

Safety Data Sheet

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

Issue date: 04/20/2016 Revision date: 03/16/2020 Supersedes: 02/13/2020

SECTION 1: Identification

Identification

Product form : Mixture

Product name : Ultra Pro Synthetic Fuel System Cleaner

Product code

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

Contact: Jackie Leung

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 3 Skin corrosion/irritation, Category 2

Serious eye damage/eye irritation, Category 2

Carcinogenicity, Category 2

Specific target organ toxicity — Repeated exposure,

Category 2

Aspiration hazard, Category 1

Hazardous to the aquatic environment — Acute Hazard,

Category 3

Hazardous to the aquatic environment — Chronic

Hazard, Category 2

Flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

Suspected of causing cancer (Dermal).

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways. Harmful to aquatic life

Toxic to aquatic life with long lasting effects.

GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)









Version: 2.2

Signal word (GHS US) : Danger

Hazard statements (GHS US) Flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eve 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

smokina.

Keep container tightly closed.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe fume, mist, vapours.

Wash hands, forearms and face thoroughly after handling

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Avoid release to the environment.

Wear eye protection, protective gloves.

If swallowed: Immediately call a POISON CENTER.

If on skin: Wash with plenty of water.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present 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 (CO2) 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 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |
| Monoalkylaryl alkoxylate aminated | (CAS-No.) Polymer | 5 – 20 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |
| 1,2,4-Trimethyl benzene | (CAS-No.) 95-63-6 | 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 |
| Cumene | (CAS-No.) 98-82-8 | 0.1 – 1 | Flam. Liq. 3, H226 Carc. 2, H351 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 |

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.

First-aid measures after skin contact : If skin irritation occurs: Get medical advice/attention. Rinse skin with water/shower. Take off

immediately all contaminated clothing.

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.

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Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation. Symptoms/effects after eye contact : Eye irritation. Symptoms/effects after ingestion : Risk of lung oedema.

Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder, Foam, Carbon dioxide, Water spray.

Specific hazards arising from the chemical

Fire hazard : Combustible liquid. Flammable liquid and vapour.

Hazardous decomposition products in case of

: 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.

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".

Environmental precautions

Avoid release to the environment.

Methods and material for containment and cleaning up 6.3.

For containment : Collect spillage.

Methods for cleaning up Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

Other information : Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

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. Do not breathe

dust/fume/gas/mist/vapours/spray. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours

may accumulate in the container. Use explosion-proof equipment.

Handling temperature

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

Storage temperature : 45 °C max.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Ultra Pro Synthetic Fuel System Cleaner | | |
|--|----------------------|--|
| No additional information available | | |
| Petroleum distillates (Diesel fuel no. 2) (68476-34-6) | | |
| USA - ACGIH - Occupational Exposure Limits | | |
| Local name | Diesel fuel as total | |
| ACGIH TWA (mg/m³) | 100 mg/m³ | |
| Monoalkylaryl alkoxylate aminated (Polymer) | | |
| No additional information available | | |
| 1,2,4-Trimethyl benzene (95-63-6) | | |
| USA - ACGIH - Occupational Exposure Limits | | |
| ACGIH TWA (ppm) | 25 ppm | |
| Cumene (98-82-8) | | |
| USA - ACGIH - Occupational Exposure Limits | | |
| ACGIH TWA (ppm) | 50 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

Hand protection:

Protective gloves

Eye protection:

Safety glasses

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 Odour : characteristic Odour threshold : No data available pН : No data available Melting point Not applicable Freezing point : No data available Boiling point : No data available : 58 °C PMCC Flash point Relative evaporation rate (butylacetate=1) : No data available

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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 : 0.86 g/cm3 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 : 5.8 mm²/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. Flammable liquid and vapour.

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

| 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) |

| 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 (mg/l) | > 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 |

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| Cumene (98-82-8) | |
|-----------------------------------|---|
| LD50 oral rat | 2700 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 014 day(s)) |
| LD50 dermal rabbit | > 3160 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s)) |
| LC50 inhalation rat (mg/l) | 39 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s)) |
| ATE US (oral) | 2700 mg/kg bodyweight |
| ATE US (vapours) | 39 mg/l/4h |
| ATE US (dust,mist) | 39 mg/l/4h |
| 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). |

| Cumene (98-82-8) | |
|------------------|--------------------------------------|
| IARC group | 2B - Possibly carcinogenic to humans |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

| 1,2,4-Trimethyl benzene (95-63-6) | | |
|-----------------------------------|--|--|
| STOT-single exposure | May cause respiratory irritation. | |
| Cumene (98-82-8) | | |
| STOT-single exposure | May cause respiratory irritation. | |
| 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 : 5.8 mm²/s @ 40 C Typical

Symptoms/effects after skin contact : Irritation.

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.

| 1,2,4-Trimethyl benzene (95-63-6) | | |
|-----------------------------------|--|--|
| LC50 fish 1 | 7.72 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal) | |
| Cumene (98-82-8) | | |
| LC50 fish 1 | 4.8 mg/l (EPA OTS 797.1400, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP) | |
| EC50 Daphnia 1 | 2.14 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) | |
| ErC50 (algae) | 2.01 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP) | |

12.2. Persistence and degradability

| Petroleum distillates (Diesel fuel no. 2) (68476-34-6) | |
|--|---------------------------|
| Persistence and degradability | Inherently biodegradable. |

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| 1,2,4-Trimethyl benzene (95-63-6) | | |
|-----------------------------------|-------------------------------------|--|
| Persistence and degradability | Not readily biodegradable in water. | |
| Chemical oxygen demand (COD) | 0.44 g O₂/g substance | |
| Cumene (98-82-8) | | |
| Persistence and degradability | Not readily biodegradable in water. | |
| Biochemical oxygen demand (BOD) | 1.28 g O ₂ /g substance | |
| Chemical oxygen demand (COD) | 2.42 g O ₂ /g substance | |
| ThOD | 3.2 g O₂/g substance | |

12.3. Bioaccumulative potential

| Petroleum distillates (Diesel fuel no. 2) (68476-34-6) | | |
|--|---|--|
| Partition coefficient n-octanol/water (Log Pow) | 3.9 – 6 | |
| 1,2,4-Trimethyl benzene (95-63-6) | | |
| 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). | |
| Cumene (98-82-8) | | |
| BCF other aquatic organisms 1 | 94.69 l/kg (BCFBAF v3.00, Calculated value) | |
| Partition coefficient n-octanol/water (Log Pow) | 3.55 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C) | |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). | |

12.4. Mobility in soil

| Petroleum distillates (Diesel fuel no. 2) (68476-34-6) | | |
|--|---|--|
| Surface tension | 0.025 N/m | |
| Ecology - soil | No (test)data on mobility of the components available. | |
| 1,2,4-Trimethyl benzene (95-63-6) | | |
| Partition coefficient n-octanol/water (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. | |
| Cumene (98-82-8) | | |
| Surface tension | 28.2 mN/m (20 °C) | |
| Partition coefficient n-octanol/water (Log Koc) | 2.946 (log Koc, 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.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Dangerous for the environment : Yes
Marine pollutant : Yes



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Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Marine pollutant : Yes



Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

Ultra Pro Synthetic Fuel System Cleaner

Not 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

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

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Cumene (98-82-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 5000 lb

15.2. International regulations

CANADA

EU-Regulations

National regulations

Cumene (98-82-8)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

| Cumene (98-82- | -8) | | | | |
|--|---|---|---|----------------------------------|--|
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
| Yes | No | No | No | | |

| Component | State or local regulations |
|----------------------------------|--|
| 1,2,4-Trimethyl benzene(95-63-6) | U.S New Jersey - Right to Know Hazardous Substance List |
| Cumene(98-82-8) | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List |

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SECTION 16: Other information

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Revision date : 03/16/2020

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

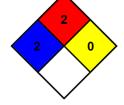
NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to

relatively high ambient temperatures before ignition can

occur

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



Hazard Rating

Physical

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)

: 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

B - Safety glasses, Gloves

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.

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