

Materials Safety Data Sheet

Fastener Installation Tools

Avdel installation tools include a series of hand, hydro-pneumatically and pneumatically operated tools for installing fasteners and ancillary parts/components used during tool use and maintenance. They are identified by a ten digit part number on order acknowledgments and dispatch advice notes and are classified in their general description as follows:

Hand Operated Tools

Consisting of a steel body with nylon or similar plastic hand grips. Moving parts may be lubricated with mineral oil based grease with or without the addition of molybdenum disulphide or graphite.

Hydro-Pneumatically or Pneumatically Operated Tools

Aluminium alloy/steel construction with external surfaces epoxy painted or coated with nylon or similar plastic. Tools contain mineral oil based hydraulic fluid, greases with molybdenum disulphide or graphite and parts coated with molybdenum disulphide dry film lubricant. Tools also contain internal seals based on acrylonitrile or neoprene rubber compounds.

Spherol M2 Grease

Part numbers 07992-00020 and 07992-00021. Containing mineral oil, lithium soap, molybdenum disulphide, graphite and a small percentage of a chlorinated additive.

Hydraulic Priming Fluid

Part numbers 07992-00002, 07992-00006. Containing highly refined mineral oil with additives. MPO-30 is available to special request only for part numbers 07992-00025 and 07992-00026.

Chemical Hazards

Normally no physical or chemical hazards arise from Avdel installation tools, hydraulic fluids, greases, oils and ADF molybdenum disulphide aerosol spray.

Health Hazards

Avdel installation tools, classified in the general descriptions on this page do not present significant health hazards in their natural state and during normal expected use in accordance with operating instructions.

Users should note the following points however:

- Air exhausted from hydro-pneumatic and pneumatic tooling may contain small amounts of mineral oil mist.
- ADF aerosol spray should not be used in a confined space or in an area which is not well ventilated. The vapour produced during use acts as an anaesthetic and can cause giddiness and drowsiness under these conditions.
- To avoid the possibility of skin disorders, prolonged contact with lubricants, oils and greases should be avoided. All lubricants, oils, greases and the constituents of ADF aerosol spray may cause skin defatting after prolonged contact.
- A suitable and sufficient assessment of any risk presented by these should be made by the user as required by the Control of Substances Hazardous to Health Regulations 1988. Reference should be made to Health and Safety Executive Guidance Note EH 40 - Occupational Exposure Limits. (Current Edition).

Occupational Exposure Standards listed in EH 40 are reviewed annually, hence none are listed on this sheet. The user should ensure that reference is made to the current issue and should include both eight hour and ten minute time weighted averages.

Fire Hazards

Avdel installation tools do not in themselves constitute a fire hazard. All oils and greases listed have a flash point in excess of 140°C and are not classified as flammable but will to some extent be combustible.

All tools, oils, greases and ADF aerosol spray if exposed to fire may give off fumes which could be toxic. These include, carbon, carbon monoxide, carbon dioxide, hydrocarbons, hydrochloric acid, combustion products of nitrogen, sulphur, chlorine and combustion products of nylon, polycarbonate and similar plastics.

There is a risk that ADF aerosol spray canisters will explode if they are exposed to heat or fire.

Suitable extinguishing media are carbon dioxide, dry power, foam or water fog.



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Storage & Transportation

No special precautions are required other than to ensure that packaging, storage and transportation are under normal ambient conditions avoiding extremes of temperature and excessive humidity.

Handling Precautions

Wear oil/solvent resistant gloves or use barrier creams to avoid risk of skin contamination from oils and greases etc during prolonged installation sequences. The use of these and safety glasses is also recommended during tool maintenance, re-priming with hydraulic fluid or greases and when ADF spray is being used.

Adequate ventilation is required when using ADF spray. If used in confined areas which are not ventilated, suitable approved respiratory protection should be worn.

Spillage

Wear oil/solvent resistant gloves or use barrier creams and wear safety glasses. Collect for disposal. Spills may be absorbed using inert absorbent. Do not allow oils, grease etc to enter drains, sewers or water courses.

Disposal

Hydraulic priming fluids, greases etc and STP should be disposed as waste oil through an approved waste disposal contractor to a licensed site. These compounds may be incinerated.

Prior to disposal, installation tools should be dismantled by a competent and qualified person in accordance with the procedures detailed on installation tool data sheets available from Avdel. Priming fluids, greases etc removed from tools should be disposed off as detailed on this page. Metal parts and rubber seals etc can be disposed of as scrap at the discretion of the user.

Emergency Action

Ingestion of oils, greases, ADF compounds etc	Seek medical attention. Do not induce vomiting.
Inhalation of oil mist/fume	May cause irritation to nose or throat. Remove victim to fresh air and seek medical attention.
Inhalation of ADF fume	At first sign of giddiness or drowsiness, remove victim to fresh air and seek medical attention.
Eyes	Dust acts as a foreign body. Irrigate with copious amounts of water and seek medical attention.
Skin	Infrequent or short term skin contact with oils, greases etc requires no immediate emergency action. Wash thoroughly with soap and water as soon as possible after contact.

References

Health and Safety Work Act 1974.
Control of Substances Hazardous to Health - Approved Code of Practice.
HSE Guidance Note EH 26 - Occupational Skin Diseases
HSE Guidance Note EH 40 - Occupational Exposure Limits
HSE Guidance Note EH 42- Monitoring Strategies Toxic Substances
HSE Health and Safety Booklet No 18 - Industrial Dermatitis Precautionary Measures
Avdel Technical Data sheet for installation tools.

If you require a copy of the Materials Safety Data Sheet from a particular manufacturer, please call our tooling department on:

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If you require further information or technical advice, please call our materials laboratory on:

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