

**SAFETY DATA SHEET**

**Reference : SDS A120**

According to directives 1907/2006 EEC

**1. IDENTIFICATION OF SUBSTANCE OR PREPARATION AND OF COMPANY :**

**Identification of the product :** A120 OIL (pn : 010990, 010991, 068099, 068844)

**Use of the product :** vacuum pump lubricant

**Identification of the company :**

**adixen VACUUM PRODUCTS**

98 avenue de BROGNY

BP 2069

74009 ANNECY CEDEX

FRANCE

**Phone:** +(33) 4 50 65 77 77

**Fax:** +(33) 4 50 65 77 89

**Responsible :** aVP Quality Manager

**Email :** [Jean-Loup.MONBEIG@adixen.fr](mailto:Jean-Loup.MONBEIG@adixen.fr)

**Emergency telephone number:** +(33) 4 50 65 77 77

Calling time schedule : 8 am to 12 am and 2 pm to 5 pm

**2. IDENTIFICATION OF HAZARDS:**

**2.1 Classification of the substance or mixture**

Product definition UVCB

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Not classified

Classification according to Directive 67/548/EEC [DSD] Not classified.

**2.2 Label elements**

Hazard pictograms

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

Prevention: Not applicable.

Response: Not applicable.

Storage: Not applicable.

Disposal: Not applicable.

**2.3 Other hazards**

Substance meets the criteria for PTB according to Regulation EC n° 1907/2006, Annex XIII No.

Substance meets the criteria for vPvB according to Regulation EC n° 1907/2006, Annex XIII No.

**SAFETY DATA SHEET**

Reference : SDS A120

According to directives 1907/2006 EEC

**3. INFORMATION ON INGREDIENTS:**

Substance/mixture UVCB

| Product/ingredient name                                | Identifiers  | %   | Classification |                                  | Type |
|--|--|-----|----------------|----------------------------------|------|
|  |  |     | 67/548/CEE     | Regulation CE n° 1272/2008 [CLP] |      |
| Distillates (petroleum), hydrotraeted heavy paraffinic | RRN: 01-211948462725<br>CE: 265-157-1<br>CAS: 64742-54-7 | 100 | Not classified | Not classified                   | -    |

Annex I Nota L applies to the base oil(s) in this product. Nota L -The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

Type

- [\*] Substance
- [A] Constituent
- [B] Impurity
- [C] Stabilizing additive

**4. FIRST AID MEASURES:**

**4.1 Description of first aid measures**

- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.
- Inhalation:** If casualty is unconscious and: If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. In case of symptoms arising from inhalation of product fumes, mists or vapour remove casualty to a quiet and well ventilated place if safe to do so. Seek medical assistance if breathing remains difficult.
- Skin contact:** Wash with soap and water. Remove contaminated clothing and shoes. Handle with care and dispose of in a safe manner. Seek medical attention if skin irritation, swelling or redness develops and persists. Accidental high pressure injection through the skin requires immediate medical attention. Do not wait for symptoms to develop.
- Ingestion:** Never give anything by mouth to an unconscious person. Seek professional medical attention or send the casualty to a hospital. Do not wait for symptoms to develop.
- Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply. Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces.

**SAFETY DATA SHEET**

**Reference : SDS A120**

**According to directives 1907/2006 EEC**

**4.2 Most important symptoms and effects, both acute and delayed**

Potential acute health effects

- Eye contact: Eye contact may cause redness and transient pain.
- Inhalation: Irritation of the respiratory tract due to excess fume, mists or vapor exposure.
- Skin contact: No known significant effects or critical hazards.
- Ingestion: Ingestion (swallowing) of this material may result in an altered state of consciousness and loss of coordination.

**4.3 Indication of any immediate medical attention and special treatment needed**

Notes to physician: Treat symptomatically.

**5. FIRE-FIGHTING MEASURES:**

**5.1 Extinguishing media**

- Suitable extinguishing media: Use dry chemical, CO2, waterspray(fog) or foam.
- Unsuitable extinguishing media: Do not use direct water jets on the burning product; they could cause splattering and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**5.2 Special hazards arising from the substance or mixture**

- Hazards from the substance or mixture: In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion Products: Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H2S, SOx (sulfur oxides) or sulfuric acid and unidentified organic and inorganic compounds.

**5.3 Advice for firefighters**

- Special precautions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.  
No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  
Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**SAFETY DATA SHEET**

**Reference : SDS A120**

According to directives 1907/2006 EEC

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel: Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind/keep distance from source. In case of large spillages, alert occupants in downwind areas.

Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapors will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations.

Note : recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air, temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.

For emergency responders:

Small spillages: normal antistatic working clothes are usually adequate.

Large spillages: full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note : gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-kid safety shoes or boots. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated.

Respiratory protection: A half or full-face respirator with filter(s) for organic vapors (and when applicable for H2S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBAs should be used.

**6.2 Environmental precautions**

Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials.

In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents.

**SAFETY DATA SHEET**

**Reference : SDS A120**

**According to directives 1907/2006 EEC**

If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means.  
The use of dispersants should be advised by an expert, and, if required, approved by local authorities.

**6.3 Methods and materials for containment and cleaning up**

**Small spill:** Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.

**Large spill:** Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet.  
When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.

**6.4 Reference to other sections**

See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

**7. HANDLING AND STORAGE :**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

General information Obtain special instructions before use. Keep away from heat/sparks/open flames/hot surfaces. -No smoking. Use and store only outdoors or in a well-ventilated area. Avoid release to the environment.

**7.1 Precautions for safe handling**

**Protective measures:** Do not ingest. Use personal protective equipment as required.  
Take precautionary measures against static discharge.  
Avoid splash filling of bulk volumes when handling hot liquid product.  
Avoid contact with skin. Avoid breathing fume/mist.  
Prevent the risk of slipping.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

**Advice on general occupational hygiene:**

Ensure that proper housekeeping measures are in place.  
Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets.  
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.  
Wash hands thoroughly after handling.  
Change contaminated clothes at the end of working shift.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations.

**SAFETY DATA SHEET**

**Reference : SDS A120**

**According to directives 1907/2006 EEC**

Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills.  
Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.  
Store separately from oxidizing agents.

Recommended materials for containers, or container linings use mild steel, stainless steel.  
Not suitable : Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

Keep only in the original container or in a suitable container for this kind of product. Keep containers tightly closed and properly labeled.  
Protect from sunlight. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors.  
Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

**7.3 Specific end use(s) Recommendations**

For more information regarding protective equipment and operational conditions see Exposure scenarios.  
See appendix:  
EXPOSURE ESTIMATION AND IDENTIFIED USES FOR "Other Lubricant Base Oils, IP346 < 3%" Input to Exposure Scenarios-4.2 Guidance to check compliance with the exposure scenarios (environmental)

**8. EXPOSURE INSPECTION / PERSONAL PROTECTION:**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**8.1 Control parameters**

Occupational exposure limits

| Product/ingredient name         | Exposure limit values |
|---------------------------------|-----------------------|
| No exposure limits value known. |                       |

Recommended monitoring Procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

| Product/ingredient name                               | Type | Exposure             | Value    | Population | Effects |
|---|------|----------------------|----------|------------|---------|
| Distillates(petroleum), hydrotreated heavy paraffinic | DNEL | Long term Inhalation | 5,4 mg/m | Workers    | Local   |

**SAFETY DATA SHEET**

**Reference : SDS A120**

**According to directives 1907/2006 EEC**

Predicted effect concentrations: No PECs available.

PNEC Summary: The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

**8.2 Exposure controls**

Appropriate engineering Controls: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.  
Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.  
Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection:  
Hand protection: Wear oil-resistant protective gloves (e.g. nitril rubber). PVC neoprene  
Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.  
In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

**9.1 Information on basic physical and chemical properties**

Appearance  
Physical state: Liquid.  
Color: Light yellow  
Odor: Odorless/Light petroleum.  
Odor threshold: Not available.

**SAFETY DATA SHEET**

Reference : SDS A120

According to directives 1907/2006 EEC

|  |  |
|--|--|
| pH   | Not applicable.  |
| Melting point/freezing point                 | -13C   |
| Initial boiling point and boiling range      | >400C  |
| Flash point Closed cup:                      | 247C [Pensky-Martens.]                                   |
| Evaporation rate                             | Not available.   |
| Flammability (solid, gas)                    | Not available.   |
| Burning time                                 | Not applicable.  |
| Burning rate                                 | Not applicable.  |
| Upper/lower flammability or explosive limits | Not available.   |
| Vapor pressure                               | 40 Pa @ 100 C  |
| Vapor density                                | Not available.   |
| Density                                      | 0,875 g/cm <sup>3</sup> [15C]                            |
| Solubility(ies)                              | Insoluble in water.<br>Soluble in most organic solvents. |
| Partition coefficient:<br>n-octanol/ water   | Not available.   |
| Auto-ignition temperature                    | >270C  |
| Decomposition temperature                    | >280C  |
| Viscosity Kinematic (40C):                   | 1,1 cm <sup>2</sup> /s (110 cSt)                         |
| Explosive properties                         | Not available.   |
| Oxidizing properties                         | Not available.   |
| DMSO extractible compounds for               | < 3%   |

base oil substance(s) according to IP346

**9.2 Other information**

No additional information.

**10. STABILITY AND REACTIVITY:**

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No specific test data related to reactivity available for this product or its ingredients.  |
| Chemical stability                 | Stable under normal conditions.   |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur.   |
| Conditions to avoid                | Oxidizing agent.  |
| Incompatible materials             | Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.<br>A mixture with nitrates or other strong oxidizers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass.<br>Sensitivity to heat, friction or shock cannot be assessed in advance. |
| Hazardous decomposition products   | This may result in the evolution of harmful and flammable gases or vapors.  |



**SAFETY DATA SHEET**

Reference : SDS A120

According to directives 1907/2006 EEC

**11. TOXICOLOGICAL INFORMATION:**

Acute toxicity

| Product/ingredient name                     | Result                          | Species | Dose        | Exposure |
|---|---------------------------------|---------|-------------|----------|
| Distillates (petroleum), hydrotreated heavy | LC50 Inhalation Dusts and mists | Rat     | >5,53 mg/l  | 4 hours  |
|   | LD50 Dermal                     | Rabbit  | >2000 mg/kg | -        |
|   | LD50 Oral                       | Rat     | >5000 mg/kg | -        |

Irritation/Corrosion

|                                  |   |
|----------------------------------|---|
| Skin                             | Non-irritating to the skin.   |
| Eyes                             | Mild irritant   |
| Respiratory                      | Not available   |
| Sensitizer                       |   |
| Skin                             | Non-sensitizer to skin.   |
| Reproductive toxicity            |   |
| Conclusion/Summary               | Not considered to be toxic to the reproductive system.  |
| Aspiration hazard                | Not available.  |
| Potential acute health effects   |   |
| Inhalation                       | Irritation of the respiratory tract due to excess fume, mists or vapor exposure.                                  |
| Ingestion                        | Ingestion (swallowing) of this material may result in an altered state of consciousness and loss of coordination. |
| Skin contact                     | No known significant effects or critical hazards.   |
| Eye contact                      | Eye contact may cause redness and transient pain.   |
| Potential chronic health effects |   |
| Chronic effects                  | No known significant effects or critical hazards.   |
| Carcinogenicity                  | No known significant effects or critical hazards.   |
| Mutagenicity                     | No known significant effects or critical hazards.   |
| Teratogenicity                   | No known significant effects or critical hazards.   |
| Developmental effects            | No known significant effects or critical hazards.   |
| Fertility effects                | No known significant effects or critical hazards.   |
| Other information                | Not available.  |
| Specific hazard                  |   |

**12. ECOLOGICAL INFORMATION:**

**12.1 Toxicity**

| Product/ingredient name                                | Result               | Species | Exposure |
|--|----------------------|---------|----------|
| Distillates (petroleum), hydrotreated heavy paraffinic | Acute EC50 >100 mg/l | Fish    | 96 hours |
|  | Acute IC50 >100 mg/l | Algae   | 48 hours |

Conclusion/Summary Aquatic toxicity data on base oils indicate LC50 values of > 100mg/l, which is considered as low toxicity.

**12.2 Persistence and degradability**

Conclusion/Summary Not readily biodegradable. Inherently biodegradable.

**SAFETY DATA SHEET**

**Reference : SDS A120**

**According to directives 1907/2006 EEC**

**12.3 Bioaccumulative potential**

Conclusion/Summary                      The product has a potential bioaccumulation.

**12.4 Mobility in soil**

Mobility                                      Insoluble in water.

**12.5 Results of PBT and vPvB assessment**

PBT    No.  
VPvB    No.

**12.6 Other adverse effects**

Spills may form a film on water surfaces causing physical damage to organisms.  
Oxygen transfer could also be impaired.

**13. DISPOSAL CONSIDERATIONS :**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).

**Waste treatment methods**

**Product**

Methods of disposal  
Used:

Where possible (e.g. in the absence of relevant contamination), recycling of substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorizations, relevant contamination limits, safety regulations and air quality legislation.  
Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers.  
National legislation may identify a specific organization, and/or prescribe composition limits and methods for recovery or disposal.

Hazardous waste:

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

**Packaging**

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled.  
Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

These codes can be given only as a suggestion, according to the original composition of the product, and its intended (foreseeable) use(s).

The final user has the responsibility for the attribution of the most suitable code, according to the actual use(s) of the material, contaminations or alterations.

**14 TRANSPORT INFORMATION :**

**International transport regulations**

**SAFETY DATA SHEET**

**Reference : SDS A120**

**According to directives 1907/2006 EEC**

This product is not regulated for carriage according to ADR/RID, IMDG, ICAO/IATA.

**Other : -**

**15 REGULATORY INFORMATION:**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV -List of substances subject to authorization Substances of very high concern None of the components are listed.

Annex XVII -Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

Other EU regulations

|                        |                                      |
|------------------------|--------------------------------------|
| Europe inventory       | This material is listed or exempted. |
| Hazard class for water | 1 Appendix No. 3                     |

**15.2 Chemical Safety**

|            |           |
|------------|-----------|
| Assessment | Complete. |
|------------|-----------|

**16 OTHER INFORMATION:**

|                               |   |
|-------------------------------|---|
| Exposure Scenario information | For more information regarding protective equipment and operational conditions see Exposure scenarios.<br>See appendix:<br>EXPOSURE ESTIMATION AND IDENTIFIED USES FOR "Other Lubricant Base Oils, IP346 < 3%" Input to Exposure Scenarios-4.2 Guidance to check compliance with the exposure scenarios (environmental) |
|-------------------------------|---|

|                   |                |
|-------------------|----------------|
| Revision comments | Not available. |
|-------------------|----------------|

|                            |   |
|----------------------------|---|
| Abbreviations and acronyms | ATE =Acute Toxicity Estimate<br>CLP = Classification, Labeling and Packaging Regulation [Regulation (EC) No. 1272/2008]<br>DNEL = Derived No Effect Level<br>EUH statement = CLP-specific Hazard statement<br>PNEC = Predicted No Effect Concentration<br>RRN = REACH Registration Number |
|----------------------------|---|

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification  | Justification |
|-----------------|---------------|
| Not classified. |               |

|   |                         |
|---|-------------------------|
| <u>Germany</u>                          |                         |
| Full text of abbreviated H statements   | Not applicable.         |
| Full text of classifications [CLP /GHS] | Not applicable.         |
| Full text of abbreviated R phrases      | Not applicable.         |
| Full text of classifications [DSD/DPD]  | Not applicable.         |
| Date of printing                        | 2011-02-21.             |
| Date of issue/ Date of revision         | 2011-02-21.             |
| Date of previous issue                  | No previous validation. |
| Version                                 | 1                       |

**SAFETY DATA SHEET**

**Reference : SDS A120**

**According to directives 1907/2006 EEC**

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.