Valvoline.	Page: 1
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Pyroil™ DOT 3 BRAKE FLUID

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)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Specific target organ systemic toxicity - repeated

exposure (Oral)

: Category 2 (Kidney)

GHS label elements

Hazard pictograms



Signal Word : Warning

Hazard Statements : May cause damage to organs (Kidney) through prolonged or

repeated exposure if swallowed.

Precautionary Statements : Prevention:

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

Response:

Get medical advice/ attention if you feel unwell.

Disposal:

Dispose of contents/ container to an approved waste disposal

plant.

Valvoline	Page: 2
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
TRIETHYLENE GLYCOL MONOBUTYL ETHER	143-22-6	Eye Dam. 1; H318	>=30.00 - < 40.00
POLYOXYETHYLENE MONOBUTYL ETHER	9004-77-7	Eye Dam. 1; H318	>=20.00 - < 30.00
DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	Eye Irrit. 2A; H319	>=5.00 - < 10.00
POLYETHYLENE GLYCOL	25322-68-3	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).	>=1.50 - < 5.00
TRISODIUM PHOSPHATE	7601-54-9	Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335	>=1.50 - < 5.00
DIETHYLENE GLYCOL	111-46-6	Acute Tox. 4; H302 STOT RE 2; H373	>=1.50 - < 5.00
DIISOPROPANOLAMINE	110-97-4	Eye Irrit. 2A; H319	>=1.50 - < 5.00

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Valvoline.	Page: 3
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

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.

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 : Obtain medical attention.

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)

Cough

pain in the abdomen and lower back

Blurred vision

lung edema (fluid buildup in the lung tissue)

acute kidney failure (sudden slowing or stopping of urine

production)

Difficulty in breathing

Diglycol ethers may cause acidosis.

Excessive levels of phosphorus can cause low blood calcium,

with tetany and convulsions.

Diglycol ethers may cause acidosis.

Excessive levels of phosphorus can cause low blood calcium,

with tetany and convulsions.

May cause damage to organs through prolonged or repeated

exposure if swallowed.

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

Valvoline	Page: 4
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

circumstances and the surrounding environment.

Water spray Foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing media

: High volume water jet

Specific hazards during

firefighting

: 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.

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

courses.

Hazardous combustion

products

: carbon dioxide and carbon monoxide

Hydrocarbons Alcohols Aldehydes ethers Ketones Organic acids

Oxides of phosphorus

Sodium oxides

Nitrogen oxides (NOx)

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 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 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.

Valvoline	Page: 5
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

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.

Container hazardous when empty. 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 with workplace			•	•
Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	
		exposure)	Permissible	
			concentration	
DIETHYLENE GLYCOL	111-46-6	TWA	10 mg/m3	US WEEL
TRISODIUM PHOSPHATE	7601-54-9	STEL	5 mg/m3	US WEEL
DIETHYLENE GLYCOL	112-34-5	TWA	10 ppm	ACGIH
MONOBUTYL ETHER			Inhalable fraction	
			and vapor	
DIISOPROPANOLAMINE	110-97-4	TWA	10 ppm	SUPLR EXP
		TWA	10 ppm	SUPLR EXP

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.

Valvoline	Page: 6
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : clear, yellow

Odour : mild

Odour Threshold : No data available

pH : +/- 1.8 9.3

Melting point/freezing point : -58 °F / -50 °C

Boiling point/boiling range : 401 °F / 205 °C

(1013 hPa)

Flash point : 275 °F / 135 °C

Method: Tag closed cup

Evaporation rate : < 0.01

n-Butyl Acetate

Flammability (solid, gas) : No data available

Upper explosion limit : 36 %(V)

Calculated Explosive Limit

Lower explosion limit : 0.9 %(V)

Calculated Explosive Limit

Vapour pressure : 169.3164 hPa (25 °C)

Calculated Vapor Pressure

Relative vapour density : 6AIR=1

Valvoline	Page: 7
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Relative density : 1.039 (20 °C)

Density : Average 1.035 g/cm3 (4 °C)

Solubility(ies)

Water solubility : soluble

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

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 : Avoid heat, open flame, and prolonged storage at elevated

temperatures. excessive heat

temperatures above 150 degrees F (66 °C) Do not allow evaporation to dryness.

Exposure to moisture

Incompatible materials : Avoid contact with:

Acids

Alkaline earth metals

aluminum Amines Ammonia Bases Copper

galvanized metals

halogenated hydrocarbons

Valvoline.	Page: 8
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

magnesium nitrites

Organic materials Oxidizing agents Reducing agents strong alkalis

Zinc

This product should not be used in conjunction with trimethylol propane or trimethylol propane-derived products. There is a possibility that bicyclic phosphates or phosphites can be produced as a result of the thermal decomposition of this product in combination with trimethylol propane, trimethylol propane-derived products or their corresponding trimethylol propane alkane homologs. Bicyclic phosphates and phosphites are a class of materials with acute neurotoxic properties which produce characteristic convulsive seizures in test animals.

Hazardous decomposition products

Alcohols Aldehydes

carbon dioxide and carbon monoxide

ethers

Hydrocarbons

Nitrogen oxides (NOx)

Organic acids

Oxides of phosphorus

Sodium oxides

ketones

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure

Skin contact

Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity

Remarks: Ingestion of medications contaminated with diethylene glycol has caused kidney failure and death in humans. Products containing diethylene glycol should be

considered toxic by ingestion.

Acute dermal toxicity : Remarks: Skin absorption of this material (or a component)

may be increased through injured skin.

Valvoline	Page: 9
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Components:

TRIETHYLENE GLYCOL MONOBUTYL ETHER:

Acute oral toxicity : LD50 (Rat): 5,300 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 3,502 mg/kg

POLYOXYETHYLENE MONOBUTYL ETHER:

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

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): 3,540 mg/kg

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Acute oral toxicity : LD50 (Rat): 3,305 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 2,734 mg/kg

Acute toxicity (other routes of : LD50 (Rat): 500 mg/kg

administration)

Application Route: Intraperitoneal

POLYETHYLENE GLYCOL:

Acute oral toxicity : LD50 (Rat): > 14,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 20,000 mg/kg

TRISODIUM PHOSPHATE:

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

Method: OECD Test Guideline 420

: LC50 (Rat): > 0.83 mg/l Acute inhalation toxicity

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

Remarks: Information given is based on data obtained from

similar substances.

DIETHYLENE GLYCOL:

Valvoline.	Page: 10
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Acute oral toxicity : LD50 (Human): Expected 1,120 mg/kg

Target Organs: Kidney

Acute inhalation toxicity : LC50 (Rat): > 4.6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: No adverse effect has been observed in acute

inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): 13,300 mg/kg

DIISOPROPANOLAMINE:

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

Assessment: No adverse effect has been observed in acute

oral toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): 8,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

TRIETHYLENE GLYCOL MONOBUTYL ETHER:

Result: No skin irritation

POLYOXYETHYLENE MONOBUTYL ETHER:

Result: Slight, transient irritation

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Result: Slight, transient irritation

POLYETHYLENE GLYCOL:

Species: Rabbit

Result: No skin irritation

TRISODIUM PHOSPHATE:

Result: Irritating to skin.

DIETHYLENE GLYCOL:

Species: Human

Result: Slight, transient irritation

DIISOPROPANOLAMINE:

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Result: Slight, transient irritation Remarks: Expert judgement

Valvoline.	Page: 11
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

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

Components:

TRIETHYLENE GLYCOL MONOBUTYL ETHER:

Result: Corrosive

POLYOXYETHYLENE MONOBUTYL ETHER:

Result: Corrosive

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Result: Severely irritating to eyes

POLYETHYLENE GLYCOL:

Species: Rabbit

Result: No eye irritation

TRISODIUM PHOSPHATE: Result: Irritating to eyes.

DIETHYLENE GLYCOL:

Species: Rabbit

Result: Slight, transient irritation

DIISOPROPANOLAMINE:

Result: Severely irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

POLYOXYETHYLENE MONOBUTYL ETHER:

Test Type: Maximisation Test

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Did not cause sensitisation on laboratory animals.

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Test Type: Maximisation Test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

POLYETHYLENE GLYCOL:

Species: Humans

Assessment: Does not cause skin sensitisation.

TRISODIUM PHOSPHATE:

Test Type: Local lymph node assay

Species: Mouse

Valvoline.	Page: 12
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Assessment: Did not cause sensitisation on laboratory animals.

Method: OECD Test Guideline 429

DIETHYLENE GLYCOL: Test Type: Maximisation Test

Species: Guinea pig

Method: Directive 67/548/EEC, Annex V, B.6.

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects

Genotoxicity in vivo : Result: In vivo tests did not show mutagenic effects

POLYETHYLENE GLYCOL:

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

TRISODIUM PHOSPHATE:

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

DIETHYLENE GLYCOL:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative GLP: yes

: Test species: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 479

Result: negative GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Test species: Mouse

Method: OECD Test Guideline 474

Result: negative GLP: yes

Valvoline.	Page: 13
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Effects on fertility : Symptoms: No effects on fertility

STOT - single exposure

Not classified based on available information.

Components:

TRISODIUM PHOSPHATE:
Exposure routes: Inhalation
Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Components:

DIETHYLENE GLYCOL: Exposure routes: Ingestion Target Organs: Kidney

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

Repeated dose toxicity

Components:

DIETHYLENE GLYCOL MONOBUTYL ETHER:

NOAEL: 250 mg/kg LOAEL: 1,000 mg/kg Application Route: Oral Target Organs: Blood

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Components:

DIETHYLENE GLYCOL:

Liver

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

egual to 0.1% is on OSHA's list of regulated carcinogens.

Valvoline.	Page: 14
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

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

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:

POLYOXYETHYLENE MONOBUTYL ETHER:

Toxicity to fish : LC50 (Flatfish, flounder (Scophthalmus maximus)): > 1,800

mq/l

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

Method: OECD Test Guideline 203

Toxicity to algae : ErC50 (Skeletonema costatum (marine diatom)): 391 mg/l

Exposure time: 72 h

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Toxicity to fish : LC50 (Bluegill (Lepomis macrochirus)): 1,300 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to bacteria : EC50 (Bacteria): > 100 mg/l

Exposure time: 96 h Test Type: Static

POLYETHYLENE GLYCOL:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 20,000 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other : LC50 (Daphnia magna (Water flea)): estimated 1,000 mg/l

Valvoline.	Page: 15
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

aquatic invertebrates Exposure time: 48 h

Remarks: QSAR

Toxicity to algae : NOEC (Pseudokirchneriella subcapitata (green algae)):

estimated 56 mg/l

End point: Growth inhibition

Exposure time: 72 h Remarks: QSAR

TRISODIUM PHOSPHATE:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 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

: EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Remarks: Information given is based on data obtained from

similar substances.

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

End point: Growth inhibition

Exposure time: 72 h
Test Type: static test

Method: OECD Test Guideline 201

Remarks: Information given is based on data obtained from

similar substances.

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l

End point: Growth inhibition

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Remarks: Information given is based on data obtained from

similar substances.

DIETHYLENE GLYCOL:

aquatic invertebrates

Toxicity to daphnia and other

: LC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 24 h Test Type: static test Method: DIN 38412

DIISOPROPANOLAMINE:

Toxicity to fish : LC50 (Carassius auratus (goldfish)): 1,100 mg/l

Exposure time: 24 h Test Type: static test

Valvoline.	Page: 16
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Persistence and degradability

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Biodegradability : Biodegradation: 89 %

Exposure time: 28 d

Method: OECD Test Guideline 301C Remarks: Readily biodegradable

POLYETHYLENE GLYCOL:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 75 % Exposure time: 28 d Remarks: QSAR

TRISODIUM PHOSPHATE:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

DIETHYLENE GLYCOL:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70 - 80 % Exposure time: 28 d

Method: OECD Test Guideline 301B

No data available

Bioaccumulative potential

DIETHYLENE GLYCOL MONOBUTYL ETHER:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

: log Pow: 1

POLYETHYLENE GLYCOL:

Partition coefficient: n-

: log Pow: 0.1

octanol/water

DIETHYLENE GLYCOL:

Bioaccumulation : Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): 100

Partition coefficient: n-

octanol/water

: log Pow: -1.47

DIISOPROPANOLAMINE:

Partition coefficient: n-

: log Pow: -0.82

octanol/water

No data available

Mobility in soil

No data available

Other adverse effects

No data available

io data avallable

Valvoline.	Page: 17
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Product:

Additional ecological

information

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

with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

federal regulations.

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.

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	SUBSIDIARY	PACKING	MARINE DOLLUTANT /
		CLASS	HAZARDS	GROUP	POLLUTANT /
					LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods	

CFR_RAIL_C

Not dangerous goods	

U.S. DOT - INLAND WATERWAYS

Not dangerous goods	

TDG_ROAD_C

Not dangerous goods	

TDG_RAIL_C

Valvoline.	Page: 18
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

Not dangerous goods	

TDG_INWT_C

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MX DG

····
Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no	

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

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)
TRISODIUM PHOSPHATE	7601-54-9	5000	100002

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Specific target organ toxicity (single or repeated exposure)

California Prop 65 This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

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

DSL : All components of this product are on the Canadian DSL

Valvoline.	Page: 19
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

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

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

TSCA : On TSCA Inventory

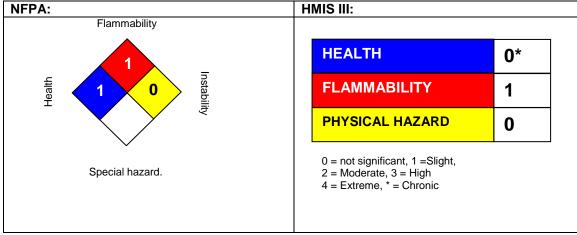
Inventories

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

Revision Date: 07/12/2018



NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Valvoline.	Page: 20
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

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.

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

Valvoline.	Page: 21
SAFETY DATA SHEET	Revision Date: 07/12/2018
	Print Date: 7/24/2018
	SDS Number: R0197992
Pyroil™ DOT 3 BRAKE FLUID	Version: 1.4
PYBF32	

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