

SAFETY DATA SHEET – MIGHTY VS7 FUEL INJECTOR CLEANER

#FL135

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

Product identifier

Product name MIGHTY VS7 FUEL INJECTOR CLEANER

Recommended use of the chemical and restrictions on use

Product code FL135

Product Type Extremely flammable aerosol
Synonyms None

Supplier's details

Recommended Use FUEL RAIL 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

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements**Emergency Overview****DANGER****Hazard Statements**

Causes skin irritation
 May cause respiratory irritation. May cause drowsiness or dizziness
 May be fatal if swallowed and enters airways
 Extremely flammable aerosol
 Contains gas under pressure; may explode if heated

**Appearance** Clear**Physical state** Aerosol**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Do not spray on an open flame or other ignition source
 Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response

Specific treatment (see first aid on this label)
 IF ON SKIN: Wash with plenty of soap and water.
 Take off contaminated clothing and wash before reuse
 If skin irritation occurs: Get medical advice/attention
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
ISOALKANES, C7-C8	70024-92-9	70-80
4-METHYL-2-PENTANOL	108-11-2	1-10
OCTADECANOIC ACID	112-80-1	1-10
1-METHOXY-2-PROPANOL	107-98-2	1-10
MONOETHANOLAMINE	141-43-5	0.1-1

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

4. FIRST AID MEASURES**First aid measures for different exposure routes**

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Artificial respiration and/or oxygen may be necessary. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

Main Symptoms	Causes skin irritation. May be fatal if swallowed and enters airways. May cause respiratory irritation.
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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Extremely flammable.

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. Keep people away from and upwind of spill/leak. Ensure adequate ventilation.

Environmental precautions

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

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, or oxidizing agents.

Aerosol Level 3

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH

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4-METHYL-2-PENTANOL 108-11-2	STEL: 40 ppm TWA: 25 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 25 ppm TWA: 100 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 100 mg/m ³ (vacated) STEL: 40 ppm (vacated) STEL: 165 mg/m ³ (vacated) S* S*	IDLH: 400 ppm TWA: 25 ppm TWA: 100 mg/m ³ STEL: 40 ppm STEL: 165 mg/m ³
1-METHYOXY-2-PROPANOL 107-98-2	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm STEL: 540 mg/m ³
MONOETHANOLAMINE 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 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

Safety glasses with side-shields.

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

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state

Aerosol

Appearance

Clear

Color

clear

Odor

Solvent

Odor Threshold

No information available

Property

Values

Remarks • Methods

pH

No information available

not applicable

Melting/freezing point

No information available

Boiling point/boiling range

No information available

Flash Point

-6 °C / 21 °F

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	0.843	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	Not applicable
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	

Other information

VOC Content(%) 85.27

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

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, or oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Vapors may irritate throat and respiratory system. May cause drowsiness and dizziness based on components. May cause irritation of respiratory tract. Avoid breathing vapors or mists.
Eye contact	Avoid contact with eyes.
Skin contact	Irritating to skin. Repeated exposure may cause skin dryness or cracking. Prolonged skin contact may defat the skin and produce dermatitis. Avoid contact with skin.
Ingestion	May be harmful if swallowed. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
4-METHYL-2-PENTANOL 108-11-2	= 2600 mg/kg (Rat)	= 2880 mg/kg (Rabbit)	> 4600 ppm (Rat) 2 h
OCTADECANOIC ACID 112-80-1	= 25 g/kg (Rat)	-	-
1-METHYOXY-2-PROPANOL 107-98-2	= 5000 mg/kg (Rat)	= 13 g/kg (Rabbit)	> 6 mg/L (Rat) 4 h
MONOETHANOLAMINE 141-43-5	= 1720 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. Irritating to skin. Prolonged or repeated exposure may cause dermatitis. May be harmful if swallowed. May be fatal if swallowed and enters airways.

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

Sensitization None known.
Germ Cell Mutagenicity None known.
Carcinogenicity There are no known carcinogenic chemicals in this product.
Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness and dizziness.
Specific target organ systemic toxicity (repeated exposure) None under normal use conditions.
Target Organ Effects Central nervous system, Eyes, Respiratory system, Skin.
Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% 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) 28375 mg/kg
ATEmix (dermal) 25595 mg/kg
ATEmix (inhalation-dust/mist) 252.6 mg/l
ATEmix (inhalation-vapor) 631 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
OCTADECANOIC ACID 112-80-1	-	205 mg/L LC50 Pimephales promelas 96h static	-	-
1-METHOXY-2-PROPANO L 107-98-2	-	20.8 g/L LC50 Pimephales promelas 96h static	-	23300 mg/L EC50 Daphnia magna 48h
MONOETHANOLAMINE 141-43-5	15 mg/L EC50 Desmodosmus subspicatus 72h	227 mg/L LC50 Pimephales promelas 96h flow-through 3684 mg/L LC50 Brachydanio rerio 96h static 300 - 1000 mg/L LC50 Lepomis macrochirus 96h static 114 - 196 mg/L LC50 Oncorhynchus mykiss 96h static 200 mg/L LC50 Oncorhynchus mykiss 96h flow-through	-	65 mg/L EC50 Daphnia magna 48h

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	log Pow
4-METHYL-2-PENTANOL 108-11-2	1.43

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1-METHYOXY-2-PROPANOL 107-98-2	-0.437
MONOETHANOLAMINE 141-43-5	-1.91

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

IMDG UN1950, AEROSOLS, 2.1, LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
ISOALKANES, C7-C8	X	X	X	Not listed	Not listed	X	Not listed	X
4-METHYL-2-PENTANOL	X	X	X	X	X	X	X	X
OCTADECANOIC ACID	X	X	X	X	X	X	X	X
1-METHYOXY-2-PROPANOL	X	X	X	X	X	X	X	X
MONOETHANOLAMINE	X	X	X	X	X	X	X	X

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - 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

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations**California Proposition 65**

This product does not contain any known Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
4-METHYL-2-PENTANOL 108-11-2	X	X	X
OCTADECANOIC ACID 112-80-1			X
1-METHOXY-2-PROPANOL 107-98-2	X	X	X
MONOETHANOLAMINE 141-43-5	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

NFPA	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 4	Physical Hazard 1	Personal protection B

Issuing date 09-09-2015

Revision Date 09-09-2015

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