Material Safety Data Sheet

Infosafe No	YSUYL	Issue Date: January 2009	Issued by Gull NZ Ltd

Product Name : **Gull Diesel**

Classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	GULL Diesel
Product Code	ADF - AGO
Product Use	Fuel for compression ignition diesel engines. For specific application advice see appropriate Technical Data Sheet or consult your Gull representative
Company Name	Gull New Zealand Ltd
Address	Level 1, 507 Lake Road, Takapuna
Telephone	+64 9 489-1452
Number/Fax	+64 9 489-1453
Other Names	Name Product Code Automotive Gas Oil (AGO) Automotive Diesel Fuel (ADF)
Other Information	Emergency Tel: 0800 154 666 (Australian Centre of Occupational Health and Safety) National Poisons Centre telephone no. (24 hours): 0800 POISON (0800 764 766) MSDS website: http://www.gull.biz

2. COMPOSITION/INFORMATION ON INGREDIENTS

Information on Composition	Chemical Composition A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range C9 through C20. Performance enhancing additives may be included at low concentrations. CAS No. 68334-30-5 Hazardous Components Hydrogenated cracked components containing polycyclic aromatic hydrocarbon compounds may be present. Fuels, diesel. EINECS No: 269-822-7, CAS No: 68334-30-5, Xn

3. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good according to NZS 5433.
This material may contain significant quantities of polycyclic aromatic hydrocarbons (PAHs), some of which have been shown by experimental studies to induce skin cancer.

4. FIRST AID MEASURES

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	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	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 disrhythmias.
Other Information	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.

5. FIRE FIGHTING MEASURES

For major fires, call the Fire Brigade immediately. Ensure an escape path is always available from any fire. There is a risk of flashback if sparks or hot surfaces ignite vapour. Use foam, dry powder or water fog. DO NOT USE water jets. 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-over.

Hazardous	Toxic fumes may be evolved on burning or exposure to heat.
Combustion Products	See Stability and Reactivity, Section 10 of this Material Safety Data Sheet.

6. ACCIDENTAL RELEASE MEASURES

Any spillage should be regarded as a potential fire risk. Isolate the spillage from all ignition sources including road traffic. Ensure good ventilation. Evacuate all non-essential personnel from the immediate area.
Wear protective equipment. (See Exposure Controls/Personal Protection, Section 8 of this Material Safety Data Sheet for details) Contain and recover liquid using sand or other suitable inert absorbent material.
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.
Spilled material may make surfaces slippery. Clean up spilled material immediately.
Protect drains from potential spills to minimize contamination.
Do not wash product into drainage system.
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.
Vapour is heavier than air and may travel to remote sources of ignition (eg. along drainage systems, in basements, etc.).
If spillage has occurred in a confined space, ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry.
Protect drains from potential spills to minimize contamination. Do not wash product into drainage system.
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.
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.
See Section 13, Disposal Considerations, of this Material Safety Data Sheet, for more detail.

7. HANDLING AND STORAGE

Handling Ensure good ventilation and avoid, as far as reasonably practicable, the inhalation and contact with vapours, mists or fumes which may be generated during use. If such vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.
Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.
Avoid skin contact. Good working practices, high standards of personal hygiene

	And plant cleanliness must be maintained at all times. Keep out of reach of children. Do not siphon product by mouth. Whilst using, do not eat, drink or smoke. Wash hands thoroughly after contact. Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets. Take all necessary precautions against accidental spillage into soil or water. 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 undosed or dosed diesel fuel.
Storage	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. 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 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. Will present 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	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.
Respiratory Protection	Respiratory protection is normally unnecessary, provided the concentration of vapour, mists or fumes is adequately controlled. If operations are such that the excessive generation and inhalation of vapour mist or fume may be anticipated, then suitable approved respiratory equipment should be worn. The use of respiratory equipment must be strictly in accordance with the manufacturers' instructions and any statutory requirements governing its selection and use.
Body Protection	Wear face visor or goggles in circumstances where eye contact can accidentally occur. If skin contact is likely, wear impervious protective clothing and/or gloves. Change heavily contaminated clothing as soon as reasonably practicable and launder before re-use. Wash any contaminated underlying skin with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odour	Mild gas-oil like.
Boiling Point	180℃ - 380℃ ASTM D 86
Solubility in Water	<0.1% mass @ 20C
Vapour Pressure	<0.1 kPa @ 20℃
Physical State	Mobile Liquid
Colour	Colorless to amber/straw
Density	0.82 - 0.86 kg/L @ 15℃ ASTM D 12984
Flash Point	>61℃ (PMC) ASTM D 93
Flammable Limits LEL	0.7%
Flammable Limits UEL	5.0%
Other Information	Grades: Gull Diesel

10. STABILITY AND REACTIVITY

Hazardous Polymerization	Hazardous polymerization reactions will not occur. This material is combustible.
Materials to Avoid	Avoid contact with strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions. Incomplete combustion/ thermal decomposition will generate smoke, carbon dioxide and hazardous gases, which will include carbon monoxide.
Conditions to Avoid	Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation	May cause irritation to eyes, nose and throat due to exposure to high concentrations of vapour, mists or fumes.
Ingestion	Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.
Skin	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 sensitization by skin contact.
Eye	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
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 the Department of Labour. 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.

12. ECOLOGICAL INFORMATION

Mobility	Spillages may penetrate the soil causing ground water contamination.
Persistence / Degradability	This product are inherently biodegradable.
Bioaccumulation	There is no evidence to suggest bioaccumulation will occur.
Acute Toxicity - Other Organisms	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.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local regulations.
After recovery and evaporation, remaining contaminated soil and/or absorbent material may be disposed of to approved landfill or, if approved, allowed to degrade in situ.
Do not dispose of near ponds, ditches, down drains or onto soil.
Incineration may be carried out under controlled conditions provided that local regulations for emissions are met. Dispose of product and container carefully and responsibly.
Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packages and should not be removed.
If possible, containers should be recycled.

14. TRANSPORT INFORMATION

Not classified as a dangerous good for transport according to the NZS 5433:1999 Transport of Dangerous Goods on Land.

U.N. Number	None Allocated
Proper Shipping Name	None Allocated
DG Class	None Allocated
Hazchem Code	None Allocated
Packing Group	None Allocated
Storage and Transport	Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
UN-No : 1202
Class : 3 Flammable Liquid
Packing group : Packing Group III
Proper Shipping Name : DIESEL FUEL
EmS : 3-07
Stowage and Segregation Category : A
Air Transport
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

This product is classified as a 3.1D - Flammable Liquid; Low Hazard, according to the Hazardous Substances (Classification) Regulations 2001.
This product is classified as a 6.1E - Substance that is mild acutely toxic, according to the Hazardous Substances (Classification) Regulations 2001.
This product is classified as a 6.3B - Substance that is mildly irritating to the skin, according to the Hazardous Substances (Classification) Regulations 2001.
This product is classified as a 6.7B - Substance that is a suspected human carcinogen, according to the Hazardous Substances (Classification) Regulations 2001.
This product is classified as a 9.1B - Substance that is ecotoxic in the aquatic environment, according to the Hazardous Substances (Classification) Regulations 2001.

16. OTHER INFORMATION

Contact Person/Point

This data sheet and the health, safety and environmental information it contains is considered to be accurate as of the date specified above. We have reviewed any information contained herein which we received from sources outside the Gull Group of Companies. However, no warranty or representation, expressed or implied is made as to the accuracy or completeness of the data and information contained in this data sheet.
Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the

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User's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission, recommendation or authorization given or implied to practice any patented invention without a valid license. The GULL Group of Companies shall not be responsible for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.