



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083625

VESTAN PAG GEAR LUBE 220

Date of the previous version: 2015-10-13

Revision Date: 2019-04-08

Version 2

1. IDENTIFICATION

Product identifier

Product name VESTAN PAG GEAR LUBE 220

Other means of identification

Product Code(s) 083625

Number 8CK
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Gear oil. Lubricant for food industry.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA, Inc.
1201 Louisiana St. Suite 1800
Houston, TX 77002
Phone: 713-483-5000

Contact Point Technical/ HSEQ

E-mail Address ProductSafety@total.com

Emergency telephone number

Company Phone Number

Emergency telephone

+1 (908) 862-9300
1-866-928-0789 (For Emergencies, call CARECHEM 24/7 Domestic)
1-215-207-0061 (For Emergencies, call CARECHEM 24/7 International)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)



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Hazards not otherwise classified (HNOC)

None known

Other information**Physical-Chemical Properties**

Contaminated surfaces will be extremely slippery.

Environmental properties

The product may form an oil film on the water surface that may stop the oxygen exchange.
Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Mixture**

Chemical Name	CAS-No	Weight %
Oxirane, 2-methyl, polymer with oxirane, monobuthyl ether	9038-95-3	75-<100

4. FIRST AID MEASURES**First aid measures for different exposure routes****General advice**

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Keep eye wide open while rinsing.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. Take victim immediately to hospital.

Inhalation

Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.

Ingestion

Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Protection of First-aiders

First aider needs to protect himself. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment.



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Most important symptoms/effects, acute and delayed

Skin contact	Not classified based on available data. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
Eye contact	Not classified based on available data.
Inhalation	Not classified based on available data. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Symptoms	No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

<u>Suitable Extinguishing Media</u>	Carbon dioxide (CO ₂). ABC powder. Foam. Water spray or fog.
<u>Unsuitable Extinguishing Media</u>	Do not use a solid water stream as it may scatter and spread fire.
<u>Special Hazard</u>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Combustion products include sulphur oxides (SO ₂ and SO ₃) and Hydrogen sulphide H ₂ S, Mercaptans, Nitrogen oxides (NO _x), Phosphorous oxides, Hydrogen fluoride. Hydrogen chloride. Sodium oxides. Silicon dioxide, Zinc oxides.

Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
<u>Protective Equipment and Precautions for Firefighters</u>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

General Information	Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.
Other information	See Section 12 for additional information.

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Environmental precautions

General Information

Do not allow material to contaminate ground water system. Prevent entry into waterways, sewers, basements or confined areas. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment

Dike to collect large liquid spills. If necessary dike the product with dry earth, sand or similar non-combustible materials.

Methods for cleaning up

Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Oil leaks in a pressurized circuit may result in a fine flammable spray (the lower flammability limit for oil mist is reached for a concentration of about 45g/m³).

Prevention of fire and explosion

Take precautionary measures against static discharges.

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. Use personal protective equipment as required. Avoid breathing vapors, mist or gas. Avoid extended and repeated contact with the skin as this may cause skin conditions, which may also be aggravated by minor injuries or by contact with soiled clothing.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Store at room temperature. Protect from moisture. Protect from frost, heat and sunlight. Keep in properly labeled containers.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Control parameters

Exposure limits

Do not contain substance with occupational exposure limits in concentration above regulatory thresholds

Exposure controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered. The personal protective equipment (PPE) recommendations apply to the product ITSELF. In case of mixtures or formulations, it is suggested that you contact the relevant PPE suppliers.

Eye/face protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing.

Hand Protection

Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. Use personal protective equipment as required. Avoid breathing vapors, mist or gas. Avoid extended and repeated contact with the skin as this may cause skin conditions, which may also be aggravated by minor injuries or by

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contact with soiled clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Appearance		limpid	
Color		amber	
Physical State @20°C		liquid	
Odor		Mild	
Odor Threshold		No information available	
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable	
Flash point	255 - 270 °C 491 - 518 °F		Cleveland Open Cup (COC) Cleveland Open Cup (COC).
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper	-	No information available	
Lower	-	No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	1.053	@ 15 °C	ASTM D 1298
Density	1053 kg/m ³	@ 15 °C	ASTM D 1298
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, kinematic	200 - 240 mm ² /s	@ 40 °C	ASTM D 445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
<u>Other information</u>			
Specific Gravity	1.053	@ 15 °C	ASTM D 1298
Freezing Point		No information available	
Pour point	-45 °C		ASTM D 97

10. STABILITY AND REACTIVITY

Reactivity None under normal processing.

Chemical stability Stable under recommended storage conditions.



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Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. None under normal processing.
Conditions to avoid	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Take precautionary measures against static discharges.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Combustion products include sulphur oxides (SO ₂ and SO ₃) and Hydrogen sulphide H ₂ S, Mercaptans, Phosphorous oxides, Nitrogen oxides (NO _x), Hydrogen fluoride, Sodium oxides, Hydrogen chloride, Silicon dioxide, Zinc oxides.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Principle Routes of Exposure	Inhalation, Ingestion, Eye contact, Skin contact.
Symptoms	No information available.
Skin contact	Not classified based on available data. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
Eye contact	Not classified based on available data.
Inhalation	Not classified based on available data. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Acute toxicity - Product Information**

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Oral	Not classified based on available data
Dermal	Not classified based on available data
Inhalation	Not classified based on available data

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Oxirane, 2-methyl, polymer with oxirane, monobutyl ether	LD50 > 2000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	LC50 (4h) > 5.01 mg/l (Rat)



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Skin corrosion/irritation	Not classified based on available data.
Sensitization	Not classified based on available data.
Carcinogenicity	Not classified based on available data.

Germ Cell Mutagenicity	Not classified based on available data.
Reproductive toxicity	Not classified based on available data.
Target Organ Effects (STOT)	None known.
STOT - single exposure	Not classified based on available data.
Aspiration hazard	Not classified based on available data.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Acute aquatic toxicity - Product Information**

No information available

Acute aquatic toxicity - Component Information

No information available

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Oxirane, 2-methyl, polymer with oxirane, monobuthyl ether 9038-95-3		LC50 (96h) > 100 mg/l (Poecilia reticulata - static)	EC50 (48h) > 100 mg/l (Daphnia magna - static)	

Chronic aquatic toxicity - Product Information

No information available

Chronic aquatic toxicity - Component Information

No information available

Effects on terrestrial organisms	No information available.
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Persistence and degradability

General Information	No information available.
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Bioaccumulative potential



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Product Information No information available.**logPow** No information available**Component Information** No information available.**Mobility****Soil** Given its physical and chemical characteristics, the product generally shows low soil mobility.**Air** Loss by evaporation is limited.**Water** The product is insoluble and floats on water. The product is insoluble and sinks in water**Other adverse effects****General Information** No information available.**13. DISPOSAL CONSIDERATIONS****Waste treatment****Waste Disposal Methods** Dispose of in accordance with local regulations.**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.**14. TRANSPORT INFORMATION****DOT** Not regulated**ICAO/IATA** Not regulated**IMDG/IMO** Not regulated**ADR/RID** Not regulated**15. REGULATORY INFORMATION****U.S. Federal Regulations****SARA 313**



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Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

To the best of our knowledge, this product does not contain any substances known to the State of California to cause cancer, developmental and/or reproductive harm.

U.S. State Right-to-Know Regulations

No information available

16. OTHER INFORMATION

NFPA	Health Hazard 1	Flammability 1	Instability 0	Special hazards -
HMIS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal protection b

NFPA (National Fire Protection Association)



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HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

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Revision Note *** Indicates updated section

Abbreviations, acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

bw = body weight

bw/day = body weight/day

EC x = Effect Concentration associated with x% response

GLP = Good Laboratory Practice

IARC = International Agency for Research of Cancer

LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals

LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals

LL = Lethal Loading

NIOSH = National Institute of Occupational Safety and Health

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOEL = No Observed Effect Level

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

Legend

Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH - National Institute for Occupational Safety and Health

TLV - Threshold Limit Values

PEL - Permissible Exposure Limits

IDLH - Immediately Dangerous to Life or Health concentrations

TWA - Time Weight Average

STEL - Short Term Exposure Limits

S* - Skin notation

TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the Safety Data Sheet