

SAFETY DATA SHEET – MIGHTY VS7 SUPREME FUEL SYSTEM CLEANER #FL-108

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name MIGHTY VS7 SUPREME FUEL SYSTEM CLEANER

Recommended use of the chemical and restrictions on use

Product code FL-108

Product Type Combustible liquid
Synonyms None

Supplier's details

Recommended Use Fuel System Cleaner.
Uses advised against No information available

Manufacturer:
Phillips 66 Spectrum Corporation
500 Industrial Park Drive
Selmer, TN 38375

Product Information:
SDS Requests: (800) 264-6457 or +17316454972
Technical Information: (800) 264-6457 or +17316454972
General Information: Val.Smith-Wedley@P66.com

Emergency telephone number

Emergency Response North America: CHEMTREC (800) 424-9300 after 5:00pm CST Or +17035273887

Health Emergency USA: (800) 264-6457 or +17316454972

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Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

3.46611% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
KEROSENE	8008-20-6	70-80
HYDROCARBON SOLVENT	64741-86-2	1-10
SOLVENT NAPHTHA	64742-94-5	0.1-1.0
NAPHTHALENE	91-20-3	0.1-1.0

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	If symptoms persist, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin contact	Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Consult a physician. Do NOT induce vomiting.
Protection of First-aiders	Absorb with sand ,clay, or other suitable material. Hard surfaces may be mopped with water.

Most important symptoms/effects, acute and delayed

Main Symptoms Not applicable.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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Suitable Extinguishing Media

Use: Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol-resistant foam.

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Absorb with sand, clay, or other suitable material. Hard surfaces may be mopped with water. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and open flame. No smoking. Wear personal protective equipment. Do not breathe vapors or spray mist. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

Incompatible products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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KEROSENE 8008-20-6	TWA: 200 mg/m ³ total hydrocarbon vapor application restricted to conditions in which there are negligible aerosol exposures Skin - potential significant contribution to overall exposure by the cutaneous route	-	TWA: 100 mg/m ³
NAPHTHALENE 91-20-3	TWA: 10 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Tightly fitting safety goggles.
- Skin and body protection** Chemical resistant apron. Protective gloves.
- Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Liquid	Odor	Solvent
Appearance	Clear	Odor Threshold	No information available
Color	Light Amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	65 °C / 149 °F	(based on components)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	0.832	

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Water solubility	Practically insoluble
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available

Other information

VOC Content(%) 88.84

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known information
Inhalation	Harmful by inhalation.
Eye contact	Avoid contact with eyes.
Skin contact	Irritating to skin.
Ingestion	Harmful if swallowed. May be fatal if swallowed and enters airways.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
KEROSENE 8008-20-6	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.28 mg/L (Rat) 4 h
HYDROCARBON SOLVENT 64741-86-2	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 4.6 mg/L (Rat) 4 h
SOLVENT NAPHTHA 64742-94-5	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
NAPHTHALENE 91-20-3	= 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, tiredness, nausea, and vomiting. Harmful in contact with skin. Causes irritation to eyes Causes drowsiness and dizziness. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Irritating to eyes.
Sensitization No information available.
Germ Cell Mutagenicity No information available.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
NAPHTHALENE 91-20-3	A3	Group 2B	Reasonably Anticipated	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure) may cause drowsiness and dizziness. May cause respiratory irritation.
Specific target organ systemic toxicity (repeated exposure) No information available.

Target Organ Effects Central nervous system, Eyes, Respiratory system, Skin.
Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 3.46611% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5707 mg/kg

ATEmix (dermal) 2283 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
HYDROCARBON SOLVENT 64741-86-2	-	35 mg/L LC50 Pimephales promelas 96h flow-through	-	-
SOLVENT NAPHTHA 64742-94-5	-	1740 mg/L LC50 Lepomis macrochirus 96h static 19 mg/L LC50 Pimephales promelas 96h static 2.34 mg/L LC50 Oncorhynchus mykiss 96h 41 mg/L LC50 Pimephales promelas 96h 45 mg/L LC50 Pimephales promelas 96h flow-through	-	0.95 mg/L EC50 Daphnia magna 48h
NAPHTHALENE 91-20-3	-	0.91 - 2.82 mg/L LC50 Oncorhynchus mykiss 96h static 5.74 - 6.44 mg/L LC50 Pimephales promelas 96h flow-through 1.6 mg/L LC50 Oncorhynchus mykiss 96h flow-through 1.99 mg/L LC50 Pimephales promelas 96h static 31.0265 mg/L LC50 Lepomis macrochirus 96h static	-	1.09 - 3.4 mg/L EC50 Daphnia magna 48h Static 1.96 mg/L EC50 Daphnia magna 48h Flow through 2.16 mg/L LC50 Daphnia magna 48h

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Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	log Pow
SOLVENT NAPHTHA 64742-94-5	6.1
NAPHTHALENE 91-20-3	3.3

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods

Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground

CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA

UN1223, KEROSENE SOLUTION, 3, PGIII, LTD. QTY

IMDG

UN1223, KEROSENE SOLUTION, 3, PGIII, LTD. QTY

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
KEROSENE	X	X	X	X	X	X	X	X
HYDROCARBON SOLVENT	X	X	X	Not listed	X	X	X	X
SOLVENT NAPHTHA	X	X	X	X	X	X	X	X
NAPHTHALENE	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
NAPHTHALENE - 91-20-3	91-20-3	0.1-1.0	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
NAPHTHALENE 91-20-3	100 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
NAPHTHALENE 91-20-3	100 lb 1 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
NAPHTHALENE - 91-20-3	X

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
KEROSENE 8008-20-6	X	X	X
NAPHTHALENE 91-20-3	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 2	Physical Hazard 0	Personal protection B

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Revision Note

No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet