



# Diesel System Cleaner

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 6/25/2015 Revision date: 12/6/2021 Supersedes: 8/27/2020 Version: 2.1

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Trade name : Diesel System Cleaner  
Product code : 3313

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Diesel additive

#### 1.3. Supplier

Bardahl Manufacturing Corporation  
1400 NW 52nd Street  
P.O. Box  
Seattle, WA 98107  
USA  
T 206-783-4851 - F 206-784-3219  
[www.bardahl.com](http://www.bardahl.com)  
Contact: Jackie Leung

#### 1.4. Emergency telephone number

Emergency number : 800-424-9300

### SECTION 2: Hazard(s) identification


#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable liquids, Category 4	Combustible liquid
Skin corrosion/irritation, Category 2	Causes skin irritation.
Germ cell mutagenicity, Category 1B	May cause genetic defects.
Carcinogenicity, Category 1B	May cause cancer.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	Toxic to aquatic life with long lasting effects.

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labelling

Hazard pictograms (GHS US) : 

Signal word (GHS US) : Danger

Hazard statements (GHS US) : Combustible liquid  
Causes skin irritation.  
May cause genetic defects.  
May cause cancer.  
Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS US) : Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Wash hands thoroughly after handling.  
Avoid release to the environment.

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Wear eye protection, protective gloves.  
If on skin: Wash with plenty of water.  
If exposed or concerned: Get medical advice/attention.  
Specific treatment (see supplemental first aid instruction on this label).  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
In case of fire: Use alcohol resistant foam, BC-powder, carbon dioxide (CO<sub>2</sub>) to extinguish.  
Collect spillage.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Petroleum distillates (Diesel fuel no. 2)	CAS-No.: 68476-34-6	50 – 80	Flam. Liq. 4, H227 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Solvent naphtha (petroleum), heavy arom.	CAS-No.: 64742-94-5	1 – 10	Asp. Tox. 1, H304
Solvent naphtha (light aromatic)	CAS-No.: 64742-95-6	1 – 10	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304 Aquatic Acute 3, H402
1,2,4-Trimethyl benzene	CAS-No.: 95-63-6	0.1 – 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Naphthalene	CAS-No.: 91-20-3	0.1 – 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

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### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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#### 5.2. Specific hazards arising from the chemical

Fire hazard	: Combustible liquid.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.
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##### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool. Store locked up.
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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>Diesel System Cleaner</b>	
No additional information available	
<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Diesel fuel as total
ACGIH OEL TWA	100 mg/m <sup>3</sup>
<b>Solvent naphtha (petroleum), heavy arom. (64742-94-5)</b>	
No additional information available	
<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
No additional information available	
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
No additional information available	
<b>Naphthalene (91-20-3)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	10 ppm

#### 8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

<b>Hand protection:</b>
Protective gloves
<b>Eye protection:</b>
Safety glasses

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### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: amber Dark
Odour	: characteristic
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 65.6 °C PMCC typical
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.866 g/cm <sup>3</sup> typical
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 27.2 mm <sup>2</sup> /s @ 40 C typical
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Petroleum distillates (Diesel fuel no. 2) (68476-34-6)

LD50 oral rat	> 5000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 5 mg/l (4 h, Rat, Inhalation)
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

#### Solvent naphtha (light aromatic) (64742-95-6)

LD50 oral rat	> 2000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit, Dermal)

#### 1,2,4-Trimethyl benzene (95-63-6)

LD50 oral rat	6000 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male, Experimental value, Oral, 014 day(s))
LD50 dermal rat	3440 mg/kg (24 h, Rat, Male / female, Read-across, Dermal)
LC50 Inhalation - Rat	> 10.2 mg/l air (4 h, Rat, Male / female, Read-across, Inhalation (vapours), 14 day(s))
ATE US (oral)	6000 mg/kg bodyweight
ATE US (dermal)	3440 mg/kg bodyweight
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

#### Naphthalene (91-20-3)

LD50 dermal rat	> 16000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
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<b>Naphthalene (91-20-3)</b>	
LC50 Inhalation - Rat	> 0.4 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, (maximum achievable concentration), Inhalation (vapours), 14 day(s))
ATE US (oral)	533 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: 27.2 mm <sup>2</sup> /s @ 40 C typical
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
LC50 - Fish [1]	18 mg/l (Pisces)
EC50 - Crustacea [1]	21 mg/l (Daphnia sp.)

<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
LC50 - Fish [1]	7.72 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)

<b>Naphthalene (91-20-3)</b>	
LC50 - Fish [1]	0.96 ppm (Oncorhynchus gorbuscha, Flow-through system, Salt water, Experimental value, Lethal)
EC50 - Crustacea [1]	2.16 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

### 12.2. Persistence and degradability

<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
Persistence and degradability	Inherently biodegradable.

<b>Solvent naphtha (petroleum), heavy arom. (64742-94-5)</b>	
Persistence and degradability	Not readily biodegradable in water.

<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
Persistence and degradability	Readily biodegradable in water.

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<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
Persistence and degradability	Not readily biodegradable in water.
Chemical oxygen demand (COD)	0.44 g O <sub>2</sub> /g substance
<b>Naphthalene (91-20-3)</b>	
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.22 g O <sub>2</sub> /g substance
ThOD	2.99 g O <sub>2</sub> /g substance
<b>12.3. Bioaccumulative potential</b>	
<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6
<b>Solvent naphtha (petroleum), heavy arom. (64742-94-5)</b>	
Partition coefficient n-octanol/water (Log Pow)	2.9 – 6.1
Bioaccumulative potential	Bioaccumable.
<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
Partition coefficient n-octanol/water (Log Pow)	2.1 – 6
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
BCF - Fish [1]	243 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.63 (Experimental value, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>Naphthalene (91-20-3)</b>	
BCF - Fish [1]	23 – 168 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	3.4 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>12.4. Mobility in soil</b>	
<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
Surface tension	25 mN/m
Ecology - soil	No (test)data on mobility of the component(s) available.
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.04 (log Koc, Calculated value)
Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.
<b>Naphthalene (91-20-3)</b>	
Surface tension	No data available in the literature



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Naphthalene (91-20-3)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.864 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

### 14.1. UN number

DOT NA No : Not applicable  
UN-No. (TDG) : Not applicable  
UN-No. (IMDG) : 3082  
UN-No. (IATA) : Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable  
Proper Shipping Name (TDG) : Not applicable  
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Proper Shipping Name (IATA) : Not applicable

### 14.3. Transport hazard class(es)

**DOT**  
Transport hazard class(es) (DOT) : Not applicable

**TDG**  
Transport hazard class(es) (TDG) : Not applicable

**IMDG**  
Transport hazard class(es) (IMDG) : 9  
Danger labels (IMDG) : 9



**IATA**  
Transport hazard class(es) (IATA) : Not applicable

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### 14.4. Packing group

Packing group (DOT) : Not applicable  
Packing group (TDG) : Not applicable  
Packing group (IMDG) : III  
Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Dangerous for the environment : Yes  
Marine pollutant : Yes



Other information : No supplementary information available.

### 14.6. Special precautions for user

**DOT**  
No data available

**TDG**  
No data available

**IMDG**  
Limited quantities (IMDG) : 5 L

**IATA**  
No data available

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

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Petroleum distillates (Diesel fuel no. 2)	68476-34-6	Present	Active	
Solvent naphtha (petroleum), heavy arom.	64742-94-5	Present	Active	
Solvent naphtha (light aromatic)	64742-95-6	Present	Active	
1,2,4-Trimethyl benzene	95-63-6	Present	Active	
Naphthalene	91-20-3	Not present	-	

### 1,2,4-Trimethyl benzene (95-63-6)

Subject to reporting requirements of United States SARA Section 313

### 15.2. International regulations

#### CANADA

No additional information available

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### EU-Regulations

No additional information available

### National regulations

No additional information available

### 15.3. US State regulations

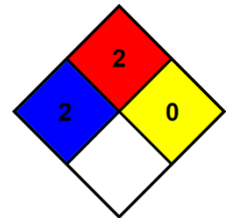
Component	State or local regulations
1,2,4-Trimethyl benzene(95-63-6)	U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

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Revision date : 12/06/2021

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



- Hazard Rating
- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
- Personal protection : B - Safety glasses, Gloves

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.