Product ID: AEROSHELL PERFORMANCE ADDITIVE 101 MSDS Date:01/05/1998 FSC:6850 NIIN:01-474-4852 Status Code:A MSDS Number: CLCHK === Responsible Party === Company Name: SHELL AVIATION LTD Address:SHELL-MEX HOUSE, STRAND City:LONDON WC2R 0ZA Country:UK Info Phone Num:44-(0)171-546-2094 Emerg ency Phone Num:44-(0)171-257-5515 Resp. Party Other MSDS Num.:SDS NO. DMC05100 CAGE:KA832 === Contractor Identification === Company Name: SHELL AVIATION LTD Address:SHELL-MEX HOUSE, STRAND Box:City:LONDON WC2R 0ZA Country:UK Phone:44-(0)171-546-2094 Contract Num:SP0450-01-M-ZA06 CAGE:KA832 Company Name: SHELL AVIATION LTD Address:SHELL-MEX HOUSE, STRAND Box:City:LONDON WC2R 0ZA Country:UK Phone:44-(0)171-546-2094 Contract Num:SP0450-01-M-ZA55 CAGE:KA832 Company Name: SHELL AVIATION LTD Address:SHEL L-MEX HOUSE, STRAND Box:City:LONDON WC2R 0ZA Country:UK Phone:44-(0)171-546-2094 Contract Num:SP0450-01-M-ZA65 CAGE:KA832

Ingred Name:DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC CAS:64742-65-0 RTECS #:PY8038500 Minumum % Wt:1. Maxumum % Wt:5.

Ingred Name:SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM. CAS:64742-94-5 RTECS #:WF3100000 Minumum % Wt:50. Maxumum % Wt:80. 000 Minumum % Wt:5. Maxumum % Wt:10. OSHA PEL:50 MG/M3;10 PPM ACGIH TLV:52 MG/M3;10 PPM ACGIH STEL:79 MG/M3;15 PPM EPA Rpt Qty:100 LBS DOT Rpt Qty:100 LBS

Ingred Name:BUTYLATED HYDROXYTOLUENE CAS:128-37-0 RTECS #:GO7875000 Minumum % Wt:5. Maxumum % Wt:10. ACGIH TLV:10 MG/M3

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:EXCESSIVE DERMAL EXPOSURE CAUSES DEFATTING AND DRYING OF SKIN. INHALATION OF VAPOURS MAY CAUSE

- IRRITATION OF THE RESPIRATORY TRACT, DIZZINESS, HEADACHE, NAUSEA. Explanation of Carcinogenicity:THIS PRODUCT HAS NOT BEEN EVALUATED IN LONG-TERM CHRONIC EXPOSURE TESTS. DERMAL APPLICATION TO MICE EXPECTED TO CAUSE TUMOURS. CARCINOGENIC RESPONSE MAY BE A CONSEQUENCE OF REPEAT, LOCAL CONTACT AND T HE EXPOSURE CONDITIONS. Effects of Overexposure:PROLONGED EXPOSURE TO VAPOUR/MIST
- CONCENTRATIONS ABOVE THE RECOMMENDED OCCUPATIONAL EXPOSURE STANDARD MAY CAUSE: HEADACHE, DIZZINESS, NAUSEA, IRRITATION OF THE EYES, UPPER RESPIRATORY TRACT, MOUTH AND DIGESTIVE TRACT, ASPHYXIATION, UMCONSCIOUSNESS AND EVEN DEATH. SPLASHES INTO THE EYE MAY CAUSE IRRITATION AND CONJUNCTIVITIS, IF INGESTED CAN LEAD TO IRRITATION OF THE MOUTH, THROAT, DIGESTIVE TRACT, VOMITING, CONVULSIONS AND COMA. ASPIRATION INTO THE LINGS MAY OCCUR DIRECTLY OR FOLLOWING INGESTION. THIS CAN CAUSE CHEMICAL PNEUMONTITIS WHICH MAY BE FATAL.

First Aid:INHALATION: REMOVE TO FRESH AIR. IF BREATHING BUT UNCONCIOUS, PLACE IN THE RECOVERY POSITION. IF BREATHING HAS STOPPED, APPLY ARTIFICIAL RESPIRATION. IF HEARBEAT ABSENT GIVE EXTERNAL CARDIAC COMPRESSI ON. MONITOR BREATHING AND PULSE. OBTAIN MEDICAL ATTENTION IMMEDIATELY. SKIN: WASH SKIN WITH WATER USING SOAP IF AVAILABLE. CONTAMINATED CLOTHING MUST BE REMOVED AS SOON AS POSSIBLE. IT MUST BE LAUNDER ED BEFO RE REUSE. EYE: FLUSH EYE WITH WATER. IF PERSISTENT IRRITATION OCCURS, OBTAIN MEDICAL ATTENTION. INGESTION: DO NOT DELAY. DO NOT INDUCE VOMITING. PROTECT THE AIRWAY IF VOMITING BEGINS. SEE SUPPL ELMENTAL DATA.

Flash Point Method:PMCC
Flash Point:=74.C, 165.2F
Extinguishing Media:FOAM AND DRY CHEMICAL POWDER. CARBON DIOXIDE, SAND OR EARTH MAY BE USED FOR SMALL FIRES ONLY.
Fire Fighting Procedures:PROPER PROTECTI
VE EQUIPMENT INCLUDING
BREATHING APPARATUS MUST BE WORN WHEN APPROACHING A FIRE IN A CONFINED SPACE. WATER IN A JET, URE OF HALON EXTINGUISHERS SHOULD BE AVOIDED FOR ENVIRONMENTAL REASO NS. KEEP ADJEACENT CONTAINERS COOL BY SPRAYING WITH WATER.
Unusual Fire/Explosion Hazard:NOT CLASSIFIED AS FLAMMABLE, BUT WILL BURN.

Spill Release Procedures: ABSORB OR CONTAIN LIQUID WITH SAND, EARTH OR SPILL CONTROL MAT

ERIAL. SHOVEL INTO A SUITABLE, CLEARY MARKED CONTAINER FOR SUBSEQUENT SAFE DISPOSAL IN ACCORDANCE WITH LOCAL REGULATIONS. LARGE SPILL: PRE VENT FROM SPREADING BY MAKING A BARRIER WITH SAND, EARTH OR OTHER CONTAINMENT MATERIAL. RECLAIM LIQUID DIRECTLY OR IN AN ABSORBENT. DISPOSE OF AS FOR SMALL SPILLS.

Handling and Storage Precautions: WHEN USING DO NOT EAT, DRINK OR SMOKE. ONLY USE IN WELL-VENTILATED AREAS.

WHEN HANDLING PRODUCT IN DRUMS

OR TOTES, SAFETY FOOTWEAR SHOULD BE WORN AND PROPER HANDLING EQUIPMENT SHOULS BE USED. PREVENT SPILLAGES. AMBIENT STORAGE TEMPERATURE. KEEP ONLY IN ORGINAL CONTAINER. SEE OTHER PRECAUTIONS.

Other Precautions:HANDLING AND STORAGE CONT: KEEP IN A COOL, DRY, WELL-VENTILATED PLACE. KEEP AWAY FROM SOURCES OF HEAT OR IGNITION. KEEP IN BUNDED AREA. ELECTROSTATIC CHARGES MAY BE GENERATED DURING PUMPING. ENSURE EL ECTRICAL CONTINUITY BY BONDING ALL EQUIPMENT. NEVER SIPHON BY MOUTH.

Respiratory Protection:NOT NORMALLY REQUIRED. IF RISK OF INHALATION WEAR HALF MASK RESPIRATOR WITH ORGANIC VAPOUR CARTRIDGE AND BULT-IN PARTICULATE FILTER NPF 20 (GAS ONLY)

Ventilation: USE ONLY IN WELL VENTILATED AREAS.

Protective Gloves: PVC OR NITRILE RUBBER GLOVES

Eye Protection:CHEMICAL MONOGOGGLES

Other Protective Equipment:WEAR OVERALLS TO MINIMISE CONTAMINATION OF PE

RSONAL CLOTHING. LAUNDER OVERALS AND UNDERGARMENT REGULARLY. SAFETY SHOES OR BOOTS-CHEMICAL RESISTANT. IF SPLASHES ARE LIKELY TO OCCUR WEAR A PVC APRON.

Work Hygienic Practices: WASH HAND BEFORE EATING, DRINKING, SMOKING AND USING THE TOILET.

Supplemental Safety and Health

FIRST AID CONT: INGESTION: GIVE NOTHING BY MOUTH, IF BREATHING BUT UNCONSCIOUS, PLACE IN THE RECOVERY POSITION. IF BREATHING HAS STOPPED, APPLY ARTIFICIAL RESPIRATION. OBTAIN MEDICAL ATTENTION IMMEDIA TE

LY. PROD CODE:8Q482.

HCC:V6 Vapor Density:>1 Viscosity:8.64 MM2/S @ 40C Evaporation Rate & amp; Reference:>1 (ETHER=1) Solubility in Water:2000 MG/KG (ESTIMATED VALUE). ACUTE TOXICITY- DERMAL: LD50 >2000 MG/KG (ESTIMATED VALUE). EYE IRRITAITON: EXPECTED TO BE SLIGHTLY IRRITANT. SKIN IRRITAITON: IRRITANT. RESPIRATORY IRRITATION: D ATA NOT AVAILABLE FROM ANIMAL STUDIES. SKIN SENSITIZATION: NOT EXPECTED TO B E A SKIN SENSITIZER.

Ecological:BASIS FOR ASSESSMENT: ECOTOXICOLOGICAL DATA HAVE NOT BEEN DETERMINED SPECIFICALLY FOR THIS PRODUCT. INFORMATION GIVEN IS BASED ON A KNOWLEDGE OF THE COMPONENTS AND THE ECOTOXICOLOGY OF SIMILAR PRODUCT S. MOBILITY: LIQUID UNDER MOST ENVIRONMENTAL CONDITIONS. EMULSIFIES IN WATER. PRODUCT REMAINING ON SOIL SURFACE WILL PARTLY EVAPORATE, BUT A SIGNIFICANT PROPORTION WILL REMAIN AFTER ONE DAY. IF THE P RODUCT ENTERS SOIL, ONE OR MORE CONSTITUENTS WILL BE MOBILE AND MAY CONTAMINATE GROUNDWATER. ECOTOXICITY: ESTIMATED TO BE MODERATELY TOXIC.

Waste Disposal Methods:WASTE ARISING FROM A SPILLAGE SHOULD BE DISPOSED OF IN ACCORDANCE WITH PREVAILING REGULATIONS, PREFERABLY TO A RECOGNISED COLLECTOR OR CONTRACTOR. THE COMPETENCE OF THE CONTRACTOR SHOULD BE ESTABLISHE D BEFOREHAND. DO NOT DISPOSE INTO

THE ENVIRONMENT, IN DRAINS OR IN WATER COURSES.

Transport Information:NOT DANGEROUS FOR CONVEYANCE UNDER UN, IMO, ADR/RID AND IATA/ICAO CODES.

Federal Regulatory Information: TSCA: ALL COMPONENTS LISTED.

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