SAFETY DATA SHEET

SynPower™ MST C3 5W40

Version: 3.0 Revision Date: 01.07.2026 Print Date: 11/17/2026

SECTION 1: Identification of the hazardous chemical and of the supplier

Product identifier

Product name : SynPower™ MST C3 5W40

Product code : 872386

Recommended use of the chemical and restrictions on use

Recommended use : Engine, gear & lubricating oil.

Manufacturer or supplier's details

Company : Valvoline Global Operations

Address : 100 Valvoline Way
Lexington, KY 40509
United States of America (USA)

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

Emergency telephone number : +1-800-VALVOLINE (+1-800-825-8654)

E-mail address : SDS@valvolineglobal.com

SECTION 2: Hazards identification

Classification of the hazardous chemical

Not a hazardous substance or mixture.

Label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Other hazards which do not result in classification

None known.

SECTION 3: Composition and information of the ingredients of the hazardous chemical

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified	72623-87-1	>= 60 -<= 100
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	64742-54-7	>= 10 -< 30
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified	72623-87-1	>= 1 -< 3

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified	64742-65-0	>= 1 -< 3
C14-16-18 Alkyl phenol	Not Assigned	< 1

SECTION 4: First aid measures

General advice	:	Do not leave the victim unattended.
If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If on skin, rinse well with water.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	No symptoms known or expected. No symptoms known or expected.
Notes to physician	:	No hazards which require special first aid measures. Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet

Physicochemical hazards arising from the chemical

Hazardous combustion products	:	carbon dioxide and carbon monoxide

Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.
Specific extinguishing methods	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	:	Refer to protective measures listed in sections 7 and 8. Use personal protective equipment.
Environmental precautions	:	If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Handling

Precautions for safe handling

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Storage

Conditions for safe storage, including any incompatibilities

Conditions for safe storage	:	Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	:	No materials to be especially mentioned.
Further information on storage stability	:	No decomposition if stored and applied as directed.

SECTION 8: Exposure controls and personal protection

Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified	72623-87-1	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified	72623-87-1	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified	64742-65-0	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection	:	Safety glasses
Skin protection	:	Protective suit
Hand protection		

Material	:	neoprene, nitrile rubber
Break through time	:	>= 240 min
Glove thickness	:	>= 0.35 mm
Guideline	:	Equipment should conform to EN 374
Remarks	:	Nitrile rubber butyl-rubber The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.
Respiratory protection	:	No personal respiratory protective equipment normally required.
Hygiene measures	:	General industrial hygiene practice.

SECTION 9: Physical and chemical properties

Appearance	:	liquid
Colour	:	amber
Odour	:	oily
Odour Threshold	:	No data available
pH	:	Not applicable
Pour point	:	< -39 °C
Boiling point/boiling range	:	No data available
Flash point	:	210 °C Method: Pensky-Martens closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available

Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	ca. 0.852 g/cm3 (15.6 °C)
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	< 6,400 mPa.s (-30 °C)
Viscosity, kinematic	:	ca. 87 mm2/s (40 °C)
Oxidizing properties	:	No data available
Particle characteristics		
Particle size	:	Not applicable

SECTION 10: Stability and reactivity

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	:	excessive heat
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11: Toxicological information

Information on likely routes of exposure : None known.

Acute toxicity

Not classified due to lack of data.

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 5.58 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity Remarks: No mortality observed at this dose.
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg Remarks: No mortality observed at this dose.

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 5.58 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity Remarks: No mortality observed at this dose.
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg Remarks: No mortality observed at this dose.

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

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

C14-16-18 Alkyl phenol:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Assessment: The substance or mixture has no acute oral toxicity
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity Remarks: No mortality observed at this dose.

Skin corrosion/irritation

Not classified due to lack of data.

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Rabbit
Result	:	No skin irritation

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Rabbit
Result	:	No skin irritation

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

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

C14-16-18 Alkyl phenol:

Method	:	OECD Test Guideline 431
Result	:	No skin irritation

Serious eye damage/eye irritation

Not classified due to lack of data.

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Rabbit
Result	:	No eye irritation

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Rabbit
Result	:	No eye irritation

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

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

C14-16-18 Alkyl phenol:

Species	:	Rabbit
Result	:	Slight, transient irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Test Type	:	Buehler Test
Species	:	Guinea pig

Assessment	:	Does not cause skin sensitisation.

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Test Type	:	Buehler Test
Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.

C14-16-18 Alkyl phenol:

Test Type	:	Local lymph node assay
Species	:	Mouse
Assessment	:	The product is a skin sensitiser, sub-category 1B.
Method	:	OECD Test Guideline 429

Germ cell mutagenicity

Not classified due to lack of data.

Components:

C14-16-18 Alkyl phenol:

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

Carcinogenicity

Not classified due to lack of data.

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Carcinogenicity - Assessment	:	Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Carcinogenicity - Assessment	:	Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Carcinogenicity - Assessment	:	Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Carcinogenicity - Assessment	:	Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

Reproductive toxicity

Not classified due to lack of data.

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Components:

C14-16-18 Alkyl phenol:

Target Organs	:	Liver
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Aspiration toxicity

Not classified due to lack of data.

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

No aspiration toxicity classification

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

May be fatal if swallowed and enters airways.

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

Ecotoxicity

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Toxicity to fish	:	LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Test Type: static test Test substance: WAF

		Method: OECD Test Guideline 203 Remarks: No toxicity at the limit of solubility
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	NOELR (Oncorhynchus mykiss (rainbow trout)): Calculated >= 1,000 mg/l Exposure time: 14 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEL (Daphnia (water flea)): 10 mg/l Exposure time: 21 d Test substance: WAF Method: OECD Test Guideline 211

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Toxicity to fish	:	LL50 (Fish): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Aquatic invertebrates): > 10,000 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EL50 (Algae, algal mat (Algae)): > 100 mg/l Exposure time: 72 h
Toxicity to fish (Chronic toxicity)	:	NOEC (Fish): 10 mg/l
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Aquatic invertebrates): 10 mg/l

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Toxicity to fish	:	LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 203 Remarks: No toxicity at the limit of solubility
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h

		Test Type: static test Test substance: WAF Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	NOELR (Oncorhynchus mykiss (rainbow trout)): >= 1,000 mg/l Exposure time: 14 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEL (Daphnia (water flea)): 10 mg/l Exposure time: 21 d Test substance: WAF Method: OECD Test Guideline 211

C14-16-18 Alkyl phenol:

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): > 100 mg/l Exposure time: 96 h Test Type: static test Test substance: WAF
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
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (algae)): > 100 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Test substance: WAF

Persistence and degradability

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 2 - 4 % Exposure time: 28 d Method: OECD Test Guideline 301B

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified:

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 2 - 4 % Exposure time: 28 d Method: OECD Test Guideline 301B

C14-16-18 Alkyl phenol:

Biodegradability	:	Result: Readily biodegradable. Remarks: Expert judgement

Bioaccumulative potential

Components:

C14-16-18 Alkyl phenol:

Partition coefficient: n-octanol/water	:	log Pow: > 7.2

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : No data available

Endocrine disrupting properties

No data available

SECTION 13: Disposal information

Disposal methods

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

International Regulations

UNRTDG

Not regulated as a dangerous good

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
Environmentally hazardous	:	no

IATA-DGR

UN/ID No.	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
Packing instruction (cargo aircraft)	:	Not applicable
Packing instruction (passenger aircraft)	:	Not applicable

IMDG-Code

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable

Packing group	:	Not applicable
Labels	:	Not applicable
EmS Code	:	Not applicable
Marine pollutant	:	Not applicable

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

Not applicable for product as supplied.

Special precautions for user

Not applicable

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

Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.
Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

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

TW TCSI	:	On the inventory, or in compliance with the inventory
US TSCA	:	All substances listed as active on the TSCA inventory
AU AIIC	:	On the inventory, or in compliance with the inventory
CA. DSL	:	All components of this product are on the Canadian DSL
JP ENCS	:	On the inventory, or in compliance with the inventory
KR KECI	:	On the inventory, or in compliance with the inventory
PH PICCS	:	On the inventory, or in compliance with the inventory
CN IECSC	:	On the inventory, or in compliance with the inventory

Inventories

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

SECTION 16: Other information

Revision Date	:	01.07.2026
Date format	:	dd.mm.yyyy

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	:	8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MY / EN

Internal information : 000000220033