1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Valvoline™ Multi-Vehicle Multi-Purpose Grease ™ Trademark, Valvoline or its subsidiaries, registered in various countries
Product code	:	VV633
Company	:	Valvoline LLC 3499 Blazer Parkway Lexington, KY 40509 United States of America
E-mail address	:	SDS@valvoline.com
Telephone	:	1-800-TEAMVAL
Telefax	:	
Emergency telephone number	:	1-800-VALVOLINE

2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation	:	Category 3
Carcinogenicity	:	Category 1B

GHS-Labelling

Hazard pictograms :

Signal word : Danger

Hazard statements : H316 Causes mild skin irritation.
H350 May cause cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P281 Use personal protective equipment as required.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	64742-65-0	>=30 - <60 %
RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED	64742-62-7	>=30 - <60 %
ZINC COMPOUNDS	68649-42-3	>=1 - <5 %

4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Get medical attention immediately.
Do not leave the victim unattended.
Consult a physician.
Show this safety data sheet to the doctor in attendance.

First aid measures for different exposure routes

In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
Remove contact lenses.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off immediately with plenty of water.

If inhaled : Move to fresh air.
Call a physician or poison control centre immediately.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
In case of shortness of breath, give oxygen.

If swallowed : Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

Most important symptoms and effects, both acute and delayed (new) : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)

Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Notes to physician (new) :

No hazards which require special first aid measures.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	ABC powder Carbon dioxide (CO2) Dry chemical Water mist
Unsuitable extinguishing media	:	Halons
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Amines carbon dioxide and carbon monoxide Hydrocarbons hydrogen sulfide oxides of sulfur, nitrogen and phosphorus zinc oxide
Specific extinguishing methods	:	Keep containers and surroundings cool with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Evacuate personnel to safe areas.
Environmental precautions	:	Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal.
Additional advice	:	Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

Technical measures	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Do not breathe vapours or spray mist. Avoid exposure - obtain special instructions before use. For personal protection see section 8. Provide sufficient air exchange and/or exhaust in work rooms. Avoid exceeding of the given occupational exposure limits (see section 8). Smoking, eating and drinking should be prohibited in the application area.
Avoidance of contact	:	Strong oxidizing agents

Storage

Conditions for safe storage	:	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Materials to avoid	:	Strong oxidizing agents
Other data	:	Stable under recommended storage conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value (Form of exposure)	Control parameters / Permissible concentration	Basis
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	64742-65-0	TWA (Inhalable fraction.)	5 mg/m3	PY OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Inhalable fraction.)	10 mg/m3	UY OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Respirable fraction.)	3 mg/m3	UY OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Respirable fraction.)	3 mg/m3	EC OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Inhalable fraction.)	10 mg/m3	EC OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Inhalable fraction.)	10 mg/m3	PY OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Respirable fraction.)	3 mg/m3	PY OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Inhalable fraction.)	10 mg/m3	CR OEL
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Respirable fraction.)	3 mg/m3	CR OEL
MOLYBDENUM DISULFIDE	1317-33-5	(Respirable fraction.)		CR OEL
MOLYBDENUM DISULFIDE	1317-33-5	(Inhalable fraction.)		CR OEL

US. ACGIH Threshold Limit Values

Components	CAS-No.	Value (Form of exposure)	Control parameters / Permissible concentration	Basis
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Respirable fraction.)	3 mg/m3	ACGIH
MOLYBDENUM DISULFIDE	1317-33-5	TWA (Inhalable fraction.)	10 mg/m3	ACGIH

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Personal protective equipment

Respiratory protection	:	In the case of vapour formation use a respirator with an approved filter.
Eye protection	:	Tightly fitting safety goggles
Hand protection	:	Wear resistant gloves such as:
Material	:	neoprene
Skin and body protection	:	Wear as appropriate: Safety shoes impervious clothing Discard contaminated shoes.
Hygiene measures	:	Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	paste
Colour	:	grey
Odour	:	hydrocarbon-like
pH	:	No data available
Freezing point	:	No data available
Boiling point	:	260 °C
Flash point	:	227 °C
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Density	:	0.86 g/cm3 (15.6 °C)
Solubility(ies)		
Water solubility	:	negligible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available

Auto-ignition temperature	:	No data available
Thermal decomposition	:	No data available

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	:	No hazards to be specially mentioned. Hazardous polymerisation does not occur.
Conditions to avoid	:	excessive heat
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	carbon dioxide and carbon monoxide Hydrocarbons

11. TOXICOLOGICAL INFORMATION

Product

Acute oral toxicity	:	No data available
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	No data available
Respiratory or skin sensitisation	:	No data available

Components:

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Acute oral toxicity	:	LD 50 Rat: > 5,000 mg/kg
Acute dermal toxicity	:	LD 50 Rabbit: > 5,000 mg/kg

ZINC COMPOUNDS:

Acute oral toxicity : LD 50 Rat: 2,000 - 5,000 mg/kg

Acute dermal toxicity : LD 50 Rabbit: > 2,000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

No data available

Components:

No data available

Persistence and degradability

Product:

No data available

Components:

No data available

Bioaccumulative potential

Product:

No data available

Components:

No data available

Mobility in soil

Product:

No data available

Components:

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : No data available

Components:

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with the European Directives on waste and hazardous waste.

Do not contaminate ponds, waterways or ditches with chemical or used container.
Container hazardous when empty.
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

UN_DG

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant		no

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

Other international regulations

Notification status

US. Toxic Substances Control Act	:	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	:	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	:	y (positive listing)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List	:	n (Negative listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	:	y (positive listing)
China. Inventory of Existing Chemical Substances	:	y (positive listing)

16. OTHER INFORMATION

Further information

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Valvoline's Environmental Health and Safety Department.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :
ACGIH : American Conference of Industrial Hygienists
BEI : Biological Exposure Index
CAS : Chemical Abstracts Service (Division of the American Chemical Society).
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
FG : Food grade
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
H-statement : Hazard Statement
IATA : International Air Transport Association.
IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”
IMDG : International Maritime Code for Dangerous Goods
ISO : International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population
LDxx : Lethal Dose, for xx percent of test population.
ICxx : Inhibitory Concentration for xx of a substance
Ecxx : Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD : Organization for Economic Co-operation and Development
OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic
PPE : Personal Protective Equipment
STEL : Short-term exposure limit
STOT : Specific Target Organ Toxicity
TLV : Threshold Limit Value
TWA : Time-weighted average
vPvB : Very Persistent and Very Bioaccumulative
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act
DOT : Department of Transportation
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC : Hazardous Materials Information Review Commission
HMIS : Hazardous Materials Identification System
NFPA : National Fire Protection Association
NIOSH : National Institute for Occupational Safety and Health
OSHA : Occupational Safety and Health Administration
PMRA : Health Canada Pest Management Regulatory Agency
RTK : Right to Know
WHMIS : Workplace Hazardous Materials Information System