

MATERIAL SAFETY DATA BULLETIN

GLIS: 400139

Revision Date: 19/05/99

TRN:481333-60

MOBIL 1 0W-40

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL 1 0W-40

SUPPLIER: Mobil Oil Company Limited,
Witan Gate House,
500-600 Witan Gate,
Central Milton Keynes MK9 1ES

Health Emergency and
Customer Service Telephone: 01908-853000

Contact: Mr F. Wells

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SYN. HYDROCARBONS AND ADDITIVES

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not hazardous to health as defined by the EC
Dangerous Substances/Preparations Directives. See Section 15 for a
regulatory analysis of the ingredients.

See Section 15 for European Label Information.

3. HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE: No significant effects expected.

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call
a doctor.

SKIN CONTACT: Wash contact areas with soap and water.

INHALATION: Not expected to be a problem.

INGESTION: Not expected to be a problem. However, if greater than 1/2
litre (pint) is ingested or if feeling uncomfortable, give 1 to 2
glasses of water and obtain medical attention or call an
ambulance for assistance. DO NOT INDUCE VOMITING or give
anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing.

Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering waterways or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, firefighters MUST use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None. Flash Point C(F): 232(450) (IP 36 / ASTM D-92). Flammable limits - LEL NA, UEL NA.

NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0

HAZARDOUS DECOMPOSITION PRODUCTS: Metal oxides. Carbon monoxide. Elemental oxides.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities such as the local Environmental Health Officer or Fire Brigade. If spills are likely to enter any drain, waterway or groundwater, contact the Area Water Authority. In case of accident or road spill, contact the Police and Fire Brigade and, if appropriate, the Area Water Authority.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Contain and adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate licensed waste disposal site in accordance with current applicable laws and regulations and product characteristics at time of disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: No special requirements under ordinary conditions of use and with adequate ventilation.

RESPIRATORY PROTECTION: No special requirements under ordinary conditions of use and with adequate ventilation.

EYE PROTECTION: Normal industrial eye protection practices should be employed.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.

EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, a product exposure limit of 5.00 mg/m³ is suggested for oil mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

PHYSICAL STATE: Liquid
COLOUR: Amber
ODOUR: Mild
ODOUR THRESHOLD-ppm: NE
pH: NA
BOILING POINT C(F): NE
MELTING POINT C(F): NA
FLASH POINT C(F): 232(450) (IP 36 / ASTM D-92)
FLAMMABILITY: NE
AUTO FLAMMABILITY: NE
EXPLOSIVE PROPERTIES: NA
OXIDIZING PROPERTIES: NA
VAPOUR PRESSURE-mmHg 20 C: < 0.1
VAPOUR DENSITY: > 2.0
EVAPORATION RATE: NE
RELATIVE DENSITY, 15/4 C: 0.865
SOLUBILITY IN WATER: Negligible
PARTITION COEFFICIENT: > 3.5
VISCOSITY AT 40 C, cSt: 71.0
VISCOSITY AT 100 C, cSt: 13.5
POUR POINT C(F): -51(-60)
FREEZING POINT C(F): NE
NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
CONDITIONS TO AVOID: Extreme heat.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidisers.
HAZARDOUS DECOMPOSITION PRODUCTS: Metal oxides. Carbon monoxide.
Elemental oxides.
HAZARDOUS POLYMERISATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY: Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

DERMAL TOXICITY: Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

INHALATION TOXICITY: Not applicable ---Harmful concentrations of mists and/or vapours are unlikely to be encountered through any customary or reasonably foreseeable handling, use, or misuse of this product.

EYE IRRITATION: Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.

SKIN IRRITATION: Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.

OTHER ACUTE TOXICITY DATA: The acute toxicological results summarized above are based on testing of representative products. Representative formulations have shown no acute effects, administered via the inhalation route, when tested at maximum attainable oil mist or vapour concentrations.

---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Representative formulations have been tested at our Environmental and Health Sciences Laboratory by dermal applications 5 days/week for 90 days at doses significantly higher than those expected during normal industrial exposure. Extensive evaluations, including microscopic examination of internal organs and clinical chemistry of body fluids, showed no adverse effects.

---REPRODUCTIVE TOXICOLOGY (SUMMARY)---

Dermal exposure of pregnant rats to representative formulations did not cause adverse effects in either the mothers or their offspring.

---SENSITIZATION (SUMMARY)---

Representative formulations have not caused skin sensitization in guinea pigs.

---OTHER TOXICOLOGY DATA---

This product is formulated with a synthetic hydrocarbon as the base stock. Our Environmental, Health and Sciences Laboratory has tested representative synthetic base stocks to assess their potential adverse effects on human health. Assessment of human health effects was based on acute oral, dermal, and inhalation toxicity; eye and skin irritation; subchronic dermal toxicity and reproductive studies; guinea pig sensitization; and mutagenicity and chromosomal damage assays. None of these base stocks appears to pose a health hazard to humans under conditions of expected use.

Used gasoline engine oils have shown evidence of skin carcinogenic activity in laboratory tests when no effort was made to wash the oil off between applications. Used oil from diesel engines did not produce this effect.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: Not established.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited by the controlling authority. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at any licensed waste disposal site. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

EU Labelling: EU labelling not required.

THE FOLLOWING PRODUCT INGREDIENTS ARE CITED ON THE LISTS BELOW:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
*** NO REPORTABLE INGREDIENTS ***		

--- REGULATORY LISTS SEARCHED ---

1=IARC 1	6=NO ALLERGI	11=DE TERAT B	16=DE CARC B	21=CH CARC
2=IARC 2A	7=SE ALLERGY	12=DE TERAT C	17=AT TERAT A	
3=IARC 2B	8=SE CARC	13=DE TERAT D	18=AT TERAT B	
4=NTP CARC	9=DK CARC	14=DE CARC A1	19=AT TERAT C	
5=NTP SUS	10=DE TERAT A	15=DE CARC A2	20=AT TERAT D	

CARC=CARCINOGEN; SUS=SUSPECTED CARCINOGEN; TERAT=TERATOGENIC

AT = Austria
CH = Switzerland

DE = Germany
DK = Denmark

NO = Norway
SE = Sweden

16. OTHER INFORMATION

USE: Automotive engine oil

NOTE: This product should not be used for any other purpose without expert advice.

COSHH Regulations: Product reviewed and no action under COSHH considered necessary.

NOTE: PRODUCT IS NOT FORMULATED TO CONTAIN PCBS.

Any sections of this Material Safety Data Bulletin which are printed in bold text highlights recent significant changes which have been made to the advice or information given.

For Internal Use Only: MHC: 1* 1* NA 1* 1*, MPPEC: A, TRN: 481333-60, GLIS: 400139

EHS Approval Date: 13MAY1999

It is believed that all the information given in this bulletin (which supersedes all previous issues) is accurate at the time of printing. Such information is offered in good faith but without guarantee and without any representation that the product concerned is suitable for any use or application. Without limitation of the foregoing, nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending any licence under valid patents.

We pursue a policy of constant research and development aimed at product improvement and, therefore, we reserve the right to change the formulation, specification and characteristics of products without notice. User should verify current specifications with us and ascertain that products are suitable for intended uses and applications.

Where the information provided herein discloses a potential hazard or hazardous ingredient, adequate warning must be provided to employees and users and appropriate precautions taken, including the practice of good industrial hygiene.

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Environmental, Health and Safety Department, Paulsboro. NJ. USA.

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