

Vacuum Gas Oil (VGO)

#### Section 1: Product and Company Identification

Product Identifier	Vacuum Gas Oil (VGO)	
Other Means of Identification	Unknown	
Recommended Use	Refinery feedstock and petrochemical production	
<b>Recommended Restrictions</b>	None known	

#### Manufacturer/Importer/Supplier/Distributor Information

Company Name	Blue Tide, LLC	
Address	5841 Legacy Circle, Suite 250D Plano, TX 75024	
Telephone	Technical Questions	(469) 956-3336
Website	www.bluetide.com	
Emergency Phone Number	Chemtrec	(800) 424-9300

#### **Section 2: Hazard Identification**

#### Classification of the substance or mixture

OSHA HCS 2012	Aspiration Toxicity – Category 1
	Carcinogenicity – Category 1B
	Skin Sensitization – Category 1
	Mutagenicity – Category 2
	STOT-SE – Category 3 (Respiration)
	STOT-RE – Category 2
	Acute Aquatic Toxicity – Category 2

#### Label Elements

Hazard Symbol	DANGER
Signal Word	
Hazard Statement	May be fatal if swallowed and enters airways May cause an allergic skin reaction May cause cancer Suspected of causing genetic defects Toxic to aquatic life
Precautionary Statement	



Vacuum Gas Oil (VGO)	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
	Keep container tightly closed
BT VGO	
Version #:01	Issue Date: 07-01-2022 Rev: n/a
	Do not breathe fume, gas, mist, vapors and/or spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Wear protective equipment - gloves, clothing, face and eye protection. Contaminated clothing must not be allowed out of the workplace Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response	<ul> <li>IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.</li> <li>IF SWALLOWED: DO NOT induce vomiting: seek medical advice immediately and show this container or label. If individual is drowsy or unconscious, place individual on the left side with head down. Never give anything by mouth to an unconscious person. 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.</li> <li>IF ON SKIN (or hair): Immediately take off all contaminated clothing. Rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs: Get medical advice/attention.</li> </ul>
Storage	Store locked up and in a well-ventilated place. Keep container tightly closed and store in an upright position to avoid leakage.
Disposal	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



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Hazard(s) not otherwise classified (HNOC)	Exposure may aggravate those with pre-existing eye, skin or respiratory conditions. A significant portion of the mixture consists of a substance capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.
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#### Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	<u>Wt%</u>
Lubricating Oils, used, vacuum distilled	92045-41-5	100



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## Section 5: Fire Fighting Measures

#### Section 4: First Aid Measures.

Inhalation	Move to fresh air and keep at rest in a position comfortable for breathing. Call for medical attention if required
Skin Contact	Take off contaminated clothing and wash it before reuse. Rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until the product is removed. If skin irritation occurs: Get medical advice/attention.
Eye Contact	Rinse with Water. Get medical attention if irritation develops and persists
Ingestion	DO NOT induce vomiting: IMMEDIATELY call a POISON CENTER/doctor. If an individual is drowsy or unconscious, place the individual on the left side with head down. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.
Most Important Symptoms/Effects	Refer to Section - Toxicological Information
Indication of any immediate medical attention and special treatment needed	Aspiration of low viscosity petroleum hydrocarbons may cause severe pneumonitis (oil pneumonia). Vomiting should not be induced. If gastric lavage is considered for an unconscious victim, use of an endotracheal tube should be considered. If spontaneous vomiting has occurred, patient should be monitored for difficult breathing as adverse effects of aspiration into the lungs may be delayed up to 48 hours.



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Suitable extinguishing media	Dry chemical, foam, carbon dioxide, water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the
Unsuitable extinguishing media	Do not use water jet. Heavy stream of water may spread fire.
Specific hazards arising from the chemical	Not considered flammable but may burn at high temperatures.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire
Firefighting equipment/Instructions	Move containers away from fire area if you can do so without risk
General Fire Hazards	Fire fighters should wear complete protective clothing (turn out gear) including self- contained breathing apparatus. Do not allow run-off from firefighting to enter drains or water courses.

## Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures	Avoid breathing fumes. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing.
Methods and materials for containment and cleaning up	Cover any spills with dikes or absorb spilled liquid with sand, earth or other inert material to prevent migration and entry into sewers or streams. Clean up spill immediately and place in appropriate containers. Dispose of in accordance with federal, state and local regulations.
<b>Environmental Precautions</b>	Do not discharge to sewers and surface waters. Notify authorities if entry occurs.

## Section 7: Handling and Storage

Precautions for Safe Observe good industrial hygiene practices



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Handling	Obtain special instructions before use. Do not handle until all safety precautions have been understood. Avoid contact with eyes and skin. Avoid breathing vapors/mists generated by this product. Use in a well ventilated area. Do not eat, drink, or smoke in the work area, wash hands after use. Use good personal hygiene practices. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored.
Conditions for Safe Storage, including any incompatibilities	Keep container(s) tightly closed and product labeled. Store in cool, dry, well-ventilated areas away from extremely high or low temperatures, direct sunlight and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use.

## Section 8: Exposure Controls / Personal Protection

Occupational Exposure Limits	No exposure limits noted for ingredient(s)
<b>Biological Limit Values</b>	No biological exposure limits noted for the ingredient(s)
Appropriate Engineering Controls	Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use a chemical fume hood or local exhaust ventilation, and process enclosure if necessary, to control exposure. Ensure eyewash/safety shower stations are available near areas where this product is used.

#### Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Have eye washing facilities readily available where eye contact can occur. Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with face shield.
Hand Protection	Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile gloves. Suitability and durability of glove is dependent on usage, e.g. frequency and duration of



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	contact, chemical resistance of glove material, glove thickness, and dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced.	
Other	Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the workplace.	
Respiratory Protection	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Supplied air respiratory protection should be used for cleaning large spills or upon entry into tanks, vessels, or other confined spaces.	
Thermal Hazards	Wear appropriate thermal protective clothing, when necessary	
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not smoke, eat, or drink. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.	

## Section 9: Physical and Chemical Properties

Appearance	Liquid
Physical State	Liquid
Form	Liquid
Color	Dark Brown
Odor	Petroleum
Odor Threshold	Not available
рН	Not available
Melting Point/Freezing Point	Not available
Initial Boiling Point and Boiling Range	>260°C (500°F)
Flash Point (COC)	>60 (140°F)
Evaporation Rate	Not available
Flammability (solid, gas)	Not available

Upper/Lower Flammability or Explosive Limits		
Flammability Limit – Lower (%)	Not available	



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Not Available

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Flammability Limit – Upper (%)	Not available
Explosive Limit – Lower (%)	Not available
Explosive Limit – Upper (%)	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Relative Density @ 15°C	0.87-0.89
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition Temperature	Not available
Viscosity @ 40°C	13.0-15.0 cSt
Other Information	

## Section 10: Stability and Reactivity

**Pour Point** 

Reactivity	The product is stable and non-reactive under normal conditions of use, storage, and transport	
Chemical Stability	Material is stable under normal conditions	
Possibility of Hazardous Reactions	No dangerous reaction known under conditions of normal use	
Conditions to Avoid	Direct sunlight, extremely high or low temperatures, and incompatible materials.	
Incompatible Materials	Strong oxidizing agents, acids	
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide, hydrogen sulfide, sulfur oxides or sulfuric acid and unidentified organic and inorganic compounds.	



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#### Section 11: Toxicological Information

#### Information on Likely Routes of Exposure:

Ingestion	No information on significant adverse effects	
Inhalation	May cause respiratory irritation, symptoms include sore throat, coughing, labored breathing, sneezing, and burning sensation depending on length of exposure.	
Skin Contact	May cause reddening, itching and inflammation.	
Eye Contact	Contact may cause irritation and discomfort	

#### Product Toxicity Data

Acute Toxicity Estimate	No information on significant adverse effects	
Immediate Effects	No information on significant adverse effects	
Delayed Effects	No information on significant adverse effects	
Irritation/Corrosivity Data	OSHA HCS 2012 – Skin Irritation 3; Eye Irritation 2B	

#### **Respiratory or Skin Sensitization**

<b>Respiratory Sensitization</b>	No information available for the product	
Skin Sensitization	No information available for the product	

Germ Cell Mutagenicity	No information available for the product
Tumorigenic Data	No information available for the product
Reproductive Toxicity	No information available for the product
Specific Target Organ Toxicity – Single Exposure	No information available for the product
Specific Target Organ Toxicity – Repeated	No information available for the product
Exposure	
Aspiration Hazard	No information available for the product
ion 12: Ecological Information	

# EcotoxicityNo information is available for the productPersistence and<br/>DegradabilityNo information is available for the productBioaccumulative Potential<br/>Mobility in SoilNo information is available for the product



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#### Section 13: Disposal Considerations

Disposal Instructions	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Avoid release into the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.
Hazardous Waste Code	The waste code should be assigned in discussion between the user, the producer, and the waste disposal company
Waste from Residues/Unused Products	Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal Instructions)
Contaminated Packaging	Empty containers may contain residue which may exhibit hazards of material. Continue to observe all precautions. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

#### **Section 14: Transport Information**

DOT	Not regulated as dangerous goods
TDG	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code	No data available

This product is considered as dangerous goods – IATA, IMO and ADR

Special precautions for user
 Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

#### Section 15: Regulatory Information

#### Safety, health and environmental regulations/legislation for the substance or mixture

The following listing of regulations may not be complete and should not be solely relied upon for all regulatory compliance responsible



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Clean Air Act (CAA) – 1990 Hazardous Air Pollutants	Not Listed	
SARA - Hazard Categories	Immediate Hazard – No	
_	Delayed Hazard – No	
	Fire Hazard – No	
	Pressure Hazard – No	
	Reactivity Hazard – No	
SARA 302 Extremely Hazardous	Not listed	
Substance		
SARA 304 – Hazardous Substances and	Not Listed	
their Reportable Quantities		
SARA 313 -TRI Reporting	Not Listed	
United States		
Labor		
U.S OSHA - Specifically Regulated Chemicals <ul> <li>Vacuum Gas Oil and components (unless indicated beling)</li> </ul>	ow)	Not Listed
Environment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollu	tants	
<ul> <li>Vacuum Gas Oil and components (unless indicated bel</li> </ul>	ow)	Not Listed
U.S CWA (Clean Waer Act) - Toxic Pollutants	214)	NotListad
<ul> <li>Vacuum Gas Oil and components (unless indicated bel</li> </ul>	ow)	Not Listed
U.S CERCLA/SARA - Hazardous Substances and the second statement of the seco	heir Reportable Quantities	
Vacuum Gas Oil and components (unless indicated bel	•	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Report		
<ul> <li>Vacuum Gas Oil and components (unless indicated bel</li> </ul>	ow)	Not Listed
United States - California		
Environment		
U.S California - Proposition 65 - Carcinogens List		
Vacuum Gas Oil and components (unless indicated bel	,	Not Listed
NOTE: This product may contain detectable amounts of benzo(a)pyrene CAS 50-32-8,	benzo(k)huoranthene CAS 207-08-9,	
benzo(b)fluoranthene CAS 205-99-2, chrysene CAS 218	-01-9, dibenz(a,h)anthracene CAS 53-70-3.	
indeno(1,2,3cd)pyrene CAS 193-		
39-5, all of which are listed on the Proposition 65 Carcine		
U.S California - Proposition 65 - Developmental To:	kicity	





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Hazard Scale: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, Severe         • Vacuum Gas Oil and components (unless indicated below)       Not Listed         • Toluene       108-88-3       Listed         Issue Date       07-01-2022       Revision Date         • Version #       01       01         Key to Abbreviations       DOT – Department of Transportation TDG – Transportation of Dangerous Goods IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the protocol of 1978 (MARPOL = Marine Pollution)         Disclaimer/Statement of Liability       The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, this SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented	NFPA Ratings	Health: 2 Fire: 2 Instability: 0
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invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.		be accurate as of the date of preparation of this Safety Data Sheet. However, this SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended

Vacuum Gas Oil and components (unless indicated below)



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