



# E10 & E15 Fuel Stabilizer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 1.4

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : E10 & E15 Fuel Stabilizer  
Product code : 92030

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

Use of the substance/mixture : Gasoline additive

#### 1.3. Supplier

Bardahl Pro  
1400 NW 52nd Street  
Seattle, 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.  |
| Serious eye damage/eye irritation, Category 2                     | Causes serious eye irritation.                                     |
| Carcinogenicity, Category 2                                       | Suspected of causing cancer (Dermal).                              |
| Specific target organ toxicity — Repeated exposure, Category 2    | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard, Category 1                                     | May be fatal if swallowed and enters airways.                      |
| Hazardous to the aquatic environment — Acute Hazard, Category 3   | Harmful to aquatic life  |
| 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  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
Suspected of causing cancer (Dermal).  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life  
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.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash hands thoroughly after handling.  
Avoid release to the environment.  
Wear eye protection, protective clothing, protective gloves.  
If swallowed: Immediately call a poison center or doctor.  
If on skin: Wash with plenty of water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

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and easy to do. Continue rinsing.  
If exposed or concerned: Get medical advice/attention.  
Get medical advice/attention if you feel unwell.  
Specific treatment (see supplemental first aid instruction on this label).  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/attention.  
If eye irritation persists: 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 | ≥ 80     | Flam. Liq. 4, H227<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Carc. 2, H351<br>STOT RE 2, H373<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 |
| Solvent naphtha (petroleum), heavy arom.  | (CAS-No.) 64742-94-5 | 0.1 – 5  | Asp. Tox. 1, H304   |
| Naphthalene                               | (CAS-No.) 91-20-3    | 0.01 – 1 | Acute Tox. 4 (Oral), H302<br>Carc. 2, H351<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410  |

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

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Call a physician immediately.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

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

- Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Eye irritation.
- Symptoms/effects after ingestion : Risk of lung oedema.

### 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.

### 5.2. Specific hazards arising from the chemical

- Fire hazard : Combustible liquid.

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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.

## 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. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 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".

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

### 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.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : 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. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

Handling temperature : 70 °C maximum

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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.

Storage temperature : 45 °C maximum

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

|   |                       |
|---|-----------------------|
| <b>E10 &amp; E15 Fuel Stabilizer ( )</b>                      |                       |
| No additional information available                           |                       |
| <b>Solvent naphtha (petroleum), heavy arom. (64742-94-5)</b>  |                       |
| No additional information available                           |                       |
| <b>Naphthalene (91-20-3)</b>                                  |                       |
| <b>USA - ACGIH - Occupational Exposure Limits</b>             |                       |
| ACGIH TWA (ppm)   | 10 ppm                |
| <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 TWA (mg/m <sup>3</sup> )                                | 100 mg/m <sup>3</sup> |

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### 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

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

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

- Physical state : Liquid  
Colour : Colourless amber  
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 : 0.842 (0.84 – 0.85) 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 : 3.38 (3 – 4) 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.

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### 10.2. Chemical stability

Stable under normal conditions.

### 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 |

| Naphthalene (91-20-3) |                            |
|-----------------------|----------------------------|
| LD50 dermal rat       | > 2500 mg/kg (Rat, Dermal) |
| ATE US (oral)         | 533 mg/kg bodyweight       |

| 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 (mg/l)                             | > 5 mg/l (4 h, Rat, Inhalation) |

|                                   |  |
|-----------------------------------|--|
| Skin corrosion/irritation         | : Causes skin irritation.  |
| Serious eye damage/irritation     | : Causes serious eye irritation.                                     |
| Respiratory or skin sensitisation | : Not classified   |
| Germ cell mutagenicity            | : Not classified   |
| Carcinogenicity                   | : Suspected of causing cancer (Dermal).                              |
| Reproductive toxicity             | : Not classified   |
| STOT-single exposure              | : Not classified   |
| STOT-repeated exposure            | : May cause damage to organs through prolonged or repeated exposure. |

| Petroleum distillates (Diesel fuel no. 2) (68476-34-6) |  |
|--|--|
| STOT-repeated exposure                                 | May cause damage to organs through prolonged or repeated exposure. |

|                                     |  |
|-------------------------------------|--|
| Aspiration hazard                   | : May be fatal if swallowed and enters airways.    |
| Viscosity, kinematic                | : 3.38 (3 – 4) mm <sup>2</sup> /s @ 40 C typical   |
| Symptoms/effects after skin contact | : Irritation. May cause an allergic skin reaction. |
| Symptoms/effects after eye contact  | : Eye irritation.                                  |
| Symptoms/effects after ingestion    | : Risk of lung oedema.                             |

## SECTION 12: Ecological information

### 12.1. Toxicity

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

| Naphthalene (91-20-3) |   |
|-----------------------|---|
| LC50 fish 1           | 0.11 mg/l (96 h, Oncorhynchus mykiss, Literature study) |
| EC50 Daphnia 1        | 2.16 mg/l (48 h, Daphnia magna, Literature study)       |

### 12.2. Persistence and degradability

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| <b>Solvent naphtha (petroleum), heavy arom. (64742-94-5)</b>  |  |
|---|--|
| Persistence and degradability                                 | Not readily biodegradable in water.                        |
| <b>Naphthalene (91-20-3)</b>                                  |  |
| Persistence and degradability                                 | 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>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b> |  |
| Persistence and degradability                                 | Inherently biodegradable.                                  |

### 12.3. Bioaccumulative potential

| <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>Naphthalene (91-20-3)</b>                                  |   |
| BCF fish 1  | 23 – 168 (8 week(s), Cyprinus carpio, Literature study) |
| Partition coefficient n-octanol/water (Log Pow)               | 3.3 (Experimental value)                                |
| Bioaccumulative potential                                     | Low potential for bioaccumulation (BCF < 500).          |
| <b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b> |   |
| Partition coefficient n-octanol/water (Log Pow)               | 3.9 – 6   |

### 12.4. Mobility in soil

| <b>Naphthalene (91-20-3)</b>                                  |  |
|---|--|
| Surface tension   | 0.03 N/m (100 °C)                                      |
| Ecology - soil  | Adsorbs into the soil.                                 |
| <b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b> |  |
| Surface tension   | 0.025 N/m  |
| Ecology - soil  | No (test)data on mobility of the components available. |

### 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

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III  
UN-No.(DOT) : UN3082  
Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.  
Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140  
Packing group (DOT) : III - Minor Danger  
Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



Dangerous for the environment : Yes

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Marine pollutant

: Yes



DOT Packaging Non Bulk (49 CFR 173.xxx)

: 203

DOT Packaging Bulk (49 CFR 173.xxx)

: 241

DOT Symbols

: G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102)

: 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.  
146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.  
173 - An appropriate generic entry may be used for this material.  
335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s.," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leakproof when used as bulk packaging.  
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / (1 + a (tr - tf))$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.  
TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)

: 155

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)

: No limit

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)

: No limit

DOT Vessel Stowage Location

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Emergency Response Guide (ERG) Number

: 171

Other information

: No supplementary information available.

### Transportation of Dangerous Goods

#### Transport by sea

Transport document description (IMDG)

: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

UN-No. (IMDG)

: 3082

Proper Shipping Name (IMDG)

: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IMDG)

: 9 - Miscellaneous dangerous substances and articles

Packing group (IMDG)

: III - substances presenting low danger

Limited quantities (IMDG)

: 5 L

Marine pollutant

: Yes



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### Air transport

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Solvent naphtha (petroleum), heavy arom. (64742-94-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### EU-Regulations

#### National regulations

No additional information available

### 15.3. US State regulations

## SECTION 16: Other information

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Revision date : 04/28/2020

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

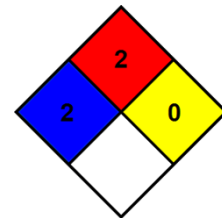
Health : 2 Moderate Hazard - Temporary or minor injury may occur

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 : C

C - Safety glasses, Gloves, Synthetic apron



SDS US (GHS HazCom 2012)

*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.*