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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline™ SAE 80W-90 High Performance Gear Oil

Details o	f the	suppl	ier of	the	safety	y data
sheet						

Valvoline LLC 100 Valvoline Way Lexington, KY 40509 United States of America (USA) 1-800-TEAMVAL (1-800-832-6825)

SDS@valvoline.com

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)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitization : Category 1

GHS label elements

Hazard pictograms



Signal Word : Warning

Hazard Statements : May cause an allergic skin reaction.

Precautionary Statements : Prevention:

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Contaminated work clothing must not be allowed out of the

workplace.

Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/ attention.

Wash contaminated clothing before reuse.

Disposal:

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Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

riazardous components			
Chemical name	CAS-No.	Classification	Concentration (%)
DISTILLATES (PETROLEUM),	64742-54-7	Not a hazardous	>=60.00 - < 70.00
HYDROTREATED HEAVY		substance or mixture.	
PARAFFINIC			
OLEFINSULFIDE	68937-96-2	Skin Sens. 1B; H317	>=1.50 - < 5.00
React. prod. of bis(2-		Flam. Liq. 4; H227	>=0.50 - < 1.00
methylpentan-2-			
yl)dithiophosphoricacid +		Acute Tox. 4; H302	
phosphorus oxide, propylene			
oxide and amines, C12-14-alkyl		Eye Dam. 1; H318	
(branched)			
		Skin Sens. 1; H317	

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

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.

First aid is not normally required. However, it is

recommended that exposed areas be cleaned by washing

with soap and water.

Wash contaminated clothing before re-use.

In case of eye contact : Flush eyes with water as a precaution.

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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. May cause an allergic skin reaction.

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

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 Sulphur oxides

Specific extinguishing

methods

:

Product is compatible with standard fire-fighting agents.

Further information : 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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and

: Use personal protective equipment.

Persons not wearing protective equipment should be excluded

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emergency procedures from area of spill until clean-up has been completed.

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

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 : Do not breathe vapours/dust.

Do not smoke.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Container hazardous when empty.

Avoid exposure - obtain special instructions before use.

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.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	
		exposure)	Permissible	
			concentration	
DISTILLATES (PETROLEUM),	64742-54-7	TWA	5 mg/m3	OSHA Z-1
HYDROTREATED HEAVY			Mist	
PARAFFINIC				
		TWA	5 mg/m3	ACGIH

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	Inhalable fraction	
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

Respiratory protection : Respiratory protection is not required under normal conditions

of use.

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. Discard gloves that show tears, pinholes, or signs of wear. Wear resistant gloves (consult your safety equipment

supplier).

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : No data available

Odour Threshold : No data available

pH : No data available

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Melting point/freezing point : No data available

Boiling point/boiling range : $> 424.9 \, ^{\circ}\text{F} / 218.3 \, ^{\circ}\text{C}$

(1013.333 hPa)

Flash point : 394 - 480 °F / 201 - 249 °C

Method: Cleveland open cup

Evaporation rate : > 1

Ethyl Ether

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : < 0.1000000 mmHg

Relative vapour density : > 1AIR=1

Relative density : 0.89 (60.00 °F)

Density : 0.8916 g/cm3 (15.56 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 146 mm2/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.

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Possibility of hazardous

reactions

: Product will not undergo hazardous polymerization.

Conditions to avoid : None known.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition

products carbon dioxide and carbon monoxide

Sodium oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Product:

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

Method: Calculation method

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

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

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

OLEFINSULFIDE:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 401

Assessment: Not classified as acutely toxic by ingestion under

GHS.

Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

Remarks: No mortality observed at this dose.

React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched):

Acute oral toxicity : LD50 (Rat): ca. 2,000 mg/kg

Method: OECD Test Guideline 401

Assessment: The component/mixture is classified as acute

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oral toxicity, category 4.

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : May cause skin irritation in susceptible persons.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

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

OLEFINSULFIDE:

Result : Mild skin irritation

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.

Remarks : Unlikely to cause eye irritation or injury.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Result : No eye irritation
Assessment : No eye irritation

OLEFINSULFIDE:

Result : Slight, transient irritation

React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide,

propylene oxide and amines, C12-14-alkyl (branched):

Result : Corrosive

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Remarks : May cause allergic skin reaction.

Components: OLEFINSULFIDE:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : The product is a skin sensitiser, sub-category 1B.

Method : OECD Test Guideline 406

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React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide,

propylene oxide and amines, C12-14-alkyl (branched):
Test Type : Local lymph node assay

Species : Mouse

Method : OECD Test Guideline 429

Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Components: OLEFINSULFIDE:

Genotoxicity in vitro : Test Type: in vitro assay

Result: Positive results were obtained in some in vitro tests.

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Cell type: Bone marrow

Method: OECD Test Guideline 474

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

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.

OSHANo 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.

Product:

No aspiration toxicity classification

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

No aspiration toxicity classification

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Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: Acute aquatic toxicity Category 3; Harmful to aquatic life.

Long-term (chronic) aquatic

hazard

: Chronic aquatic toxicity Category 3; Harmful to aquatic life

with long lasting effects.

Components:

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 (Aguatic invertebrates): > 10,000 mg/l

Exposure time: 48 h

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

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.

OLEFINSULFIDE:

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: Harmful to aquatic life.

Long-term (chronic) aquatic

hazard

: Harmful to aquatic life with long lasting effects.

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React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene

oxide and amines, C12-14-alkyl (branched):

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): ca. 24 mg/l

Exposure time: 96 h Test Type: static test Test substance: WAF

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EL50 (Daphnia magna (Water flea)): ca. 91.4 mg/l

Exposure time: 48 h Test Type: static test Test substance: WAF

Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 15

mg/l

End point: Growth inhibition Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 3.3

mg/l

End point: Growth inhibition Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 201

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 0.12 mg/l

Exposure time: 21 d

End point: Reproduction Test Test Type: semi-static test Test substance: WAF

Method: OECD Test Guideline 211

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: Toxic to aquatic life.

Long-term (chronic) aquatic

hazard

: Toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:
OLEFINSULFIDE:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 13 % Exposure time: 28 d

Method: OECD Test Guideline 301B

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React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene

oxide and amines, C12-14-alkyl (branched):

Biodegradability : Result: Not readily biodegradable.

> Biodegradation: 7.4 % Exposure time: 28 d

Method: Modified Sturm Test

No data available

Bioaccumulative potential

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

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

octanol/water

React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene

oxide and amines, C12-14-alkyl (branched):

Partition coefficient: n-: Remarks: No data available

octanol/water

No data available Mobility in soil Components: No data available

Other adverse effects

No data available

Product:

Additional ecological : An environmental hazard cannot be excluded in the event of information

unprofessional handling or disposal., Harmful to aquatic life

with long lasting effects.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water

courses or the soil.

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.

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SECTION 14. TRANSPORT INFORMATION International transport regulations REGULATION						
ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.	

U.S. DOT - ROAD Not dangerous goods CFR_RAIL_C

Not dangerous goods	
LLC DOT INI AND WATERWAYS	

U.S. DOT - INLAND WATERWAYS Not dangerous goods

TDG_ROAD_C	
	Not dangerous goods

TDG_RAIL_C	
	Not dangerous goods

TDG_INWT_C	
	Not dangerous goods

IN.	INTERNATIONAL MARITIME DANGEROUS GOODS			
	Not dangerous goods			

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO			
Not dangerous goods			

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER			
Not dangerous goods			

Not dangerous goods	
Not dangerous goods	
MX_DG	
Not dangerous goods	
*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID	
•	

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Marine pollutant	no	ĺ

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 311/312 Hazards : Respiratory or skin sensitisation

California Prop. 65

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" for carcinogenicity as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" for reproductive/developmental toxicity as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

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 : On the inventory, or 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

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

TSCA : On TSCA Inventory

TSCA list

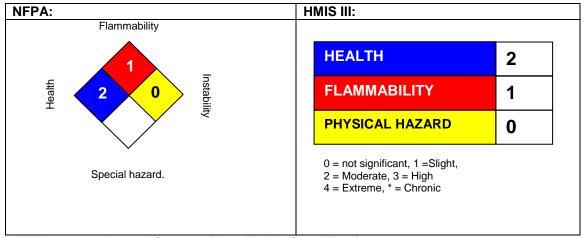
No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

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Further information

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NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements

H227	Combustible liquid.	
H302	Harmful if swallowed.	
H317	May cause an allergic skir	

H317 May cause an allergic skin reaction. 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

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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