	Page: 1
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_GB

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Valvoline™ MOTOR START

™ Trademark, Valvoline or its subsidiaries, registered in various countries

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Fuels and fuel additives

1.3 Details of the supplier of the safety data sheet

Ellis Enterprises B.V., an affiliate of Valvoline
Wieldrechtseweg 39
3316 BG Dordrecht
Netherlands
+31 (0)78 654 3500 (in the Netherlands), or
contact your local CSR contact person

SDS@valvoline.com

1.4 Emergency telephone number

00-800-825-8654 / 001-859-202-3865, or contact
your local emergency telephone number at 112

Product Information

+31 (0)78 654 3500 (in the Netherlands), or
contact your local CSR contact person

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1

H222: Extremely flammable aerosol.


H229: Pressurised container: May burst if heated.

Specific target organ toxicity - single
exposure, Category 3, Central nervous
system

H336: May cause drowsiness or dizziness.

Long-term (chronic) aquatic hazard,
Category 3

H412: Harmful to aquatic life with long lasting
effects.

	Page: 2
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH019 May form explosive peroxides.
EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements : P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe spray.
Storage:
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

Hazardous components which must be listed on the label:


Diethyl ether
Pentane

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Additional advice

No information available.

	Page: 3
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components


Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Diethyl ether	60-29-7 200-467-2	Flam. Liq.1; H224 Acute Tox.4; H302 Skin Irrit.2; H315 STOT SE3; H336	>= 40,00 - < 50,00
Pentane	109-66-0 203-692-4 01-2119459286-30-xxxx	Flam. Liq.1; H224 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	>= 15,00 - < 20,00
Substances with a workplace exposure limit :			
Butane	106-97-8 203-448-7 01-2119474691-32-xxxx	Flam. Gas1; H220 Press. GasLiquefied gas; H280	>= 10,00 - < 15,00

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of 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. Do not leave the victim unattended.
If inhaled	: Move to fresh air. If unconscious, place in recovery position and seek medical advice. Consult a physician after significant exposure.
In case of skin contact	: First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

	Page: 4
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

- 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 : IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known or expected.
- Risks : May cause drowsiness or dizziness.
Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- 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

5.2 Special hazards arising from the substance or mixture

- 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.

**SAFETY DATA SHEET**

Revision Date: 16.11.2018

Print Date: 16.10.2020

SDS Number: 000000274833

Version: 1.1

Valvoline™ MOTOR START

™ Trademark, Valvoline or its subsidiaries, registered in various countries

887056

Hazardous combustion products : carbon dioxide and carbon monoxide
Hydrocarbons

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Evacuate personnel to safe areas.
Remove all sources of ignition.
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.
Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up**6.4 Reference to other sections**

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling : Open drum carefully as content may be under pressure.
Provide sufficient air exchange and/or exhaust in work rooms.

**SAFETY DATA SHEET**

Revision Date: 16.11.2018

Print Date: 16.10.2020

SDS Number: 000000274833

Valvoline™ MOTOR START

Version: 1.1

™ Trademark, Valvoline or its subsidiaries, registered in various countries
887056

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.
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.

Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition. Use only explosion-proof equipment.

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

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : 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.


Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Diethyl ether	60-29-7	STEL	200 ppm 616 mg/m3	2000/39/EC
		TWA	100 ppm 308 mg/m3	2000/39/EC

		Page: 7
SAFETY DATA SHEET		Revision Date: 16.11.2018
		Print Date: 16.10.2020
		SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056		Version: 1.1

		TWA	100 ppm 310 mg/m3	GB EH40
		STEL	200 ppm 620 mg/m3	GB EH40
Pentane	109-66-0	TWA	1.000 ppm 3.000 mg/m3	2006/15/EC
		TWA	600 ppm 1.800 mg/m3	GB EH40
Butane	106-97-8	STEL	750 ppm 1.810 mg/m3	GB EH40
		TWA	600 ppm 1.450 mg/m3	GB EH40

8.2 Exposure controls

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

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

Hand protection

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

Skin and body protection : Wear as appropriate:
Impervious clothing
Safety shoes
Flame-resistant clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : aerosol



SAFETY DATA SHEET

Revision Date: 16.11.2018

Print Date: 16.10.2020

SDS Number: 000000274833

Version: 1.1

Valvoline™ MOTOR START

™ Trademark, Valvoline or its subsidiaries, registered in various countries

887056

Colour : clear

Odour : ether-like

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling range : Not applicable

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper flammability limit : 36 %(V)

Lower explosion limit / Lower flammability limit : 1,4 %(V)

Vapour pressure : 8 hPa (20 °C)

Relative vapour density : No data available

Relative density : No data available

Density : 0,63 g/cm³ (20 °C)

Solubility(ies)

Water solubility : immiscible

Solubility in other solvents : No data available


Partition coefficient: n-octanol/water : No data available

Ignition temperature : 170 °C

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

	Page: 9
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

Viscosity, kinematic : No data available

Oxidizing properties : No data available

9.2 Other information

Self-ignition : not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : None known.

Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Acids
Alkali metals
Amines
halogens
Oxidizing agents
strong bases
strong reducing agents
Sulphur compounds


10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of : Inhalation

	Page: 10
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

exposure

Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 2.000 mg/kg
Method: Calculation method

Components:

ETHYL ETHER:

Acute oral toxicity : LD50 (Rat, female): 1.200 mg/kg

Components:

PENTANE NORMAL:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Assessment: Not classified as acutely toxic by ingestion under GHS.
Remarks: No mortality observed at this dose.

Acute inhalation toxicity : LC50 (Rat): > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Components:

BUTANE NORMAL:

Acute inhalation toxicity : LC50 (Mouse): 680 mg/l
Exposure time: 2 h

LC50 (Rat): > 50000 ppm
Exposure time: 2 h
Test atmosphere: gas

Skin corrosion/irritation


Repeated exposure may cause skin dryness or cracking.

Components:

ETHYL ETHER:

Result: Irritating to skin.

PENTANE NORMAL:

	Page: 11
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

Result: Slight, transient irritation

Result: Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

ETHYL ETHER:

Result: Severely irritating to eyes

PENTANE NORMAL:

Result: Slight, transient irritation

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Components:

BUTANE NORMAL:

Genotoxicity in vitro : Test Type: Ames test
Test species: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.


Components:

ETHYL ETHER:

Assessment: May cause drowsiness or dizziness.

PENTANE NORMAL:

Assessment: May cause drowsiness or dizziness.

	Page: 12
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Components:

PENTANE NORMAL:

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.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Pentane

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4,26 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l
Exposure time: 48 h


Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 10,7 mg/l
Exposure time: 72 h

Butane

Toxicity to fish : Remarks: No toxicity at the limit of solubility
QSAR

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): Expected > 10 - < 100 mg/l
Exposure time: 48 h
Remarks: QSAR

Toxicity to algae : EC50 (green algae): Expected 7,7 mg/l
Exposure time: 96 h
Remarks: QSAR

	Page: 13
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

12.2 Persistence and degradability

Components:

Pentane

Biodegradability

: Result: Readily biodegradable.
Biodegradation: 87 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Butane

Biodegradability

: Result: Readily biodegradable.
Remarks: Information given is based on data obtained from similar substances.

12.3 Bioaccumulative potential

Components:

Diethyl ether

Partition coefficient: n-octanol/water

: log Pow: 0,89

Pentane

Partition coefficient: n-octanol/water

: log Pow: 3,39

Butane

Partition coefficient: n-octanol/water

: log Pow: 2,89

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment


: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information

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

	Page: 14
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : 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.
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

14.1 UN number


- ADN : UN 1950
ADR : UN 1950
RID : UN 1950
IMDG : UN 1950
IATA : UN 1950

14.2 UN proper shipping name

- ADN : AEROSOLS
ADR : AEROSOLS
RID : AEROSOLS
IMDG : AEROSOLS
IATA : AEROSOLS

14.3 Transport hazard class(es)

- ADN : 2
ADR : 2
RID : 2
IMDG : 2.1

	Page: 15
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

IATA : 2.1

14.4 Packing group

ADN

Packing group : Not assigned by regulation
Classification Code : 5F
Labels : 2.1

ADR

Packing group : Not assigned by regulation
Classification Code : 5F
Labels : 2.1
Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation
Classification Code : 5F
Hazard Identification Number : 23
Labels : 2.1

IMDG

Packing group : Not assigned by regulation
Labels : 2.1
EmS Code : F-D, S-U

IATA (Cargo)

Packing instruction (cargo aircraft) : 203
Packing instruction (LQ) : Y203
Packing group : Not assigned by regulation
Labels : Flammable gas

IATA (Passenger)

Packing instruction (passenger aircraft) : 203
Packing instruction (LQ) : Y203
Packing group : Not assigned by regulation
Labels : Flammable gas

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR


Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

	Page: 16
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable


REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 57). : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
P3a	FLAMMABLE AEROSOLS	150 t	500 t
18	Liquefied extremely flammable gases (including LPG) and natural gas	50 t	200 t

Other regulations : Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.

	Page: 17
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

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

DSL	: This product contains one or several components that are not on the Canadian DSL and have annual quantity limits.
AICS	Not in compliance with the inventory
ENCS	Not in compliance with the inventory
KECI	Not in compliance with the inventory
PICCS	Not in compliance with the inventory
IECSC	Not in compliance with the inventory
TCSI	Not in compliance with the inventory
TSCA	Not 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)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information


Further information

Revision Date: 16.11.2018

Full text of H-Statements

H220	Extremely flammable gas.
H224	Extremely flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Other information : The information accumulated herein is believed to be accurate

	Page: 18
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

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 (+31 (0)78 654 3500).

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.

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

	Page: 19
SAFETY DATA SHEET	Revision Date: 16.11.2018
	Print Date: 16.10.2020
	SDS Number: 000000274833
Valvoline™ MOTOR START ™ Trademark, Valvoline or its subsidiaries, registered in various countries 887056	Version: 1.1

WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands
 ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: Regulation for the Carriage of Dangerous Substances on the Rhine
 CLP : Classification, Labelling and Packaging
 CSA : Chemical Safety Assessment
 CSR : Chemical Safety Report
 DNEL : Derived No Effect Level.
 EINECS : European Inventory of Existing Commercial Chemical Substances.
 ELINCS : European List of Notified Chemical Substances
 PEC : Predicted Effect Concentration
 PEL : Permissible Exposure Limits
 PNEC : Predicted No Effect Concentration
 R-pharse : Risk phrase
 REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID : Regulation Concerning the International Transport of Dangerous Goods by Rail
 S-phrase: Safety phrase
 WGK : German Water Hazard Class