

Valvoline™ Full Synthetic SAE 20W-50 4-Stroke Motorcycle Oil

Revision Date: 01/08/2020 Version: 1.5 Print Date: 09/11/2020

29 CFR 1910.1200 (OSHA HazCom 2012)

## **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier** 

Valvoline™ Full Synthetic SAE 20W-50 4-Stroke Trade name

Motorcycle

Oil

Product code 743525

Details of the supplier of the safety data sheet

Valvoline LLC 100 Valvoline Way Lexington, KY 40509

United States of America (USA) 1-800-TEAMVAL (1-800-832-6825) **Emergency telephone number** 

1-800-VALVOLINE (1-800-825-8654)

**Regulatory Information Number** 1-800-TEAMVAL (1-800-832-6825)

**Product Information** 

1-800-TEAMVAL (1-800-832-6825)

SDS@valvoline.com

#### SECTION 2. HAZARDS IDENTIFICATION

## **GHS Classification**

Not a hazardous substance or mixture.

#### **GHS** label elements

Not a hazardous substance or mixture.

#### Other hazards

None known.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
Lubricating Oils (Petroleum), C20- 50, Hydrotreated Neutral Oil- Based	72623-87-1	Asp. Tox. 1; H304	>=60.00 - < 70.00
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY		Not a hazardous substance or mixture.	>=5.00 - < 10.00



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PARAFFINIC			
Zinc O,O,O',O'-tetrakis(1,3-	2215-35-2	Skin Irrit. 2; H315	>=1.00 - < 1.50
dimethylbutyl)			
bis(phosphorodithioate		Eye Dam. 1; H318	

Actual concentration is withheld as a trade secret

#### **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

: No symptoms known or expected.

Notes to physician : No hazards which require special first aid measures.

## **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 (CO2)

Dry chemical

Unsuitable extinguishing : High volume water jet



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media

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the

point of release.

Hazardous combustion

products

: Oxides of phosphorus

Hydrocarbons Carbon oxides

carbon dioxide and carbon monoxide

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

regulations.



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Conditions for safe storage : Kee

: Keep container tightly closed in a dry and well-ventilated

place.

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based	72623-87-1	TWA	5 mg/m3 Mist	OSHA Z-1
		TWA	5 mg/m3 Inhalable particulate matter	ACGIH
		TWA	5 mg/m3 Mist	OSHA P0
		TWA	5 mg/m3 Mist	NIOSH REL
		ST	10 mg/m3 Mist	NIOSH REL
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7	TWA	5 mg/m3 Mist	OSHA Z-1
		TWA	5 mg/m3 Inhalable particulate matter	ACGIH
		TWA	5 mg/m3 Mist	OSHA P0
		TWA	5 mg/m3 Mist	NIOSH REL
		ST	10 mg/m3 Mist	NIOSH REL
		PEL	5 mg/m3 particulate	CAL PEL

**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.



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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 resistant gloves (consult your safety equipment

supplier).

Wear as appropriate: Impervious clothing Safety shoes

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Wash hands before breaks and at the end of workday.

When using do not eat or drink. When using do not smoke.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : 626 °F / 330 °C

(1,013.333333 hPa)

Calculated Phase Transition Liquid/Gas

Flash point :  $> 390 \, ^{\circ}\text{F} \, / > 199 \, ^{\circ}\text{C}$ 

Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Self-ignition : No data available

Upper explosion limit / Upper

flammability limit

6 %(V)

GLP: Calculated Explosive Limit

Lower explosion limit / Lower

flammability limit

1 %(V)

GLP: Calculated Explosive Limit

Vapour pressure : 1.3333333 hPa (68 °F / 20 °C)



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Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.865 g/cm3

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic :  $144.2 \text{ mm2/s} (104 \degree \text{F} / 40 \degree \text{C})$ 

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.

Conditions to avoid : None known.

Incompatible materials : Acids

Strong oxidizing agents

Hazardous decomposition

products No hazardous decomposition products are known.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure

Inhalation Skin contact

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Eye Contact Ingestion Acute toxicity

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

**Components:** 

Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based:

Acute oral toxicity : LD50 (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 : LD50 (Rabbit): > 5,000 mg/kg

Remarks: No mortality observed at this dose.

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Acute oral toxicity : LD50 (Rat): > 15 g/kg

Acute dermal toxicity : LD50 (Rabbit): > 5 g/kg

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate:

Acute oral toxicity : LD50 (Rat): 2,230 mg/kg

GLP: no

Acute inhalation toxicity : LC50 (Rat): > 2.3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: Not classified as acutely toxic by inhalation

under GHS.

Remarks: Information given is based on data obtained from

similar substances.

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg

Method: OECD Test Guideline 402

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

Skin corrosion/irritation

Not classified based on available information.

Components:

Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based:

Species : Rabbit

Result : No skin irritation



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DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Assessment : Slight, transient irritation Result : Slight, transient irritation

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Irritating to skin.

GLP : yes

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Result : No eye irritation

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

and the skin.

**Components:** 

**Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based:** 

Species : Rabbit

Result : No eye irritation

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Result : No eye irritation
Assessment : No eye irritation

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate:

Result : Corrosive

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based:

Test Type : Buehler Test Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate:

Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

GLP : yes



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Germ cell mutagenicity

Not classified based on available information.

Components:

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate:

Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

Carcinogenicity

Not classified based on available information.

**Components:** 

**Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based:** 

Carcinogenicity - : Classified based on DMSO extract content < 3% (Regulation

Assessment (EC) 1272/2008, Annex VI, Part 3, Note L)

**DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:** 

Carcinogenicity - : Classified based on DMSO extract content < 3% (Regulation

Assessment (EC) 1272/2008, Annex VI, Part 3, Note L)

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

on OSHA's list of regulated carcinogens.

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.

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.

Components:

Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based:

May be fatal if swallowed and enters airways.

**DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:** 

No aspiration toxicity classification

**Further information** 

Product:

Remarks : No data available



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#### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity** 

**Product:** 

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: Not classified based on available information.

Long-term (chronic) aquatic

hazard

: Not classified based on available information.

**Components:** 

Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based:

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

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >=

100 mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Test Type: static test
Test substance: WAF

Method: OECD Test Guideline 201

Toxicity to fish (Chronic

toxicity)

: NOELR (Oncorhynchus mykiss (rainbow trout)): >= 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

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Toxicity to fish : LL50 (Fish): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EL50 (Aquatic invertebrates): > 10,000 mg/l

Exposure time: 48 h

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l



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Exposure time: 72 h

Toxicity to fish (Chronic

toxicity)

: NOEC (Fish): 10 mg/l

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Aquatic invertebrates): 10 mg/l

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: Not classified based on available information.

Long-term (chronic) aquatic

hazard

: Not classified based on available information.

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 4.5 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

Remarks: Information given is based on data obtained from

similar substances.

Toxicity to daphnia and other

aquatic invertebrates

: EL50 (Daphnia magna (Water flea)): 23 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae : NOEL (Desmodesmus subspicatus (green algae)): 10 mg/l

End point: Growth inhibition

Exposure time: 72 h Test Type: static test Test substance: WAF

Method: OECD Test Guideline 201

Remarks: Information given is based on data obtained from

similar substances.

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 0.4 mg/l

Exposure time: 21 d Test substance: WAF

Method: OECD Test Guideline 211

Remarks: Information given is based on data obtained from

similar substances.

## Persistence and degradability

**Components:** 

Lubricating Oils (Petroleum), C20-50, Hydrotreated Neutral Oil-Based: Biodegradability : Result: Not readily biodegradable.

Biodegradation: 2 - 4 %

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Exposure time: 28 d

Method: OECD Test Guideline 301B

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate: Biodegradability : Result: Not readily biodegradable.

Biodegradation: 1.5 % Exposure time: 28 d

Method: OECD Test Guideline 301B

Remarks: Information given is based on data obtained from

similar substances.

No data available

**Bioaccumulative potential** 

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Partition coefficient: n- : log Pow: Expected > 7

octanol/water

No data available
Mobility in soil
Components:
No data available
Other adverse effects
No data available

**Product:** 

Additional ecological

information

: No data available

## Components:

## **SECTION 13. DISPOSAL CONSIDERATIONS**

# **Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and

federal regulations.

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.

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**



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#### International Regulations

#### **UNRTDG**

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

# Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### **National Regulations**

#### **49 CFR**

Not regulated as a dangerous good

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**

#### **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

## SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : The following components are subject to reporting levels

established by SARA Title III, Section 313:

Zinc O,O,O',O'- 2215-35-2 >= 1 - < 5 %

tetrakis(1,3dimethylbutyl) bis(phosphorodit

hioate

4259-15-8 Not >= 0.1 - < 1 %

Assigned



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## California Prop. 65

★ WARNING: Cancer - www.P65Warnings.ca.gov.

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

DSL All components of this product are on the Canadian DSL

AICS On the inventory, or in compliance with the inventory

**ENCS** : Not in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

**PICCS** : On the inventory, or in compliance with the inventory

: On the inventory, or in compliance with the inventory **IECSC** 

TCSI : Not in compliance with the inventory

**TSCA** : On TSCA Inventory

#### **TSCA list**

No substances are subject to TSCA 12(b) export notification requirements.

#### **Inventories**

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

## **SECTION 16. OTHER INFORMATION**

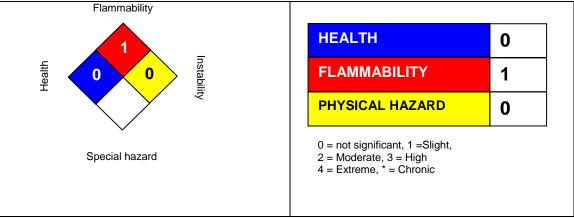
#### **Further information**

Internal information: R0412111



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NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

#### **Full text of H-Statements**

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

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-VALVOLINE).

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.



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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