ASHLAND	Page: 1
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

: Valvoline™ LOW VOC NON-CHLORINATED Trade name

BRAKE PARTS CLEANER

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data **Emergency telephone number** sheet 1-800-ASHLAND (1-800-274-5263) Ashland P.O. Box 2219 **Regulatory Information Number** Columbus, OH 43216 1-800-325-3751 United States of America **Product Information** 614-790-3333 EHS Customer Requests@ashland.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable aerosols : Category 1

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 4

Skin irritation : Category 2

Eye irritation : Category 2A

Specific target organ systemic toxicity - single

exposure

: Category 1 (Central nervous system, Eyes)

Specific target organ systemic toxicity - single

exposure

: Category 3 (Respiratory system, Central nervous system)

Specific target organ systemic toxicity - repeated

exposure

: Category 2 (Auditory system)

ASHLAND	Page: 2
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

Aspiration hazard : Category 1

GHS Label element

Hazard pictograms







Signal Word : Danger

Hazard Statements : Extremely flammable aerosol.

Harmful if swallowed, in contact with skin or if inhaled.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

Causes damage to organs (Central nervous system, Eyes). May cause damage to organs (Auditory system) through

prolonged or repeated exposure.

Precautionary Statements

: Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Wear eye protection/ face protection.

Wear protective gloves/ protective clothing.

Response:

IF SWALLOWED: Immediately call a POISON CENTER or

doctor/ physician.

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if

you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed: Call a POISON CENTER or doctor/ physician.

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding

ASHLAND	Page: 3
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

50 °C/ 122 °F.

Disposal:

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Static Accumulator

Chemical nature : Defatter

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
ACETONE	67-64-1	Flam. Liq. 2; H225	51.80
		Eye Irrit. 2A; H319	
		STOT SE 3; H336	
METHANOL	67-56-1	Flam. Liq. 2; H225	22.07
		Acute Tox. 3; H301	
		Acute Tox. 3; H331	
		Acute Tox. 3; H311	
		STOT SE 1; H370	
XYLENE	1330-20-7	Flam. Liq. 3; H226	20.12
		Acute Tox. 4; H312	
		Skin Irrit. 2; H315	
		Eye Irrit. 2A; H319	
		STOT SE 3; H335, H336	
		Asp. Tox. 1; H304	

ASHLAND	Page: 4
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

ETHYL BENZENE	100-41-4	Flam. Liq. 2; H225	6.03
		Acute Tox. 4; H332	
		Skin Irrit. 2; H315	
		Eye Irrit. 2A; H319	
		STOT RE 2; H373	
		Asp. Tox. 1; H304	
CARBON DIOXIDE	124-38-9	Press. Gas Liquefied gas; H280	6.00

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Call a POISON CENTRE or doctor/physician if exposed or

you feel unwell.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

Keep patient warm and at rest.

If unconscious place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

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 : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

If swallowed : Obtain medical attention.

Do NOT induce vomiting. Rinse mouth with water.

ASHLAND	Page: 5
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

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

This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis.

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:

redness of the skin

stomach or intestinal upset (nausea, vomiting, diarrhea)

irritation (nose, throat, airways)

discomfort in the chest

effects on memory

muscle cramps

pain in the abdomen and lower back

Blurred vision

Shortness of breath

confusion

irregular heartbeat

cyanosis (causes blue coloring of the skin and nails from lack

of oxygen)

visual impairment (including blindness)

Harmful if swallowed, in contact with skin or if inhaled

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs.

May cause damage to organs through prolonged or repeated

exposure.

Notes to physician

: No hazards which require special first aid measures.

ASHLAND	Page: 6
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray Foam

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite

explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

carbon dioxide and carbon monoxide

Hydrocarbons Aldehydes

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. Use a water spray to cool fully closed containers.

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 : Evacuate personnel to safe areas. Remove all sources of ignition.

Use personal protective equipment. Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Persons not wearing protective equipment should be excluded

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

ASHLAND	Page: 7
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

respective authorities.

Other information : Comply with all applicable federal, state, and local regulations.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Open drum carefully as content may be under pressure.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. 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.

Container may be opened only under exhaust ventilation

hood.

Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun

exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or

red-hot objects.

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.

Observe label precautions.

No smoking.

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
ACETONE	67-64-1	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		REL	250 ppm	NIOSH/GUID

ASHLAND	Page: 8
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

			590 mg/m3	E
		PEL	1,000 ppm	OSHA_TRA
			2,400 mg/m3	NS
		TWA	250 ppm	ACGIHLIS_P
		STEL	500 ppm	ACGIHLIS_P
		TWA	750 ppm 1,800 mg/m3	Z1A
		STEL	1,000 ppm 2,400 mg/m3	Z1A
METHANOL	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		REL	200 ppm 260 mg/m3	NIOSH/GUID E
		STEL	250 ppm 325 mg/m3	NIOSH/GUID E
		PEL	200 ppm 260 mg/m3	OSHA_TRA NS
		TWA	200 ppm 260 mg/m3	TN OEL
		STEL	250 ppm 325 mg/m3	TN OEL
XYLENE	1330-20-7	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		PEL	100 ppm 435 mg/m3	OSHA_TRA NS
		REL	100 ppm 435 mg/m3	NIOSH/GUID E
		STEL	150 ppm 655 mg/m3	NIOSH/GUID E
ETHYL BENZENE	100-41-4	TWA	20 ppm	ACGIH
		REL	100 ppm 435 mg/m3	NIOSH/GUID E
		STEL	125 ppm 545 mg/m3	NIOSH/GUID E
		PEL	100 ppm 435 mg/m3	OSHA_TRA NS
CARBON DIOXIDE	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		REL	5,000 ppm 9,000 mg/m3	NIOSH/GUID E
		STEL	30,000 ppm 54,000 mg/m3	NIOSH/GUID E
		PEL	5,000 ppm 9,000 mg/m3	OSHA_TRA NS

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Samplin g time	Permissible concentratio n	Basis
ACETONE	67-64-1	acetone	Urine	Samplin g time:	50 mg/l	

ASHLAND	Page: 9
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

				End of shift.		
Remarks:	Nonspecific	,				
METHANOL	67-56-1	methanol	Urine	Samplin g time: End of shift.	15 mg/l	
Remarks:	Background	d, Nonspecific				
XYLENE	1330-20-7	Methylhippu ric acids	Creatinine in urine	Samplin g time: End of shift.	1.5 g/g	
ETHYL BENZENE	100-41-4	Sum of mandelic acid and phenylglyox ylic acid	Creatinine in urine	Samplin g time: End of shift.	0.15 g/g	ACGIH BEI
Remarks:	Nonspecific	1		•		

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

: In the case of vapour formation use a respirator with an approved filter.

In the case of dust or aerosol formation use respirator with an

approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by airpurifying respirators is limited. Use a positive pressure, airsupplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection Remarks

: The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Wear chemical splash goggles when there is the potential for

exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:

impervious clothing

Safety shoes

Flame-resistant clothing

ASHLAND	Page: 10
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

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.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : aerosol

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

Boiling point/boiling range : 133 °F / 56 °C

(1,013.232 hPa)

Calculated Phase Transition Liquid/Gas

Flash point : -4 °F / -20 °C

Evaporation rate : No data available

Flammability (solid, gas) :

No data available

No data available

Flammability (liquids) : Static Accumulating liquid

Flammability (liquids) : Flammability (liquids) :

Upper explosion limit : 36 %(V)

Calculated Explosive Limit

Lower explosion limit : 1 %(V)

Calculated Explosive Limit

Vapour pressure : 307.9692 hPa (25 °C)

Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.8132 g/cm3 (15.56 °C)

ASHLAND	Page: 11
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

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 : No data available

Oxidizing properties : No data available

Heat of combustion : Estimated 30.0 kJ/g

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

: Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

excessive heat

Incompatible materials : Acids

alkalis
aluminum
Amines
Ammonia
halogens
Lead
peroxides
Reducing agents

sodium strong bases

Strong oxidizing agents

Zinc Peroxides

Hazardous decomposition

products

carbon dioxide and carbon monoxide

formaldehyde-like

ASHLAND	Page: 12
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

Hydrocarbons

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure

Skin contact

Eye Contact Ingestion

Acute toxicity

Harmful if swallowed, in contact with skin or if inhaled

Components: ACETONE:

Acute oral toxicity : LD 50 (Rat, female): 5,800 mg/kg

Acute inhalation toxicity : LC 50 (Rat, female): 76 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD 50 (Rabbit): > 7,426 mg/kg

METHANOL:

Acute oral toxicity : LD L0 (Human): 300 mg/kg

Assessment: The component/mixture is classified as acute

oral toxicity, category 3.

Acute inhalation toxicity : LC 50 (Rat): 64000 ppm

Exposure time: 4 h

Assessment: The component/mixture is classified as acute

inhalation toxicity, category 3. Remarks: Slightly toxic by inhalation

: LD 50 (Rabbit): 12,800 mg/kg Acute dermal toxicity

Assessment: The component/mixture is classified as acute

dermal toxicity, category 3.

XYLENE:

: LD 50 (Rat): 3,523 - 8,600 mg/kg Acute oral toxicity

Acute inhalation toxicity : LC 50 (Rat): 6700 ppm

Exposure time: 4 h Test atmosphere: vapour

: LD 50 (Rabbit): 1,700 mg/kg Acute dermal toxicity

ETHYL BENZENE:

: LD 50 (Rat): ca. 3,500 mg/kg Acute oral toxicity

: LC50 (Rat): 4000 ppm Acute inhalation toxicity

> Exposure time: 4 h Test atmosphere: vapour

ASHLAND	Page: 13
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

Acute dermal toxicity : LD 50 (Rabbit): 17,800 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

Components:

ACETONE:

Result: Mildly irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

METHANOL: Species: Rabbit

Result: Not irritating to skin

XYLENE:

Result: Irritating to skin

ETHYL BENZENE: Result: Irritating to skin

CARBON DIOXIDE:

Result: Not irritating to skin

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

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

Components:

ACETONE:

Result: Irritating to eyes

METHANOL: Species: Rabbit

Result: Mildly irritating to eyes

XYLENE:

Result: Irritating to eyes

ETHYL BENZENE:
Result: Irritating to eyes

Remarks: Exposure to a concentration of 5000 ppm causes intolerable irritation of the eyes

CARBON DIOXIDE:

Result: Not irritating to eyes

ASHLAND	Page: 14
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Components: METHANOL:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs (Central nervous system, Eyes).

Components: ACETONE:

Exposure routes: Inhalation Target Organs: Nervous system

Assessment: May cause drowsiness or dizziness.

METHANOL:

Target Organs: Central nervous system, Eyes

Assessment: The substance or mixture is classified as specific target organ toxicant, single

exposure, category 1.

XYLENE:

Assessment: May cause respiratory irritation., May cause drowsiness or dizziness.

STOT - repeated exposure

May cause damage to organs (Auditory system) through prolonged or repeated exposure.

<u>Components:</u> ETHYL BENZENE:

Target Organs: Auditory system

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

May be fatal if swallowed and enters airways.

Components:

ACETONE:

May be harmful if swallowed and enters airways.

XYLENE:

May be fatal if swallowed and enters airways.

ASHLAND.	Page: 15
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

ETHYL BENZENE:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Components:

METHANOL:

Remarks: Central nervous system

ETHYL BENZENE:

Remarks: Central nervous system

Carcinogenicity:

IARC Group 2B: Possibly carcinogenic to humans

ETHYL BENZENE 100-41-4

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:

ACETONE:

Toxicity to fish : LC 50 (Rainbow trout, donaldson trout (Oncorhynchus

mykiss)): 4,740 - 6,330 mg/l

Exposure time: 96 h Test Type: static test

LC 50 (Fathead minnow (Pimephales promelas)): 8,733 -

9,482 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to algae : NOEC (Microcystis aeruginosa): 530 mg/l

Exposure time: 8 d Test Type: static test

ASHLAND	Page: 16
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

aquatic invertebrates (Chronic toxicity)

Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 2,112 mg/l

Exposure time: 28 d

Test Type: flow-through test

METHANOL:

Toxicity to fish : LC 50 (Rainbow trout, donaldson trout (Oncorhynchus

mykiss)): 18,000 - 20,000 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): > 10,000 mg/l

Exposure time: 48 h Test Type: static test

XYLENE:

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 23.53 -

29.97 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: LC 50 (Water flea (Daphnia magna)): > 100 - < 1,000 mg/l

Exposure time: 24 h Test Type: static test

ETHYL BENZENE:

: LC 50 (Fathead minnow (Pimephales promelas)): 9.1 - 15.6 Toxicity to fish

Exposure time: 96 h Test Type: static test

LC 50 (Rainbow trout, donaldson trout (Oncorhynchus

mykiss)): 4.2 mg/l Exposure time: 96 h Test Type: Renewal

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): 1.37 - 4.4 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae : (Pseudokirchneriella subcapitata (green algae)): 3.6 mg/l

> End point: EC 50 Exposure time: 96 h

Test Type: Growth inhibition

Persistence and degradability

Components:

ACETONE:

Biodegradability : Result: Readily biodegradable

Biodegradation: 90.9 % Exposure time: 28 d

Method: OECD Test Guideline 301B

ASHLAND	Page: 17
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

METHANOL:

Biodegradability : Biodegradation: 99 %

Exposure time: 28 d

Method: OECD Test Guideline 301D

XYLENE:

Physico-chemical

removability

: Remarks: The product evaporates readily.

ETHYL BENZENE:

Biodegradability : Result: Readily biodegradable

Biodegradation: 70 - 80 %

Exposure time: 28 d

Bioaccumulative potential

Components:

ACETONE:

Partition coefficient: n-

octanol/water

: log Pow: -0.24

METHANOL:

Bioaccumulation : Species: Green algae (Chlorella fusca vacuolata)

Bioconcentration factor (BCF): 28,400

Exposure time: 24 h Concentration: 0.05 mg/l

Method: Static

Partition coefficient: n-

octanol/water

: log Pow: -0.77

XYLENE:

Partition coefficient: n-

octanol/water

: log Pow: 3.16

ETHYL BENZENE:

Partition coefficient: n-

: log Pow: 3.15

octanol/water

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological

information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life.

ASHLAND	Page: 18
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

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.

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.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

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

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	1950	ORM-D, CONSUMER COMMODITY	2	

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	1950	ORM-D, CONSUMER COMMODITY	2.1	

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	1950	ORM-D, CONSUMER COMMODITY	2.1	

INTERNATIONAL MARITIME DANGEROUS GOODS

UN	1950	AEROSOLS	2.1

TRANSPORT CANADA - INLAND WATERWAYS

ASHLAND	Page: 19
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

UN	1950	AEROSOLS	2.1

TRANSPORT CANADA - RAIL

UN	1950	AEROSOLS	2.1	

TRANSPORT CANADA - ROAD

UN	1950	AEROSOLS	2.1	LIMITED QUANTITY

U.S. DOT - INLAND WATERWAYS

Aerosols, flammable	ORM	
		,

U.S. DOT - RAIL

Aerosols, flammable	ORM	

U.S. DOT - ROAD

AEROSOLES	ORM	

*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

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
XYLENE	1330-20-7	100	496.985781

SARA 311/312 Hazards : Acute Health Hazard

Fire Hazard

Chronic Health Hazard

SARA 313 Component(s)

METHANOL 67-56-1 22.07 %

ASHLAND	Page: 20
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

	XYLENE	1330-20-7	20.12 %
	ETHYL BENZENE	100-41-4	6.03 %
Pennsylvania Right To Know ACETONE		67-64-1	50.00 - 70.00 %
METHANOL		67-56-1	20.00 - 30.00 %
XYLENE		1330-20-7	20.00 - 30.00 %
ETHYL BENZEI	NE	100-41-4	5.00 - 10.00 %
CARBON DIOX	IDE	124-38-9	5.00 - 10.00 %
New Jersey Right To Know ACETONE		67-64-1	50.00 - 70.00 %
METHANOL		67-56-1	20.00 - 30.00 %
XYLENE		1330-20-7	20.00 - 30.00 %
ETHYL BENZEI	NE	100-41-4	5.00 - 10.00 %
CARBON DIOX	IDE	124-38-9	5.00 - 10.00 %

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

ETHYL BENZENE 100-41-4

BENZENE 71-43-2

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive

harm.

METHANOL 67-56-1

TOLUENE 108-88-3

BENZENE 71-43-2

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

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

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

ASHLAND	Page: 21
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

KECL : 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

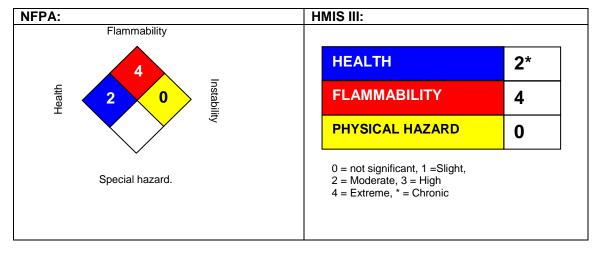
Inventories

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

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 05/23/2015



NFPA Flammable and Combustible Liquids Classification Not applicable

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

ASHLAND	Page: 22
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

H226 Flammable liquid and vapor. H280 Contains gas under pressure; may explode if heated. H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs through prolonged or repeated exposure.	H225	Highly flammable liquid and vapor.
H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H226	Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H280	Contains gas under pressure; may explode if heated.
H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H301	Toxic if swallowed.
H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H304	May be fatal if swallowed and enters airways.
H315 Causes skin irritation. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H311	Toxic in contact with skin.
H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H312	Harmful in contact with skin.
H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H315	Causes skin irritation.
H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H319	Causes serious eye irritation.
H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H331	Toxic if inhaled.
H336 May cause drowsiness or dizziness. H370 Causes damage to organs.	H332	Harmful if inhaled.
H370 Causes damage to organs.	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.	H370	Causes damage to organs.
	H373	May cause damage to organs through prolonged or repeated exposure.

Sources of key data used to compile the Safety Data Sheet Ashland 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 Ashland's Environmental Health and Safety Department (1-800-325-3751).

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

ASHLAND	Page: 23
SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 5/28/2015
	SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER	Version: 1.0
602371	

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