		Page: 1
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : VR1™ RACING SAE 20W-50  
MOTOR OIL

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b>  Valvoline LLC 3499 Blazer Parkway Lexington, KY 40509 United States of America  SDS@valvoline.com	<b>Emergency telephone number</b> 1-800-VALVOLINE  <b>Regulatory Information Number</b> 1-800-TEAMVAL  <b>Product Information</b> 1-800-TEAMVAL
---	--

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.


## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED	64742-62-7	Not a hazardous substance or mixture.	12.32


		Page: 2
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.24
ZINC DIALKYL DITHIOPHOSPHATE	68649-42-3	Skin Irrit. 2; H315 Aquatic Acute 2; H401 Aquatic Chronic 2; H411	1.08

---

#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
If on skin, rinse well with water.  
Wash contaminated clothing before re-use.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : 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)  
Dizziness
- Notes to physician : No hazards which require special first aid measures.

		Page: 3
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

---

## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

---


## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- 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).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

---

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.  
Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.  
Dispose of rinse water in accordance with local and national

		Page: 4
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
RESIDUAL OILS (PETROLEUM), SOLVENT- DEWAXED	64742-62-7	PEL	500 ppm 2,000 mg/m3	OSHA_TRAN NS
		REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRAN NS

**Engineering measures** : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Hand protection

Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection


: Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

: Wear as appropriate:  
impervious clothing  
Safety shoes  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Wear resistant gloves (consult your safety equipment supplier).


Hygiene measures

: Wash hands before breaks and at the end of workday.  
When using do not eat or drink.  
When using do not smoke.

		Page: 5
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Colour	: amber
Odour	: mild
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: 600.01 °F / 315.56 °C (1,013.333333 hPa)
Flash point	: > 390 °F / > 199 °C Calculated Phase Transition Liquid/Gas Method: Closed Cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: 7 %(V) GLP: Calculated Explosive Limit
Lower explosion limit	: 0.9 %(V) GLP: Calculated Explosive Limit
Vapour pressure	: 0.1 hPa (20 °C) Calculated Vapor Pressure
Relative vapour density	: No data available
Relative density	: 0.8880 (15.56 °C)
Density	: 0.8816 g/cm <sup>3</sup> (15.56 °C)
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Thermal decomposition	: No data available
Viscosity	

		Page: 6
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

Viscosity, dynamic : No data available

Viscosity, kinematic : 182 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

### Acute toxicity

Not classified based on available information.

### Components:


RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.58 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: Not classified as acutely toxic by inhalation under GHS.  
Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg  
Remarks: No mortality observed at this dose.

LD 50 (Rabbit): > 2,000 mg/kg  
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

		Page: 7
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

**ZINC DIALKYL DITHIOPHOSPHATE:**

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

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg  
 Assessment: Not classified as acutely toxic by dermal absorption under GHS.

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED:

Species: Rabbit

Result: Not irritating to skin

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

ZINC DIALKYL DITHIOPHOSPHATE:

Result: Irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

**Components:**

RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED:

Species: Rabbit

Result: Not irritating to eyes

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

ZINC DIALKYL DITHIOPHOSPHATE:

Result: Possibly irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Components:**

RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED:

Test Type: Buehler Test

Species: Guinea pig


Assessment: Does not cause skin sensitisation.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

		Page: 8
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED:

No aspiration toxicity classification

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 12. ECOLOGICAL INFORMATION**


**Ecotoxicity**

**Components:**

RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
 Exposure time: 96 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 203  
 Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l  
 Exposure time: 48 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 202

		Page: 9
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l  
 End point: Growth inhibition  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR (Oncorhynchus mykiss (rainbow trout)): Calculated >= 1,000 mg/l  
 Exposure time: 14 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia (water flea)): 10 mg/l  
 Exposure time: 21 d  
 Test substance: WAF  
 Method: OECD Test Guideline 211

**ZINC DIALKYL DITHIOPHOSPHATE:**

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**Persistence and degradability**

**Components:**

RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED:

Biodegradability : Result: Not readily biodegradable.  
 Biodegradation: 2 - 4 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301B

**Bioaccumulative potential**

**Components:**

No data available

**Mobility in soil**

**Components:**

No data available


**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**Components:**

		Page: 10
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

- General advice : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.
- Dispose of in accordance with all applicable local, state and federal 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.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

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

**MX\_DG**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**


Not dangerous goods

**TDG\_INWT\_C**

Not dangerous goods

**TDG\_RAIL\_C**

Not dangerous goods

		Page: 11
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

**TDG ROAD C**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**CFR RAIL C**

Not dangerous goods

**U.S. DOT - ROAD**

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.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards


**SARA 313 Component(s)**

ZINC DIALKYL DITHIOPHOSPHATE	68649-42-3	1.08 %
PHOSPHORODITHIOIC ACID, MIXED O,O- BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS	84605-29-8	0.35 %

**Pennsylvania Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	70.00 - 90.00 %
RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED	64742-62-7	10.00 - 20.00 %
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %

**New Jersey Right To Know**

		Page: 12
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

HEAVY PARAFFINIC DISTILLATE	64742-54-7	70.00 - 90.00 %
RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED	64742-62-7	10.00 - 20.00 %
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %
LUBRICANT ADDITIVE	Not Assigned	1.00 - 5.00 %
POLYOLEFIN AMIDE ALKENEAMINE	Not Assigned	1.00 - 5.00 %
ZINC DIALKYL DITHIOPHOSPHATE	68649-42-3	1.00 - 5.00 %

**California Prop 65**


Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : Contact your sales representative for additional information.
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : q (quantity restricted)

**Inventories**

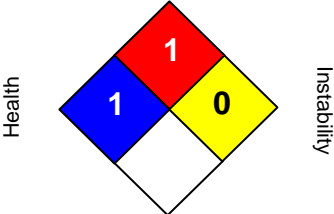
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

		Page: 13
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

## SECTION 16. OTHER INFORMATION

### Further information

Revision Date: 07/31/2016

<p><b>NFPA:</b></p> <div style="text-align: center;"> <p>Flammability</p>  <p>Health      Instability</p> <p>Special hazard.</p> </div>	<p><b>HMIS III:</b></p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: blue; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: red; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: yellow;"><b>PHYSICAL HAZARD</b></td> <td style="text-align: center;"><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

### Full text of H-Statements referred to under sections 2 and 3.

H303	May be harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.


### Further information

Sources of key data used to compile the Safety Data Sheet  
 Valvoline internal data including own and sponsored test reports  
 The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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 SDS has been prepared by Valvoline's Environmental Health and Safety Department (1-800-825-8654).

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).

		Page: 14
<b>SAFETY DATA SHEET</b>		Revision Date: 07/31/2016
		Print Date: 9/12/2016
		SDS Number: R0173128
VR1™ RACING SAE 20W-50 MOTOR OIL		Version: 1.3
822347		

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