenic in humans. Intermittent or occasional skin contact with this product is not expected to have serious health effects as long as good personal hygiene measures, such as those outlined in the Safety Data Sheet, are followed.

REPODUCTIVE TOXICITY

Product:Based on available data the classification criteria are not met. Not classified as hazardous.

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

ASPIRATION HAZARD

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

OTHER ADVERSE EFFECTS

Product:To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Handle in accordance with good industrial hygiene and safety practice.



12 – ECOLOGICAL INFORMATION

ACUTE TOXICITY

FICH
FISH Fish: Expected to have low toxicity > 10 × 100 mg/l (based on
Product:Fish: Expected to have low toxicity: >10 - <100 mg/L (based on
similar products / components)
AQUATIC INVERTEBRATES
Product:
(based on similar products / components) (based on similar products / components)
CHRONIC TOXICITY
FISH NOTE (NOTE to 10 and 10
Product:NOEC/NOEL: >10 - <100 mg/L (based on similar products /
components)
AQUATIC INVERTEBRATES
Product:NOEC/NOEL: >10 - <100 mg/L (based on similar products /
components)
TOXICITY TO AQUATIC PLANTS
Product:Algae: Expected to have low toxicity: >10 - <100 mg/L (based on
similar products / components) (based on similar products / components)
PERSISTENCE AND DEGRADABILITY
PERSISTENCE AND DEGRADABILITY
BIODEGRADATION
Product: This product contains organic and non-organic ingredients.
Biodegradability for organic ingredients under aerobic static laboratory conditions is high
(BOD20 or BOD28 / THOD greater than 80%).
BIOLOGICAL OXYGEN DEMAND
Product:No data available
CHEMICAL OXYGEN DEMAND
Product:No data available
BOD / COD RATIO
Product:No data available
BIOACCUMULATIVE POTENTIAL
Product:Potential to bioaccumate is low.
MOBILITY IN SOIL
Product:Expected to partition to water.
RESULTS OF PBT AND mPvB ASSESSMENT
Product:Not fulfilling PBT (persistent/bio accumulative/toxic) criteria.
Not fulfilling vPvB (very persistent, very bio accumulative) criteria.
OTHER ADVERSE EFFECTS
Product:No other adverse environmental effects (e.g. ozone depletion,
photochemical ozone creation potential or global warming potential) are expected from this
product.
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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, 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).

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.

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:None
SARA SECTION 313:None
ACUTE:Yes (Eyes)
CHRONIC:
FIRE:Yes
PRESSURE:No
REACTIVE:No
CLEAN WATER ACT:None
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
Homeland Security Regulated This product does not contain any reportable DHS chemicals.
California Proposition 65 This product can expose you to Ethylene Glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to wrong REF Warnings or gove
information go to www.P65Warnings.ca.gov.
ComponentEthylene glycol CAS# 107-21-1, Methanol CAS 67-56-1
Cal Prop 65 NSRLNo Significant Risk Level
US State Right to Know (RTK)
ComponentEthylene glycol CAS# 107-21-1, Methanol CAS 67-56-1
MassachusettsYes **
New JerseyYes **
PennsylvaniaYes **
IllinoisYes **



Rhode Island	Yes **		
**RTK Chemical(s)	Ethylene glycol	CAS# 107-21-1, Methanol	CAS 67-56-1
Canada NPRI	Ethylene glycol	CAS# 107-21-1, Methanol	CAS 67-56-1

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): All ingredients in this product are listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All ingredients in this product are listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): All ingredients in this product are listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): All ingredients in this product are listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.KE-04134 Philippines Inventory (PICCS): All ingredients in this product are listed on the Philippine Inventory or otherwise complies with PICCS.

Inventory of Existing Chemical Substances in China: All ingredients in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).



16 - OTHER INFORMATION

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HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	С

*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