Full Force Diesel Performance Inc.
7822 Manchester Pike
Murfreesboro, TN 37127

FFD186 **J3 PCM Port Prep Pen**

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Identifier: FFD186

Other Means of Identification: PCM Port Prep Pen

Related Part # FFD186

Recommended Use and Restriction on Use

Use: Powerstroke 7.3L PCM terminal

cleaning

Uses Advised Against: Not applicable

Details of Distributor

Full Force Diesel
7822 Manchester Pike
Murfreesboro, TN 37127

☎ 615-962-8291

E-MAIL info@fullforcediesel.com
WEB www.fullforcediesel.com

Emergency Phone Number

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents)
USA or CANADA—Call Verisk 3E at ***+1-866-519-4752*** or ***+1-760-476-3962***
(Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service
CANADA—Call CANUTEC collect at ***+1-613-996-6666*** or ****666*** on cellular phones

Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

Criteria	Category	Signal Word	Pictograms
Flammable Liquid	2	Danger	Flame
Eye Irritation	2	Warning	Exclamation
Specific Target Organ Toxicity Single Exposure	3	Warning	Exclamation

Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity). Severity categories rankings do not allow comparisons between classes.

Label Elements

Signal Word	**DANGER**
Pictograms	**Hazard Statements**
	H225: Highly flammable liquid and vapor
	H319: Causes serious eye irritation H336: May cause drowsiness or dizziness
Prevention	**Precautionary Statements**
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, flames, and other ignition sources. No Smoking.
P261	Avoid breathing vapors.
P271	Use only outdoors or a in well-ventilated area.
P280	Wear protective gloves.
P264	Wash hands thoroughly after handling.

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Response	Precautionary Statements
P370 + P378	In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice or attention.
P304 + P340, P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.
Storage	**Precautionary Statements**
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
Disposal	**Precautionary Statements**
P501	Dispose of contents in accordance to local, regional, national, and international regulations.

Hazards Not Otherwise Classified

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Defats skin	Repeated exposure may cause skin dryness or cracking.	None	None

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(weight)
67-64-1	acetone	50%
646-06-0	1,3-dioxolane	34%
109-87-5	dimethoxymethane	16%

Section 4: First-Aid Measures

Exposure Condition	*GHS Code: Precautionary Statement*
IF ON SKIN (or hair)	P303 + P361 + P353
Immediate Symptoms	*dry skin, redness, pain, (see also inhalation symptoms)*
Response	Take off immediately all contaminated clothing. Rinse skin with water or shower.
IF IN EYES	P305 + P351 + P338, P337 + P313
Immediate Symptoms	*severe irritation, redness, pain, blurred vision*
Response	Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention
IF INHALED	P304 + P340, P312
Immediate Symptoms	*cough, sore throat, headache, drowsiness, dizziness, confusion, unconsciousness*
Response	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.
IF SWALLOWED	P301 + P330, P331, P308 + P313
Immediate Symptoms	*nausea, weakness, abdominal pain, vomiting, (see also inhalation symptoms)*
Response	Rinse mouth. Do NOT induce vomiting. IF exposed or concerned: Get medical advice or attention.

Section 5: Fire-Fighting Measures

Extinguishing Media	In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
Specific Hazards	The vapors are heavier than air and may accumulate in low-lying areas. Vapors may travel long distances and ignite at an ignition source, which can cause a flashback or an explosion.
Combustion Products	Produces carbon oxides (CO, CO_2).
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

Section 6: Accidental Release Measures

Personal Protection	See personal protection equipment in Section 8.
Precautions for Response	Avoid breathing the vapors. Remove or keep away all sources of ignition or extreme heat.
Environmental Precautions	Prevent spill from entering drains and waterways.
Containment	Not applicable
Cleaning	Place inert absorbent pads directly on the spill. Let absorb and wipe clean. Collect the contaminated pad in a sealable, solvent-resistant container. Wash the spill area with soap and water to remove remaining residues. **RECOMMENDATION:** Use a grounded stainless steel or carbon steel container.
Disposal Methods	Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention	Keep out of reach of children. Keep away from heat, hot surfaces, sparks, flames, and other ignition sources. No Smoking. Avoid breathing vapors. Use only outdoors or in a well-ventilated area. Keep cap tightly closed.
Handling	Wear protective gloves. Wash hands thoroughly after handling.
Storage	Store in a well-ventilated area. Keep cool. Store locked up.

Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
acetone	ACGIH	500 ppm	750 ppm
	U.S.A. OSHA PEL	1 000 ppm	Not established
	Canada AB	500 ppm	750 ppm
	Canada BC	250 ppm	500 ppm
	Canada ON	500 ppm	750 ppm
	Canada QC	750 ppm	1 000 ppm
1,3-dioxolane	ACGIH [a)]	20 ppm	Not established
	U.S.A. OSHA PEL	Not established	Not established
	Canada AB	20 ppm	Not established
	Canada BC [b)]	20 ppm	Not established
	Canada ON	20 ppm	Not established
	Canada QC	Not established	Not established
dimethoxymethane	ACGIH [c)]	1 000 ppm	Not established
	U.S.A. OSHA PEL	1 000 ppm	3 100 ppm
	Canada AB	1 000 ppm	3 100 ppm
	Canada BC	1 000 ppm	1 250 ppm
	Canada ON	1 000 ppm	Not established
	Canada QC	1 000 ppm	3 110 ppm

Note: The ACGIH[1], OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from the RTECS[2] database and from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

a) Hematologic effect
b) Adverse reproductive effect
c) Eye irritation; CNS impairment

Engineering Controls

Ventilation Keep airborne concentrations below the occupational exposure limits (OEL).

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Personal Protective Equipment

Eye protection	Wear appropriate protective eyeglasses or chemical safety goggles. **RECOMMENDATION:** Use safety glasses with lateral protection (side shields).
Skin Protection	For incidental contacts, use neoprene, natural latex rubber, or other chemically resistant gloves.
Respiratory Protection	For over-exposures up to 10 x OEL of mist/vapors/spray, wear respirator such as a half-mask respirator with organic vapor cartridges. Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus. **RECOMMENDATION:** Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Section 9: Physical and Chemical Properties

Physical State	Liquid	**Lower Flammability Limit** [c]	2.7%
Appearance	Colorless	**Upper Flammability Limit** [c]	16.5%
Odor	Ketone-like	**Vapor Pressure @20 °C** [b]	221 hPa [166 mmHg]
Odor Threshold	Not available	**Vapor Density**	>2.01 (Air = 1)
pH	Not available	**Relative Density @25 °C**	0.89
Freezing/Melting Point	Not available	**Solubility in Water**	Miscible
Initial Boiling Point	42 °C [107 °F]	**Partition Coefficient n-octanol/water**	Not available
Flash Point [a]	-30 °C [-22 °F]	**Auto-ignition Temperature**	250 °C [482 °F]
Evaporation Rate	Not available	**Decomposition Temperature**	Not available
Flammability	Flammable	**Viscosity @40 °C**	<20.5 mm^2/s

a) Closed cup value
b) Calculated using Raoult's Law
c) Calculated using LeChatelier Principal

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Avoid flames, sparks, other ignition sources and incompatible substances.
Incompatibilities	Phosphorous oxychloride, strong oxidizing agents, strong bases, strong acids
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

Section 11: Toxicological Information

Summary of Effects and Symptoms by Routes of Exposure

Eyes	Causes redness, serious eye irritation, pain and/or blurred vision.
Skin	May cause dry skin, redness, and/or pain. (see also inhalation symptoms).
Inhalation	May cause cough, sore throat, headache, drowsiness, dizziness, and/or confusion. Severe overexposure may lead to unconsciousness.
Ingestion	May cause nausea, weakness, abdominal pain, and/or vomiting. (see also inhalation symptoms)
Chronic	Prolonged or repeated exposure may cause skin dryness, cracking, as well as defatting the skin.

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
acetone	5 800 mg/kg Rat	20 mL/kg Rabbit [a)]	16 000 ppm 4 h Rat [a)]
1,3-dioxolane	5 200 mg/kg Rat	15 000 mg/kg Rat	20 650 mg/m^3 4 h Rat
dimethoxymethane	6 423 mg/kg Rat	Not available	57 mg/L 7 h Rat

Note: Toxicity data from the RTECS[2] and ECHA were consulted. The data from supplier SDS were also consulted.

a) Supplier safety data sheet

Other Toxicological Effects

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Acetone and 1,3-dioxolane are known serious eye irritants.
Sensitization (allergic reactions)	Based on available data, the classification criteria are not met.
Carcinogenicity (risk of cancer)	None of the ingredients are classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.
Mutagenicity (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
Reproductive Toxicity (risk to sex functions)	Based on available data, the classification criteria are not met.
Teratogenicity (risk of fetus malformation)	Based on available data, the classification criteria are not met.
STOT-single exposure	Acetone can affect the central nervous system by inhalation causing drowsiness or dizziness.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met. There are no category 1 components.

Section 12: Ecological Information

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (http://echa.europa.eu), and other reliable sources.

Acetone does not meet classification criteria for aquatic environmental toxicants with LC50 and EC50 of >100 mg/L.

- Acetone has a minimal LC50 96 h of 5 540 mg/L for Oncorhynchus mykiss (rainbow trout) and an EC50 48 h of 13 500 mg/L for Daphnia magna (water flea).

1,3-dioxolane and dimethoxymethane is not classifiable as an environmental toxicant.

Acute Ecotoxicity

Available toxicity data does not meet classification thresholds.

Section continue on the next page

Chronic Ecotoxicity

Available toxicity data does not meet classification thresholds.

Biodegradability

Not available

Other Effects

Volatile Organic Compound (VOC) content = 50% [446 g/L] by VOC-Exemption

Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); **USA DOT 49 CFR** (Parts 100 to 185) **Regulations**.	
Sizes 30 mL and under **Excepted Quantity** Document as class **E2** 	*FOR REFERENCE ONLY* **UN number**: UN1993 **Shipping Name:** Flammable liquid, n.o.s. (acetone, 1,3-dioxolane, dimethoxymethane) **Class:** 3 **Packing Group**: II **Marine Pollutant:** No

Air

Refer to ICAO-IATA Dangerous Goods Regulations.	
Sizes 30 mL and under **Excepted Quantity** Document as class **E2**  On air waybill, write: "Dangerous Goods in Excepted Quantities".	*FOR REFERENCE ONLY* **UN number**: UN1993 **Shipping Name:** Flammable liquid, n.o.s. (acetone, 1,3-dioxolane, dimethoxymethane) **Class:** 3 **Packing Group**: II **Marine Pollutant**: No

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Sea

Refer to IMDG regulations.	
Sizes 30 mL and under **Excepted Quantity** Document as class **E2**  	*FOR REFERENCE ONLY* **UN number:** UN1993 **Shipping Name:** Flammable liquid, n.o.s. (acetone, 1,3-dioxolane, dimethoxymethane) **Class:** 3 **Packing Group:** II **Marine Pollutant:** No

Note: **Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.**

Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL.

Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

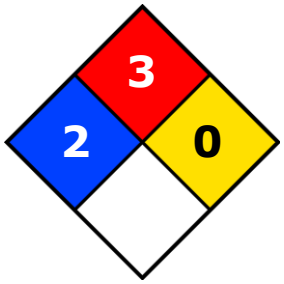
USA

Other Classifications

HMIS® RATING

HEALTH:	* 2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:
0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45

This product contains acetone (CAS# 67-64-1), which is subject to the CERCLA reporting requirements at the 5 000 lb (2 268 kg) threshold.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, USA).

This product does not contain any substances known to be listed in California.

Europe

RoHS (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

SDS Prepared by	MG Chemical's Regulatory Department
Date of Revision	06 March 2020
Supersedes	06 May 2019
Reason for Changes:	Update to the emergency phone number information.

Reference

1) ACGIH 2017 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2017).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

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FFD186 **J3 PCM Port Prep Pen**

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
ECHA	European Chemicals Agency
EU	European Union
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
IARC	International Agency for Research on Cancer
NOELR	No observable effect loading ratio
NTP	National Toxicology Program
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.fullforcediesel.com.

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