SAFETY DATA SHEET

Gull New Zealand Ltd.

Section 1. Identification of the material and the supplier

Product	Gull Diesel (blended with up to 5% bio diesel).
Product Code	Gull Diesel Max
Product Use	Fuel for compression ignition diesel engines. Not recommended for marine use. For specific application advice see appropriate Technical Data Sheet or consult your Gull representative
Other Names	High flash point diesel (>60°C).
Company Name	Gull New Zealand Ltd.
Address	Level 4, 507 Lake Road, Takapuna, Auckland
Telephone	+64 9 489-1452
Fax Number	+64 9 489 1453
Emergency Telephone:	**0800 POISON (0800 764 766)**
Website:	www.gull.co.nz

Section 2. Hazards identification

This substance is classified as a dangerous good according to NZS5433: 2012

This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

EPA Approval Code: HSR001441

Pictograms

Chronic

Ecotoxic

HSNO Classification	Hazard Code	Hazard Statement
3.1D	H227	Combustible Liquid
6.1E	H303	May be harmful if swallowed.
6.3B	H316	Causes mild skin irritation.
6.7B	H351	Suspected of causing cancer
9.1B	H411	Toxic to aquatic life with long lasting effects

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use
P202	Do not handle until safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P273	Avoid release to environment
P280	Wear protective gloves and eye protection

Response code	Response Statement
P312	Call a Poison Centre (0800 764 766) if you are feeling unwell
P308 + P313	If exposed or concerned: Get medical attention
P332+ P313	If skin irritation occurs: Get medical attention
P370 + P378	Use foam extinguisher

Storage Code	Storage Statement
P405	Store locked up.
P403+P235	Store in a well-ventilated place. Keep cool.

Disposal Code	Disposal Statement
P501	Dispose of contaminated residues or waste by liaising with a waste disposal company or by disposing at a site approved by relevant local authorities.

Section 3. Composition/information on ingredients

Hazardous Ingredients	%(wght)	CAS NUMBER
Diesel	>90%	68334-30-5
Bio Diesel	≤5%	67762-38-3

Information on diesel composition:
A complex mixture of volatile hydrocarbons containing paraffin's, naphthenes, olefins and aromatics with carbon numbers predominantly between C4 and C12. Performance enhancing additives may be included at low concentrations.

Information on Bio Diesel composition (up to 5%):
Methyl esters from lipid sources
Synonyms: Rapeseed Methyl Ester (RME)

Section 4. First aid measures

Routes of exposure:

Inhalation	If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.
Ingestion	If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If swallowed, do not induce vomiting, give a glass of water and contact a doctor or Poisons Information Centre immediately.
Skin contact	Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin. Medical advice must be obtained urgently if product under high pressure has been injected through the skin.
Eye contact	Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.

Advice to Doctor

Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitutes a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and the underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

Section 5. Fire-fighting measures

Hazard type	Combustible
Hazards from decomposition products	Hazardous Toxic fumes may be evolved on burning or exposure to heat.
Suitable extinguishing media	Use foam, dry powder or water fog. Do not use water jets.
Precautions for firefighters and special protective clothing	Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire protective clothing. Ensure an escape path is always available from any fire. There is a risk of flashback if sparks or hot surfaces ignite vapour. FIRES IN CONFINED SPACES SHOULD BE DEALT WITH BY TRAINED PERSONNEL WEARING APPROVED BREATHING APPARATUS. Water may be used to cool nearby heat exposed areas/objects/packages. Avoid spraying directly into storage containers because of the danger of boil-
HAZCHEM code	3Z

Section 6. Accidental release measures

For emergency responders	Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel". Large and uncontained spillages should be smothered in foam to reduce the risk of ignition. Recovery of large spillages should be affected by specialist personnel. The foam blanket should be maintained until the area is declared safe. In case of spillage at sea, approved dispersants may be used where authorized by the appropriate regulatory authority. In the event of spillages, contact the appropriate authorities. Regular surveillance on the location of the spillage should be maintained.
For non-emergency personnel	Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Eliminate all ignition sources (including road traffic) into the hazard area. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment (refer Section 8).
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage. In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies. It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.

Methods and materials for containment and cleaning up

Small spill	Eliminate all ignition sources. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.
Large spill	Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Diesel vapour is heavier than air. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (refer Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Approved Handlers:
Approved Handler requirements are not required for this product.

Precautions for safe handling	Wear appropriate personal protective equipment (refer Section 8). Do not get in eyes or on skin or clothing. Do not swallow. Never siphon by mouth. Avoid exposure - obtain special instructions before use. Avoid breathing vapour or mist. Use only with adequate ventilation. Avoid release to the environment. Do not enter storage areas and confined spaces unless adequately ventilated. Wear appropriate respirator when ventilation is inadequate. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Wash thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container. On infrequent basis diesel fuel may be have been dosed with a biocide to destroy slimes which may grow at the fuel/ water interface. Some biocides have been classified as sensitizers and therefore special care to avoid skin contact is required. The biocide is soluble in water and skin protection is required when handling water phases. Normal handling conditions apply to either un-dosed or dosed diesel fuel.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (refer Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Store and dispense only in well ventilated areas away from heat and sources of ignition. Store and use only in equipment/containers designed for use with the product. Containers must be properly labelled and kept closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not remove warning labels from containers. Empty containers may retain residual product; retain hazard warning labels on empty packages as a guide to their safe handling, storage and disposal. Do not re-use container for any other product. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hydrocarbon vapour concentrations below 1% of the lower flammability limit and an oxygen concentration of at least 20% by volume. Always have sufficient personnel standing by outside the tank with supplied air breathing apparatus and appropriate equipment to affect a quick rescue
Other information -Fire prevention	Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards, even at temperatures below the normal flash point. Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electricity discharge and all ignition

sources during filling, ullaging and sampling from storage tanks. Hoses should be electrically continuous. Ensure equipment used is properly earthed or bonded to the tank structure. The product presents a flammability hazard if heated above the flash point but bulk liquids at normal storage temperatures present a low fire hazard. If fuel contacts hot surfaces, or leaks from high pressure fuel pipes, the vapour and/or mists generated will create a flammability or explosion hazard. Product soaked rags, paper or material used to absorb spillages, represent a fire hazard and should not be allowed to accumulate. Dispose of safely after use. Empty containers represent a fire hazard as they may contain remaining flammable residues and vapour. Do not cut, weld, heat or drill empty containers. Do not introduce an ignition source. Heating can cause an explosion.

Section 8 Exposure controls / personal protection

Occupational exposure limits

Material	TWA*		STEL*		Reference
	ppm	mg/m^3	ppm	mg/m^3	
Oil mist, mineral	-	5	-	10	NZ Workplace Exposure Standards and Biological Exposure Indices (10th edition)
Fuels, diesel [total hydrocarbon, vapour & aerosol]	-	100	-	-	Inhalable fraction and vapour. American Conference of Industrial Hygienists (2014)

***** TWA - (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL - (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Biological Limit Value (BLV): Data not available.

Individual protection measures

Respiratory protection	Ensure good ventilation. Avoid, as far as reasonably practicable, inhalation of vapour, mists or fumes generated during use. If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level. If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
Hand protection	Wear gloves of impervious material e.g. nitrile or neoprene rubber gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance. The use of barrier cream is recommended.
Eye protection	Chemical safety glasses or face shield recommended as appropriate. Final choice of appropriate eye/face protection will vary according to individual circumstances including methods of handling or engineering controls as determined by appropriate risk assessments. Eye protection should conform to Australian/New Zealand Standard AS/NZS 1337- Eye Protectors for Industrial Applications.
Protective clothing	Suitable protective work-wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial clothing.

Section 9 Physical and chemical properties

Odour	Characteristic oil odour
Appearance	Colourless to amber/straw
Physical state	Mobile liquid at room temperature
Boiling range	180 - 380°C Test Method: ASTM D 86
Solubility in water	<0.1% mass @ 20°C
Vapour pressure	<0.1 kPa @ 20°C
Density	0.82 – 0.86 kg/L @ 15°C Test Method: ASTM D 12984
Flash point	>61°C (PMCC) Test Method: ASTM D 93
Auto-ignition temperature	230°C
Flammability limits	Lower: 0.7% v/v Upper: 5% v/v
Other Information	Gull diesel may contain up to 5% bio diesel

Section 10. Stability and reactivity

Chemical stability	Stable under normal conditions of storage and handling.
Conditions to avoid	This material is combustible. Avoid heat, open flames, sparks and other sources of ignition.
Incompatible materials	Avoid contact with strong oxidizing agents.
Hazardous decomposition products	Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide and carbon dioxide.
Hazardous polymerization	Will not occur.

Section 11.	Toxicological information	
Acute oral toxicity	LD_{50} Rat (oral)	> 2000 mg / kg Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities maycause nausea and diarrhea. Ingestion may lead to vomiting and aspiration into the lungs, this may result in chemical pneumonitis, which may be fatal.
Acute dermal toxicity	LD50 Rabbit (dermal)	> 2000 mg / kg Unlikely to cause harm to the skin on brief or occasional contact, but prolonged or repeated exposure may lead to dermatitis. This material contains significant quantities of polycyclic aromatic hydrocarbons (PAHs), some of which have been shown by experimental studies to induce skin cancer. Unlikely to cause sensitisation by skin contact.
Acute inhalation toxicity	LC_{50} Rat (inhalation)	> 5000 mg / m^3 Vapours may cause drowsiness and dizziness. May cause irritation to eyes, nose and throat due to exposure to high concentrations of vapour, mist or fumes.
Eye contact		Vapour, mist or fume may cause eye irritation. Exposure to vapour, mist or fume may cause stinging, redness and watering of the eyes.
Carcinogenicity		Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity		No known significant effects or critical hazards.
Teratogenicity		No known significant effects or critical hazards.
Chronic effects		It is important to recognize that this product is classified as a Category A3 Carcinogen – Confirmed Animal Carcinogen with Unknown Relevance to Humans according to the Occupational Safety and Health Service of WorkSafe. The substance is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histological type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiological studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

Section 12. Ecological information

Product classed as 'Dangerous for the Environment'. May be harmful to aquatic organisms. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

HSNO classifications	9.1B
Mobility	Spillages may penetrate the soil causing ground water contamination.
Persistence and degradability	This product is inherently biodegradable.
Biodegradability	Material has the potential to bio-accumulate, however metabolism or physical properties may reduce the bio-concentration or limit bioavailability.
Environmental Protection	Do not discharge this material into drains, sewers or waterways.

Test	Duration	Organism Type	Test Results
Aquatic - Acute Toxicity	96 hour(s)	Fish	LL50 1 - 100 mg/l: data for similar materials
Aquatic - Acute Toxicity	48 hour(s)	Daphnia magna	EL50 1 - 1000 mg/l: data for similar materials
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	EL50 1 - 100 mg/l: data for similar materials
Aquatic - Chronic Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	NOELR 1 - 10 mg/l: data for similar materials

Persistence, degradability and bioaccumulation potential

Media	Test Type	Duration	Test Results
Water	Readily biodegradable	28 day(s)	Percent degraded < 60 : similar material

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Wherever possible waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Hazard warning labels are a guide to the safe handling of empty packages and should not be removed Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	U.N. number	Proper shipping name	Class	Hazchem code	Packing group	DG label	Additional information
New Zealand land transport	3082	Environmentally Hazardous Substance, Liquid N.O.S (diesel)	9	3Z	III		
Marine transport (IMDG)	3082	Environmentally Hazardous Substance, Liquid N.O.S (diesel)	9		III		Emergency schedules (EmS) F-A, S-F Stowage & segregation category: A Marine pollutant.
Air transport (IATA)	3082	Environmentally Hazardous Substance, Liquid N.O.S (diesel)	9		III		

Section 15 Regulatory information

EPA Approval Code	HSR001441
HSNO Classifications	3.1D, 6.1E, 6.3B, 6.7B, 9.1B
HSNO Controls	Trigger quantities for this substance (class 9.1B)

Approved handler	Not Required
Location Certificate	Not Required
Tracking	Not Applicable
Signage	1000 L
Emergency Response Plan	1000 L
Secondary containment	1000 L

Section 16 Other information

The content and format of this SDS is in accordance with HSNO Approved Code of Practice (No. HSNO CoP 8-1 09-06): Preparation of Safety Data Sheets

Disclaimer

The information and recommendations contained herein is, to the best of Gull's knowledge and belief, accurate and reliable as of the date issued. The information herein is given in good faith, but no warranty, express or implied is made.

The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container.

Please contact the New Zealand proprietor, Gull New Zealand Ltd, phone +64 9 489-1452, www.gull.co.nz if further information is required.

Document history

Current issue	Previous issue
Date of issue: 14 March 2019	Date of previous issue: 30 May 2016
Revision: 3.1	Revision: 3.0
Date of next review: 14 March 2024	