1. PRODUCT AND COMPANY NAME:

Product name: OCTOIL

Supplier: ALCATEL VACUUM TECHNOLOGY FRANCE
98 avenue de BROGNY
BP 2069
74009 ANNECY CEDEX
FRANCE
Telephone: (33) 4 50 65 77 77
Fax: (33) 4 50 65 77 89
Person to contact: Vacuum Technology Division Quality Manager
Emergency telephone number: (33) 4 50 65 77 77

2. INFORMATION ON INGREDIENTS:

Regulated materials at concentration of 1% (WT) or greater

100% Dioctyl Phthalate

3. IDENTIFICATION OF HAZARDS:

Exposure limits:
Threshold Limit Value : 5 mg/kg-TWA
10 mg/kg-STEL. ACGIH
OSHA Permissible Exposure Limit: 5 mg/kg

Exposure effects:
Carcinogenicity Status: This chemical has been Iisted as a carcinogen or potential carcinogen for hazard communication purposes by: National Toxicology Program (Annual Report on Carcinogens) and International Agency for Research on Cancer (IARC) Monographs. A Consumer Product Safety Commission Chronic Hazard Advisory Panel has stated that, as this chemical is an animal carcinogen, it must be considered a potential carcinogen to humans. The Chemical Manufacturers Association Phthalate Esters Panel belleves that the scientific data suggest that, while DOP may induce liver tumors in rats and mice at high dose levels, it poses little or no risk to man under the much lower exposure levels typical of product use.

Possible Entry Routes:

Inhalation: Harmful if Inhaled.
Skin: Harmful if absorbed through the skin.
Eyes: Low hazard for usual industrial handling.
Any material that contacts the eye may be irritating or cause mechanical Injury.

Toxicity Data:

Test	Species	Result	Acute toxicity Classification
Acute oral LD50	Rat	30.6 g/kg	Relatively harmless
Acute oral LD50	Rabbit	33.9 g/kg	
Dermal LD50	Rabbit	>20 ml/kg	
Skin Irritation	Rabbit	Slight	
Skin Irritation	Human	None	
Skin sensitization	Human	None	
Eye Irritation	Rabbit	Slight	

DOP is the phthalate ester plasticizer whose safety has been most extensively studied. DOP has been used worldwide for more than 35 yr. with no observed effects on human health.

DOP was tested by the National Cancer Institute (NCI) in a lifetime feeding study in rats and mice. In two previous prolonged feeding studies with rats, lower dose levels of DOP did not result in liver tumors. The interpretation of these results has proved difficult. A Consumer Product Safety Commission Chronic Advisory Panel has stated that DOP must be considered potentially carcinogenic to humans as it is an animal carcinogen.

The Chemical Manufacturers Association Phthalate Esters Panel is continuing to sponsor research on the safety of phthalate esters in a program established in consultation with the Environmental Protection Agency. EPA and Food and Drug Administration periodically review the results from this program. At this time, neither agency is proposing new regulations on phthalate esters.

In its research program, the CMA Panel is sponsoring metabolism studies, mutagenicity studies, and studies on liver effects aimed at understanding the results of the NCI studies, Most chemicals that cause tumors do so by damaging genetic material. The CMA studies and other mutagenicity studies conducted by government and Industry scientists show that DOP does not damage genetic material. DOP causes changes in the liver cells of mice and rats which may be unique to these rodents and may not occur in other animal species, including humans. If these changes in the liver do not occur, it is unlikely that tumors will be formed. Metabolism studies show further differences between rats and promates In response to DOP. These studies also indicate that the extremely high doses used in the NCI

studies cause changes in the liver of rats and mice which are not seen at more realistic dose levels.

In summary, the CMA Phthalate Esters Panel believes that the scientific data suggest that, while DOP may induce liver tumors in rats and mice at high dose levels, it poses little or no risk to man under the much lower exposure levels typical of product use. The Panel is sponsoring an extensive research program to investigate further the results from rodent studies and to determine the risks, if any, from human exposure to DOP.

First aid procedures:

Skin: Immediately wash with soap and plenty of water. Wash clothing before reuse. Destroy contaminated shoes.
Eyes: Any material that contacts the eye should be washed out immediately and medical attention obtained if any symptoms are present after washing.
Inhalation Remove to fresh air. Treat symptomatically.

4. FIRE CONTROL MEASURES:

Flash point: 216 °C
Method used: Cleveland open cup

Explosive limits **Lower:** 31% at 256 C
28% at 264 C
Upper: Not determined

Autoignition temperature: 391 °C
Method used: ASTM D2155

Extinguishing media: Water spray, chemical foam or carbon dioxide, dry chemical.

Special firefighting procedures:
Wear breathing gear when fighting fires in enclosed spaces, wear protective clothIng to prevent contact wlth skin and eyes.

Unusual fire and/or explosion hazards:
None

5. PHYSICAL PROPERTIES:

Physical state: Liquid
Vapor pressure: <.0001 torr @ 25C
Boiling point: 384 c.

Evaporation rate (ether - 1): NII
Specific gravity: 0.98
Viscosity: 27 cst @ 40 c
Solubility in water: 340 micrograms/liter at 25 c
Appearance: clear liquid; no odor

6. REACTIVITY:

Stability: Material is stable
Incompatibility (materials to avoid): Oxidizing materials

Hazardous polymerization products: Will not occur

Hazardous decomposition products: As with any other organic material, combustion will product carbon dioxide and carbon monoxide.

7. RELEASE PROCEDURES:

Procedure to be followed in event of release:
Small spills should be picked up immediately with an absorbent. Large spills should be
flushed with water spray; preventing run-off from entering drains, sewers, or streams. Clean Water Act and Superfund reportable quantity (RQ): 1 lb.

Procedures for proper waste disposal: Proper waste disposal procedures are dependent on the product's end-use. Unused material may be incinerated. Observe all federal, state, and local laws concerning health and environment.

8. SPECIAL PROTECTION:

Respiratory protection:
An appropriate NIOSH-approved respirator for organic vapor and mist must be worn if exposure is likely to exceed recommended exposure limits. TLV 5 mg/kg-TWA. If respirators are used, a program should be established to assure compliance with OSHA Standard 29 CFR 1910.134.

Protective gloves:
Yes - Impermeable gloves

Safety glasses/goggles:
Yes - glasses should have side shields

Other protective equipment:

A safety shower, an eye bath and washing facilities should be available.
WASH THOROUGHLY AFTER HANDLING.

Ventilation:
US Gov't 8 hr TWA limit for exposure to mists is 5 mg per cubic meter. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or enclosed handling system may be needed to control air contamination.

9. SPECIAL PROTECTIONS:

Special storage and handling precautions:
Keep from contact with ozidizing materials. Since emptied containers retain product residue.
follow label warnings even after container Is emptied.

Transportation information:
DOT Hazard Classification: ORM-E.
Proper DOT shipping Name: Hazardous Substance Liquid, N.O.S.
NA Number: 9188

10 OTHER INFORMATION:

Types of use: Lubricant for vacuum pumps
(for more details, refer to the technical manual)
This sheet completes the technical user manual but does not replace it. The information that it contains is based on our knowledge concerning the product in question, on the date of edition of this sheet, and is given in good faith. Users should also pay attention to the risks which may be involved when a product is used for purposes other than that for which it was originally intended.
No guarantees can be given on the accuracy of the information contained in this sheet. The sheet, given to our customers in good faith in the sole aim of informing and helping them in their research, cannot be considered to provide an absolute or implicit guarantee related to its use. Consequently, ALCATEL VACUUM TECHNOLOGY FRANCE or ALCATEL subsidiaries cannot be held responsible for damage of any type related to the publication of this document. Similarly, none of the information it contains should be interpreted as an authorization or recommendation for the use of products which would cause an infringement of patent rights.