

SECTION 1: Product and company identification

Product name : Fuel Aid Plus
Use of the substance/mixture : Fuel: additive
Product code : 0649-NEW
Company : Total Solutions
P.O. Box 240014
Milwaukee, WI 53224 - USA
T 800-743-6417
athea.com
Contact: Technical Department
Emergency number : Chemtrec: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Flam. Liq. 4 H227
Carc. 2 H351
STOT SE 3 H336
STOT SE 3 H335
Asp. Tox. 1 H304

2.2. Label elements

GHS US labelling
Hazard pictograms (GHS US)



Signal word (GHS US)
Hazard statements (GHS US)

GHS07 : Danger
GHS08 : Combustible liquid
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.
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.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Immediately call a poison center or doctor.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advice/attention.
Call a poison center or doctor if you feel unwell.
Do NOT induce vomiting.
In case of fire: Use media other than water to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
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

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 |
|---|-----------------------|-------|---|
| Hydrotreated Light Alkanes | (CAS-No.) 64742-47-8 | > 90 | Not classified |
| C9-15 Heavy Aromatic Hydrocarbons | (CAS-No.) 64742-95-6 | < 3 | Flam. Liq. 3, H226 Muta. 1B, H340 Carc. 1B, H350 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 |
| Butoxyethanol | (CAS-No.) 111-76-2 | < 3 | Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |
| Polyolefin alkyl phenol alkyl amine (2) | (CAS-No.) Proprietary | < 2 | Not classified |
| Trimethylbenzene | (CAS-No.) 95-63-6 | < 0.6 | Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 STOT SE 3, H335 Aquatic Chronic 2, H411 |
| Cumene | (CAS-No.) 98-82-8 | < 0.5 | Flam. Liq. 3, H226 Carc. 2, H351 STOT SE 3, H335 Asp. Tox. 1, H304 |

All hazardous chemicals, as determined by 29 CFR 1910.1200 have been listed. A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention. |
| First-aid measures after inhalation | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| First-aid measures after skin contact | : Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water/.... 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 | : Rinse mouth with water. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-------------------------------------|--|
| Symptoms/effects | : If you feel unwell, seek medical advice. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes eye irritation. May cause drowsiness or dizziness. May cause respiratory irritation. May cause genetic defects (through prolonged or repeated exposure). May cause cancer. |
| Symptoms/effects after inhalation | : May cause drowsiness or dizziness. Irritation of the respiratory tract. Headache. Nausea. Central nervous system depression. Shortness of breath. Unconsciousness. |
| Symptoms/effects after skin contact | : Causes skin irritation. Repeated exposure may cause skin dryness or cracking. |
| Symptoms/effects after eye contact | : Causes eye irritation. |
| Symptoms/effects after ingestion | : May be fatal if swallowed and enters airways. Risk of aspiration pneumonia. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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|------------------------------|--|
| Suitable extinguishing media | : Dry chemical powder. Carbon dioxide. Alcohol-resistant foam. |
|------------------------------|--|

5.2. Special hazards arising from the substance or mixture

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|------------------|--|
| Fire hazard | : Flammable liquid and vapour. |
| Explosion hazard | : Vapours may travel long distances along ground before igniting/flashing back to vapour source. |
| Reactivity | : Upon combustion: CO and CO2 are formed. |

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Firefighting instructions | : Exercise caution when fighting any chemical fire. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|---|
| General measures | : Remove ignition sources. Use special care to avoid static electric charges. |
|------------------|---|

6.1.1. For non-emergency personnel

| | |
|----------------------|--|
| Protective equipment | : Protective goggles. Gloves. Protective clothing. |
| Emergency procedures | : Evacuate unnecessary personnel. No naked flames or sparks. |

6.1.2. For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Equip cleanup crew with proper protection. |
| Emergency procedures | : Stop leak if safe to do so. Stop release. Ventilate area. |

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|--|
| For containment | : Contain released product, collect/pump into suitable containers. |
| Methods for cleaning up | : This material and its container must be disposed of in a safe way, and as per local legislation. Take up liquid spill into inert absorbent material, e.g.: sand/earth. Clean contaminated surfaces with a soap solution. |

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-------------------------------|---|
| Precautions for safe handling | : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Do not breathe vapours. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care. Keep away from sources of ignition - No smoking. Take precautions against electrostatic charges. Obtain special instructions before use. Remove contaminated clothing immediately. |
| Hygiene measures | : Wash thoroughly after handling. Wash contaminated clothing before reuse. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|----------------------------|---|
| Technical measures | : Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. |
| Storage conditions | : Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from: sparks, open flames, excessive heat. |
| Incompatible products | : Strong acids. Oxidizing agents. |
| Incompatible materials | : Sources of ignition. Heat sources. |
| Storage area | : Store away from heat. Store in a cool area. Store in a dry area. Store in a well-ventilated place. |
| Special rules on packaging | : Keep only in original container. meet the legal requirements. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrotreated Light Alkanes (64742-47-8)

Not applicable

C9-15 Heavy Aromatic Hydrocarbons (64742-95-6)

Not applicable

| Butoxyethanol (111-76-2) | | |
|---------------------------------|---------------------|-----------------------|
| ACGIH | ACGIH OEL TWA [ppm] | 20 ppm |
| ACGIH | Remark (ACGIH) | Eye & URT irr |
| OSHA | OSHA PEL TWA [1] | 240 mg/m ³ |
| OSHA | OSHA PEL TWA [2] | 50 ppm |

| Cumene (98-82-8) | | |
|-------------------------|---------------------|---|
| ACGIH | ACGIH OEL TWA [ppm] | 0.1 ppm |
| ACGIH | Remark (ACGIH) | Lung cancer; liver and lung dam; A2 (Suspected Human Carcinogen: Human data are accepted as adequate in quality but are conflicting or insufficient to classify the agent as a confirmed human carcinogen; OR, the agent is carcinogenic in experimental animals at dose(s), by route(s) of exposure, at site(s), of histologic type(s), or by mechanism(s) considered relevant to worker exposure. The A2 is used primarily when there is limited evidence or carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals with relevance to humans) |
| OSHA | OSHA PEL TWA [1] | 245 mg/m ³ |
| OSHA | OSHA PEL TWA [2] | 50 ppm |

| Polyolefin alkyl phenol alkyl amine (2) (Proprietary) | | |
|--|--|--|
| Not applicable | | |

| Trimethylbenzene (95-63-6) | | |
|-----------------------------------|--|--|
| Not applicable | | |

8.2. Exposure controls

Personal protective equipment

: Use appropriate personal protective equipment when risk assessment indicates this is necessary.
Gloves. Safety glasses. Protective goggles. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|-----------------------|
| Physical state | : Liquid |
| Appearance | : Clear, amber liquid |
| Odour | : Hydrocarbon odor |
| Odour threshold | : No data available |
| pH | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 147 °F Closed Cup |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Flammability (solid, gas) | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Vapour pressure | : No data available |
| Relative density | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Density | : 0.79 g/ml |
| Solubility | : Insoluble in water. |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Partition coefficient n-octanol/water (Log Kow) | : No data available |
| Auto-ignition temperature | : No data available |

| | |
|---------------------------|---------------------|
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Oxidizing agents.

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 : Not classified

C9-15 Heavy Aromatic Hydrocarbons (64742-95-6)

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

Butoxyethanol (111-76-2)

| | |
|---------------------|-----------------------|
| ATE CLP (oral) | 500 mg/kg bodyweight |
| ATE CLP (dermal) | 1100 mg/kg bodyweight |
| ATE CLP (gases) | 4500 ppmv/4h |
| ATE CLP (vapours) | 11 mg/l/4h |
| ATE CLP (dust,mist) | 1.5 mg/l/4h |

Trimethylbenzene (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 CLP (oral) | 6000 mg/kg bodyweight |
| ATE CLP (dermal) | 3440 mg/kg bodyweight |
| ATE CLP (gases) | 4500 ppmv/4h |
| ATE CLP (vapours) | 11 mg/l/4h |
| ATE CLP (dust,mist) | 1.5 mg/l/4h |

| | |
|-----------------------------------|--------------------------------|
| 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. |

Butoxyethanol (111-76-2)

| | |
|------------|----------------------|
| IARC group | 3 - Not classifiable |
|------------|----------------------|

| | |
|--|---|
| Cumene (98-82-8) | |
| IARC group | 2B - Possibly carcinogenic to humans |
| National Toxicology Program (NTP) Status | 3 - Reasonably anticipated to be Human Carcinogen |

| | |
|-------------------------------------|--|
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : May cause drowsiness or dizziness. May cause respiratory irritation. |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : May be fatal if swallowed and enters airways. |
| Symptoms/effects after inhalation | : May cause drowsiness or dizziness. Irritation of the respiratory tract. Headache. Nausea. Central nervous system depression. Shortness of breath. Unconsciousness. |
| Symptoms/effects after skin contact | : Causes skin irritation. Repeated exposure may cause skin dryness or cracking. |
| Symptoms/effects after eye contact | : Causes eye irritation. |
| Symptoms/effects after ingestion | : May be fatal if swallowed and enters airways. Risk of aspiration pneumonia. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--|---|
| C9-15 Heavy Aromatic Hydrocarbons (64742-95-6) | |
| LC50 - Fish [1] | 18 mg/l (Pisces) |
| EC50 - Crustacea [1] | 21 mg/l (Daphnia sp.) |
| Trimethylbenzene (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

| | |
|--|-------------------------------------|
| C9-15 Heavy Aromatic Hydrocarbons (64742-95-6) | |
| Persistence and degradability | Readily biodegradable in water. |
| Trimethylbenzene (95-63-6) | |
| Persistence and degradability | Not readily biodegradable in water. |
| Chemical oxygen demand (COD) | 0.44 g O ₂ /g substance |

12.3. Bioaccumulative potential

| | |
|---|--|
| C9-15 Heavy Aromatic Hydrocarbons (64742-95-6) | |
| Partition coefficient n-octanol/water (Log Pow) | > 3 |
| Trimethylbenzene (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). |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|---|
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
|--|---|

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

Additional information

| | |
|-------------------|---|
| Other information | : When transported by ground in non-bulk containers, this product utilizes the exception found under 49 CFR 173.150. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may be required. |
|-------------------|---|

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

| | | |
|------------------|----------|--------|
| Butoxyethanol | 111-76-2 | < 3% |
| Cumene | 98-82-8 | < 0.5% |
| Trimethylbenzene | 95-63-6 | < 0.6% |

| | | |
|--------|-----------|------------------|
| Cumene | (98-82-8) | CERCLA RQ5000 lb |
|--------|-----------|------------------|

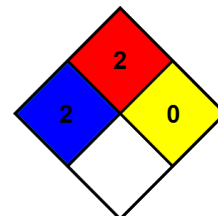
WARNING

This product can expose you to Cumene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

- 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.



Prepared by: Technical Department

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