

Injector Cleaner

Safety Data Sheet

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

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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Injector Cleaner
Product code : 92000

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
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 |
| Carcinogenicity, Category 2 | Suspected of causing cancer. |
| 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 — 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.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.
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.
Avoid release to the environment.
Wear eye protection, protective gloves.
If swallowed: Immediately call a poison center or doctor.
If exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Do NOT induce vomiting.
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.

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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 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |
| Monoalkylaryl alkoxyate aminated | (CAS-No.) Polymer | 1 – 5 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |
| 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 |

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. Call a physician immediately.
- 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.
- Symptoms/effects after eye contact : Serious damage to eyes.
- 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. Flammable liquid and vapour.
- 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 : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. 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 product 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 : 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. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. 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. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Separate working clothes from town clothes. Launder separately. 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

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|---|-----------------------|
| Injector Cleaner | |
| No additional information available | |
| 1,2,4-Trimethyl benzene (95-63-6) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH TWA (ppm) | 25 ppm |
| Petroleum distillates (Diesel fuel no. 2) (68476-34-6) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Diesel fuel as total |
| ACGIH TWA (mg/m ³) | 100 mg/m ³ |
| Monoalkylaryl alkoxyate aminated (Polymer) | |
| No additional information available | |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

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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 | : 61 °C PMCC |
| 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 | : 0.836 g/cm ³ 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 | : 2.9 mm ² /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.

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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

| 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 |

| 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 : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

| 1,2,4-Trimethyl benzene (95-63-6) | |
|-----------------------------------|-----------------------------------|
| 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 : 2.9 mm²/s @ 40 C typical
Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Risk of lung oedema.

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SECTION 12: Ecological information

12.1. Toxicity

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

| 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) |

12.2. Persistence and degradability

| 1,2,4-Trimethyl benzene (95-63-6) | |
|-----------------------------------|-------------------------------------|
| Persistence and degradability | Not readily biodegradable in water. |
| Chemical oxygen demand (COD) | 0.44 g O ₂ /g substance |

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

12.3. Bioaccumulative potential

| 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). |

| Petroleum distillates (Diesel fuel no. 2) (68476-34-6) | |
|--|---------|
| Partition coefficient n-octanol/water (Log Pow) | 3.9 – 6 |

12.4. Mobility in soil

| 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. |

| 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. |

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

Not applicable

Transportation of Dangerous Goods

Transport by sea

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (petroleum distillates), 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

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Packing group (IMDG) : III - substances presenting low danger
Limited quantities (IMDG) : 5 L
Marine pollutant : Yes



Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

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Not 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

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

| 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 : 03/26/2020

Abbreviations and acronyms:

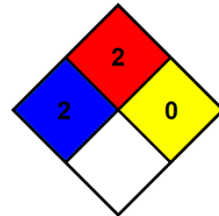
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| | |
|---------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BLV | Biological limit value |
| CAS-No. | Chemical Abstract Service number |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC50 | Median effective concentration |
| EC-No. | European Community number |
| EN | European Standard |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| vPvB | Very Persistent and Very Bioaccumulative |
| WGK | Water Hazard Class |

- 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
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.