SECTION 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Identification          HD AFFF 3% - C6 / HD AFFF 3F-C6
Application & Use               Fire Extinguishing Foam Concentrate
Product Description            Mixture of Hydrocarbon Surfactants, Fluorinated Surfactants & Solvents

SECTION 2 - COMPOSITION

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>CONCENTRATION %</th>
<th>CAS No</th>
<th>HEALTH CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butyl Di Glycol</td>
<td>5-20</td>
<td>112-34-5</td>
<td>Xi R 36</td>
</tr>
<tr>
<td>Metal salt</td>
<td>≤ 5</td>
<td>7487-88-9</td>
<td>Xi R 36, 37, 38</td>
</tr>
<tr>
<td>Proprietary Mixture of Hydrocarbon &amp; Fluorinated Surfactants</td>
<td>5-20</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>QS</td>
<td>7732-18-5</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 - HAZARD IDENTIFICATION

Human health hazards            Not classified under CHIP III
Ingestion                       May cause nausea, vomiting & diarrhea

SECTION 4 - FIRST AID MEASURES

Remove patient from hazard area, keep patient calm & warm. Provide fresh air. Refer this Material Safety Data Sheet while giving medical treatment.

Skin                            Remove contaminated clothing. Wash immediately with plenty of clean water. If irritation persists, call for medical treatment.
Eye                             Wash immediately with clean flowing water for at least 10 minutes, contact doctor if irritation/pain persists.
Ingestion                       May cause nausea. Do not induce vomiting. Send immediately for medical help.
Inhalation:                     If the patient is conscious, it is anticipated to be a minor problem. If there is breathing difficulty or cough, keep patient at rest, seated in maximum comfortable position. Call for medical attention if symptoms do not go away quickly or patient is unconscious.

SECTION 5 - FIRE FIGHTING MEASURES

Fire fighting measures are not applicable as HD AFFF is a fire extinguishing medium. If product containers are involved in fire, then a suitable extinguishing agent should be applied. Evacuate all persons from area involved in fire, use PPE.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions:           Avoid contact with skin, eyes and clothing. Do not breathe mist, aerosols.
Personal Protections:           Wear protective clothing specified for normal operations.
Environmental precautions       -
Spillage                        The practice of washing spills into drains should be avoided if at all possible and should under no circumstances be allowed without first consulting the local Water Authority and Environment Agency.
Spillage                        Small spills can be absorbed with sand or contained with earth or spill control material. Shovel up spillage and place in labelled, sealable container for subsequent safe disposal as per local laws.
SECTION 7- HANDLING AND STORAGE

Handling
No special handling techniques required

Storage
Recommended storage environment is 0° to 49° C. Store the product in original shipping container or tanks designed for product storage, away from direct sunlight and heat. Do not put into contact with material which reacts violently with water. The product should be stored in sealed, original containers above 0° C and below 40° C for the best results. Protect from frost.

Personal Protective Equipment - Fire Fighting
HD Fire Protect Foam concentrates will be used by professional fire fighters to control and extinguish flammable liquid fires. This process may involve exposure to heat, flame and possibly toxic vapours and fumes. It is normal procedure to wear appropriately designed personal protective equipments suitable for fire fighting operations.

SECTION 8- EXPOSURE CONTROL & PERSONAL PROTECTION

Occupational Exposure limit: Not determined

Ventilation & engineering control measures: Use only in well ventilated areas, avoid prolong, extensive or repeated inhalation or contact with eye and skin.

Personal Protective & Handling

Hand protection: Wear impervious gloves of approved type (e.g., Neoprene)

Eye protection: Wear safety goggles of an approved type

Respiratory protection: Not required

SECTION 9- PHYSICAL & CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Clear to Amber coloured liquid</td>
</tr>
<tr>
<td>pH at 20° C</td>
<td>6.5 - 9.0</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>100° C at 760 mm Hg</td>
</tr>
<tr>
<td>Odour</td>
<td>Organic</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 98° C</td>
</tr>
<tr>
<td>Flammability</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscible with water in all proportions</td>
</tr>
<tr>
<td>Viscosity at 20° C</td>
<td>&lt; 10 cSt</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.0 - 1.05</td>
</tr>
<tr>
<td>Special fire fighting procedures</td>
<td>None. This is an extinguishing agent</td>
</tr>
</tbody>
</table>

SECTION 10- REACTIVITY & STABILITY

Stability
Generally stable. As with all aqueous solutions, prevent from contact with any material which have violent reaction with water.

Hazardous decomposition products
Do not expose containers to heat or flame since the containers are made from high density polyethylene and will burn. Thermal decomposition of containers and/or product may generate acid smoke, fumes and traces of Na₂O, Cl⁻, SOx, NOx & HF.

SECTION 11- TOXICOLOGICAL INFORMATION/HEALTH EFFECT

Inhalation
Inhalation of hazardous amount is unlikely, when used as intended. May cause irritation to respiratory tract when inhaled.

Ingestion
Low oral risk when used as intended. May cause nausea, vomiting and diarrhea if ingested.

Contact to eye or skin
Low risk if appropriate precautionary measures are taken (see section 6). May cause skin and eye irritation when comes in contact with them.

Aqua toxicity
Guppi fish, No toxic effect till concentration of 1500 ppm for 96 hrs
SECTION 12- ECOLOGICAL INFORMATION

Persistence/degradability: Biodegradable
Bioaccumulation: Bioaccumulation is unlikely to occur due to metabolism and excretion
Biodegradation: Biodegradable
COD 7911.36
BOD 17250
Sewage treatment: Data not available

SECTION 13- DISPOSAL CONSIDERATION

Disposal Waste should be disposed via local authority, waste collection service or registered waste carrier. Ensure that the destination is a licenced facility. Container should be disposed off as per local rules.
Handling for disposal Avoid contact with skin & eyes. Do not inhale excessively. Do not ingest. Wash thoroughly with clean water in case of contact.
Method of disposal Do not discharge into drain or water source. Contact concerned local authorities

SECTION 14- TRANSPORT INFORMATION

Not classified as Dangerous or Hazardous for transport under UN,IMO,ADR/RID and IATA/ICAO

SECTION 15- REGULATORY INFORMATION

Label for supply None required
UK regulatory references Health and Safety at work Act 1974
Approved Code of Practice Classification and Labelling of Substances and Preparations Dangerous for Supply
Guidance Notes Occupational Exposure Limits EH40/96
Transportation of Dangerous Goods Non required as per ADR/RID/MDG,IATA & 49 CFR
(TDG) information

SECTION 16- OTHER INFORMATION

Use & restriction For Fire extinguishment purpose only
Revision Date April-19
Information Source Data sheet of ingredients & packaging manufacturers,
Literature from PPE manufacturers
Central Pollution Control Board Guidelines - India

NOTE

This information is based on our knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should therefore not be construed as guaranteeing any specific property of the product. User is required to ensure suitability of the product for the intended use, compliance to regulations, for its safe use and disposal. HD FIRE PROTECT PVT. LTD will not be held responsible or liable for any injury or accident of any kind.