

# SAFETY DATA SHEET

## Hi-Speed Diesel (HSD)



### 1. Identification of Substance or Mixture and of the Supplier

**Product Name** : Diesel  
**Other Names** : Low Sulphur Diesel  
**Recommended Use** : Diesel fuels are distillate fuels suitable for use in high and medium speed internal combustion engines of the compression ignition type.  
 This product is intended for use in closed systems only  
**Suppliers Details** : **Attock Refinery Limited**  
 P.O. Refinery, Morgah, Rawalpindi, Pakistan  
 Telephone/Fax Number  
 Tel: +92-51-5487041-45  
 Fax: 92-51-5487093-4  
 E-mail: info@arl.com.pk  
**Emergency Phone Number** : +92-51-5487041

### 2. Hazard Identification

**GHS Classification** **Flammable Liquids, Category 4**  
**Aspiration Hazard, Category 1**  
**Carcinogenicity: Category 2**  
**Hazardous to the Aquatic Environment- Long-term -Hazard, Category 2**

**GHS Label Elements  
& Precautionary  
Statements**



**Signal Word**  
Danger

**Hazard Statement (s)**

**H304** May be fatal if swallowed and enters airways  
**H332** Harmful if inhaled  
**H351** Suspected of causing cancer  
**H411** Toxic to aquatic life with long lasting effects  
**H319** Causes eye irritation  
**H340** May cause genetic defects  
**AUH066** Repeated exposure may cause skin drying or cracking

### Precautionary statement – Prevention

- P201** Obtain special instructions before use
- P202** Do not handle until all safety precautions have been read and understood
- P210** Keep away from source of ignition, hot surface and open flames.  
No smoking
- P264** Wash hands, face and all exposed skin thoroughly after handling
- P273** Avoid release to the environment
- P280** Wear protective gloves/protective clothing/eye protection/face protection.
- P281** Use personal protective equipment as required

### Precautionary statement – Response

- P301+P310** IF SWALLOWED: Immediately call doctor/physician.
- P302+P352** IF ON SKIN: Wash with plenty of soap and water
- P304+340** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P308+P313** IF exposed or concerned: Get medical advice/attention.
- P331** Do NOT induce vomiting
- P362** Take off contaminated clothing and wash before reuse.
- P370+P378** In case of fire: Use foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only for extinction.
- P391** Collect spillage

### Precautionary statement – Storage

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

### Precautionary statement – Disposal

- P501** Dispose of contents/container to an approved waste disposal plant

## 3. Composition / Information on Ingredients

**Chemical Identity** : Complex mixture of hydrocarbons consisting of paraffin's, cycloparaffins and aromatics with carbon numbers in the range of C9 and higher.

**CAS Number** : 68334-30-5

**Composition Information**

Name	CAS Number	Percent (%)
Fuel Diesel	68334-30-5	100

#### 4. First-Aid Measures

<b>Inhalation</b>	: If inhaled, remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.
<b>Ingestion</b>	: DO NOT induce vomiting. Do not give liquids. Seek medical attention.
<b>Skin</b>	: Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water. Obtain medical attention
<b>Eye Contact</b>	: If in eyes, immediately flush with clean and low pressure water for at least 15-minutes. Hold eyelids open to ensure adequate flushing. Seek medical attention.

#### 5. Fire Fighting Measures

<b>Hazchem Code</b>	: Not applicable
<b>Suitable Extinguishing Media</b>	: Foam, water spray or fog. Dry chemical, Carbon dioxide (CO <sub>2</sub> ), sand or earth may be used for small fires only.
<b>Unsuitable Extinguishing Media</b>	: Do not use water in a jet.
<b>Hazards from Combustion Products</b>	: Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide, oxides of sulphur and oxides of nitrogen.
<b>Specific Hazards during Fire Fighting</b>	: This product will burn if exposed to fire.
<b>Decomposition Temperature</b>	: Not Available
<b>Precautions in connection with Fire</b>	: Special protective equipment for firefighters. .In case of fire: Wear self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Evacuate personnel to a safe area. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

## 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures** : Use personal protective equipment. Extinguish or remove all sources of ignition and stop leak if safe to do so.  
Increase ventilation. Evacuate personnel to safe areas.

**Environmental Precautions** : Avoid release to the environment. Avoid subsoil penetration.

**Methods and Materials for Containment and Cleaning up** : If possible contain the spill. Contain liquid with sand or soil. Prevent spilled material from entering drains, sewers, and open waterways. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulation

## 7. Handling & Storage

**Safe Handling** : Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion. Avoid inhalation of vapors and mists and skin or eye contact. Do not handle until all safety precautions have been read and understood.

**Safe Storage Conditions** : Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

**Recommended Material** : For containers, or container linings use mild steel, stainless steel. Aluminium may also be used for applications where it does not present an unnecessary fire hazard. Examples of suitable materials are: high density polyethylene (HDPE), polypropylene (PP), and Viton (FKM), which have been specifically tested for compatibility with this product.

**Unsuitable Materials** : Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber (NR), nitrile rubber (NBR), ethylene propylene rubber , polymethyl methacrylate , polystyrene, polyvinyl chloride (PVC), polyisobutylene

## 8. Exposure Control / Personnel Protection

### Occupational Exposure Limit Values

Component	CAS No	Value Type (Form of Exposure)	Control Parameters / Permissible Concentration	Basis
Fuel Diesel	68334-30-5	TWA	100 mg/m <sup>3</sup>	ACGIH

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.

### Biological Limit Values

: No biological limits allocated.

### Appropriate Engineering Controls

: This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapors/mists below the exposure standards, suitable respiratory protection must be worn.

### Respiratory Protection

: If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements

### Eye Protection

: Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances.  
Eye protection devices should conform to relevant regulations.

### Hand Protection

: Wear gloves of impervious material such as nitrile gloves (Breakthrough time of > 240 minutes) neoprene, PVC gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.  
Occupational protective gloves should conform to relevant regulations.

### Body Protection

: Suitable protective work wear, e.g. Cotton overalls/dangries

## 9. Physical & Chemical Properties

<b>Physical State</b>	: Liquid
<b>Color</b>	: Light Yellowish
<b>Odor</b>	: Hydrocarbon (marketable)
<b>Boiling Point Range</b>	: 145-390 °C
<b>Specific Gravity @ 15.6°C/ 15.6°C:</b>	: 0.840-0.860
<b>Flash Point</b>	: >54 °C
<b>Sulphur</b>	: <0.05%

## 10. Stability & Reactivity

<b>Chemical Stability</b>	: Stable under normal conditions of storage and handling
<b>Conditions to Avoid</b>	: Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources
<b>Incompatible Products</b>	: Keep away from strong oxidizers.
<b>Hazardous Decomposition Products</b>	: Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

## 11. Toxicological Information

### Toxicology Information

**: Acute Toxicity – Oral**  
LD50 :( Rat) : >2000 mg/kg

**Acute Toxicity – Inhalation**  
LD50 :( Rat) : >5 mg/l / 4h

**Acute Toxicity – Dermal**  
LD50 :( Rat) : >2000 mg/kg

**Ingestion** : The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process.

<b>Inhalation</b>	: Inhalation of product vapors may cause irritation of the nose, throat and respiratory system.
<b>Skin</b>	: Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis
<b>Eye</b>	: May be an eye irritant
<b>Respiratory Sensitization</b>	: Not expected to be a respiratory sensitizer
<b>Skin Sensitization</b>	: Not expected to be a skin sensitizer
<b>Germ cell Mutagenicity</b>	: Not considered to be mutagenic hazard
<b>Carcinogenicity</b>	: Suspected to cause cancer
<b>Reproductive Toxicity</b>	: Not considered to be toxic to reproduction
<b>Aspiration Respiratory Organs Hazard</b>	: May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract

## **12. Ecological Information**

<b>Ecotoxicity</b>	: Toxic to aquatic life with long lasting effects
<b>Persistence and degradability</b>	: Major constituents are expected to be inherently biodegradable. The volatile constituents will oxidize rapidly by photochemical reactions in air.
<b>Mobility</b>	: Floats on water. Partly evaporates from water or soil surfaces, but a significant proportion will remain after one day. Large volumes may penetrate soil and could contaminate groundwater.
<b>Bioaccumulative Potential</b>	: Contains constituents with the potential to bioaccumulate. Films formed on water may affect oxygen transfer and damage organisms
<b>Other Adverse Effects</b>	
<b>Environmental Protection</b>	: Major components are inherently biodegradable. Persists under anaerobic conditions. The volatile components oxidize rapidly by photochemical reactions in air. Do not discharge this material into waterways, drains and sewers
<b>Acute Toxicity - Other Organisms</b>	: LL/EL/IL50:(Aquatic organisms): 1-10 mg/l

### **13. Disposal Considerations**

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected.

### **14. Transport Information**

**Hazard Class**

3

**U.N. Number**

1202

**Packaging Group**

III

**Label**

Combustible Liquid

### **15. Regulatory Information**

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations.

### **16. Other Information including Information on Preparation and revision of the SDS**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process.