

**SECTION 1: Product and company identification**

Product name : Fuel Aid Plus  
Use of the substance/mixture : Fuel: additive  
Product code : 0649  
Company : Total Solutions  
P.O. Box 240014  
Milwaukee, WI 53224 - USA  
T (414) 354-6417  
Emergency number : Chemtec: (800) 424-9300

**SECTION 2: Hazards identification**

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

**Classification (GHS-US)**

Flam. Liq. 3 H226  
Acute Tox. 4 (Oral) H302  
Skin Irrit. 2 H315  
Eye Irrit. 2B H320  
Muta. 1B H340  
Carc. 1B H350  
STOT SE 3 H335  
STOT SE 3 H336  
Asp. Tox. 1 H304

Full text of H-phrases: see section 16

**2.2. Label elements**

**GHS-US labeling**

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Flammable liquid and vapor  
Harmful if swallowed  
May be fatal if swallowed and enters airways  
Causes skin irritation  
Causes eye irritation  
May cause respiratory irritation  
May cause drowsiness or dizziness  
May cause genetic defects  
May cause 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, open flames, sparks. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical, lighting equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Avoid breathing mist, spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Wear eye protection, protective clothing, protective gloves  
If swallowed: Immediately call a doctor, a POISON CENTER  
If swallowed: Call a doctor, a POISON CENTER if you feel unwell  
If on skin: Wash with plenty of soap and water.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
If inhaled: Remove person to fresh air and keep comfortable for breathing  
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  
Call a doctor, a POISON CENTER if you feel unwell  
Rinse mouth

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 before reuse  
In case of fire: Use carbon dioxide (CO<sub>2</sub>), dry extinguishing powder, foam 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 comply with local/regional/national/international regulations.

**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. Substance**

Not applicable

Full text of H-phrases: see section 16

**3.2. Mixture**

| Name                                                                  | Product identifier  | %       | Classification (GHS-US)                                                                                           |
|-----------------------------------------------------------------------|---------------------|---------|-------------------------------------------------------------------------------------------------------------------|
| SOLVESSO 100                                                          | (CAS No) 64742-95-6 | 50-100  | Flam. Liq. 3, H226<br>Muta. 1B, H340<br>Carc. 1B, H350<br>STOT SE 3, H336<br>STOT SE 3, H335<br>Asp. Tox. 1, H304 |
| Trimethylbenzene                                                      | (CAS No) 25551-13-7 | 40-70   | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2B, H320<br>Asp. Tox. 1, H304                      |
| cumene                                                                | (CAS No) 98-82-8    | 4-10    | Flam. Liq. 3, H226<br>Carc. 2, H351<br>STOT SE 3, H335<br>Asp. Tox. 1, H304                                       |
| xylene                                                                | (CAS No) 1330-20-7  | 0.5-5   | Flam. Liq. 3, H226<br>Acute Tox. 4 (Dermal), H312<br>Acute Tox. 4 (Inhalation), H332<br>Skin Irrit. 2, H315       |
| hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics | (CAS No) 64742-47-8 | 1-5     | Flam. Liq. 4, H227<br>Asp. Tox. 1, H304                                                                           |
| cymenes                                                               | (CAS No) 25155-15-1 | 0.5-1.5 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319                                                  |

**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 or doctor/physician 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 soap and 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 or doctor/physician.

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

- Symptoms/injuries : 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/injuries after inhalation : May cause drowsiness or dizziness. Irritation of the respiratory tract. Headache. Nausea. Central nervous system depression. Shortness of breath. Unconsciousness.
- Symptoms/injuries after skin contact : Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
- Symptoms/injuries after eye contact : Causes eye irritation.
- Symptoms/injuries 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**

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

**5.2. Special hazards arising from the substance or mixture**

Fire hazard : Flammable liquid and vapor.  
Explosion hazard : Vapors may travel long distances along ground before igniting/flashing back to vapor 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 substance, 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 vapors. 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**

|                         |                 |        |
|-------------------------|-----------------|--------|
| <b>cumene (98-82-8)</b> |                 |        |
| ACGIH                   | ACGIH TWA (ppm) | 50 ppm |

|                           |                  |                                  |
|---------------------------|------------------|----------------------------------|
| <b>cumene (98-82-8)</b>   |                  |                                  |
| ACGIH                     | Remark (ACGIH)   | Eye, skin, & URT irr; CNS impair |
| <b>xylene (1330-20-7)</b> |                  |                                  |
| ACGIH                     | ACGIH TWA (ppm)  | 100 ppm                          |
| ACGIH                     | ACGIH STEL (ppm) | 150 ppm                          |
| ACGIH                     | Remark (ACGIH)   | URT & eye irr; CNS impair        |

**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, colorless liquid. |
| Odor                                        | : solvent odor             |
| Odor 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                                 | : 118 °F Closed Cup        |
| Relative evaporation rate (butyl acetate=1) | : No data available        |
| Flammability (solid, gas)                   | : No data available        |
| Explosion limits                            | : No data available        |
| Explosive properties                        | : No data available        |
| Oxidizing properties                        | : No data available        |
| Vapor pressure                              | : No data available        |
| Relative density                            | : No data available        |
| Relative vapor density at 20 °C             | : No data available        |
| Specific gravity / density                  | : 0.86 g/ml                |
| Solubility                                  | : Insoluble in water.      |
| Log Pow                                     | : No data available        |
| Log Kow                                     | : No data available        |
| Auto-ignition temperature                   | : No data available        |
| Decomposition temperature                   | : No data available        |
| Viscosity                                   | : No data available        |
| Viscosity, kinematic                        | : < 20 cSt                 |
| Viscosity, dynamic                          | : No data available        |
| VOC content                                 | : 100 %                    |

**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 : Oral: Harmful if swallowed.

|                                  |                       |
|----------------------------------|-----------------------|
| <b>SOLVESSO 100 (64742-95-6)</b> |                       |
| LD50 oral rat                    | > 2000 mg/kg (Rat)    |
| LD50 dermal rabbit               | > 3160 mg/kg (Rabbit) |

|                                      |           |
|--------------------------------------|-----------|
| <b>Trimethylbenzene (25551-13-7)</b> |           |
| LD50 oral rat                        | 500 mg/kg |

|                           |                            |
|---------------------------|----------------------------|
| <b>xylene (1330-20-7)</b> |                            |
| LC50 inhalation rat (ppm) | 4550 ppmV/4h               |
| ATE CLP (dermal)          | 1100.000 mg/kg body weight |
| ATE CLP (gases)           | 4550.000 ppmV/4h           |
| ATE CLP (dust, mist)      | 1.500 mg/l/4h              |

|                             |                    |
|-----------------------------|--------------------|
| <b>cymenes (25155-15-1)</b> |                    |
| LD50 oral rat               | > 2000 mg/kg (Rat) |

|                                                                                              |                                               |
|----------------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics (64742-47-8)</b> |                                               |
| LD50 dermal rabbit                                                                           | > 5000 mg/kg body weight (Rabbit; Literature) |

Skin corrosion/irritation : Causes skin irritation.  
 Serious eye damage/irritation : Causes eye irritation.  
 Respiratory or skin sensitization : Not classified  
 Germ cell mutagenicity : May cause genetic defects.  
 Carcinogenicity : May cause cancer.

|                         |                                      |
|-------------------------|--------------------------------------|
| <b>cumene (98-82-8)</b> |                                      |
| IARC group              | 2B - Possibly Carcinogenic to Humans |

|                           |                      |
|---------------------------|----------------------|
| <b>xylene (1330-20-7)</b> |                      |
| IARC group                | 3 - Not Classifiable |

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

**SECTION 12: Ecological information**

**12.1. Toxicity**

|                                  |                       |
|----------------------------------|-----------------------|
| <b>SOLVESSO 100 (64742-95-6)</b> |                       |
| LC50 fish 1                      | 18 mg/l (Pisces)      |
| EC50 Daphnia 1                   | 21 mg/l (Daphnia sp.) |
| Threshold limit algae 1          | 1 - 10,Algae          |

|                                                                                              |                           |
|----------------------------------------------------------------------------------------------|---------------------------|
| <b>hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics (64742-47-8)</b> |                           |
| LC50 fish 1                                                                                  | > 100 mg/l (Pisces)       |
| EC50 Daphnia 1                                                                               | > 100 mg/l (Invertebrata) |
| Threshold limit algae 1                                                                      | > 100 mg/l (Algae)        |

**12.2. Persistence and degradability**

|                                                                                    |                                                        |
|------------------------------------------------------------------------------------|--------------------------------------------------------|
| SOLVESSO 100 (64742-95-6)                                                          |                                                        |
| Persistence and degradability                                                      | Readily biodegradable in water.                        |
| cymenes (25155-15-1)                                                               |                                                        |
| Persistence and degradability                                                      | Biodegradability in water: no data available.          |
| hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8) |                                                        |
| Persistence and degradability                                                      | Readily biodegradable in water. Adsorbs into the soil. |

**12.3. Bioaccumulative potential**

|                                                                                    |                                                   |
|------------------------------------------------------------------------------------|---------------------------------------------------|
| SOLVESSO 100 (64742-95-6)                                                          |                                                   |
| Log Pow                                                                            | > 3                                               |
| cymenes (25155-15-1)                                                               |                                                   |
| Bioaccumulative potential                                                          | No bioaccumulation data available.                |
| hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8) |                                                   |
| Log Pow                                                                            | 6 - 8.2                                           |
| Bioaccumulative potential                                                          | High potential for bioaccumulation (Log Kow > 5). |

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

**SECTION 14: Transport information**

Department of Transportation (DOT)

**Additional information**

Other information : When transported by ground in non-bulk containers, this product utilizes the exception found under 49 CFR 173.150

**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.

|                                                               |                  |       |
|---------------------------------------------------------------|------------------|-------|
| 1,2,4-trimethylbenzene                                        | CAS No 95-63-6   | 15-40 |
| cumene                                                        | CAS No 98-82-8   | 4-10  |
| xylene                                                        | CAS No 1330-20-7 | 0.5-5 |
| cumene (98-82-8)                                              |                  |       |
| Listed on SARA Section 313 (Specific toxic chemical listings) |                  |       |
| RQ (Reportable quantity, section 304 of EPA's List of Lists)  | 5000 lb          |       |
| xylene (1330-20-7)                                            |                  |       |
| Listed on SARA Section 313 (Specific toxic chemical listings) |                  |       |
| RQ (Reportable quantity, section 304 of EPA's List of Lists)  | 100 lb           |       |

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

**SECTION 16: Other information**

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

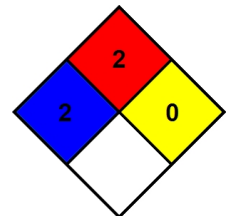
Full text of H-phrases:

|                           |                                                             |
|---------------------------|-------------------------------------------------------------|
| Acute Tox. 4 (Dermal)     | Acute toxicity (dermal) Category 4                          |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhalation) Category 4                      |
| Acute Tox. 4 (Oral)       | Acute toxicity (oral) Category 4                            |
| Asp. Tox. 1               | Aspiration hazard Category 1                                |
| Carc. 1B                  | Carcinogenicity Category 1B                                 |
| Carc. 2                   | Carcinogenicity Category 2                                  |
| Eye Irrit. 2A             | Serious eye damage/eye irritation Category 2A               |
| Eye Irrit. 2B             | Serious eye damage/eye irritation Category 2B               |
| Flam. Liq. 3              | Flammable liquids Category 3                                |
| Flam. Liq. 4              | Flammable liquids Category 4                                |
| Muta. 1B                  | Germ cell mutagenicity Category 1B                          |
| Skin Irrit. 2             | Skin corrosion/irritation Category 2                        |
| STOT SE 3                 | Specific target organ toxicity (single exposure) Category 3 |
| STOT SE 3                 | Specific target organ toxicity (single exposure) Category 3 |
| H226                      | Flammable liquid and vapor                                  |
| H227                      | Combustible liquid                                          |
| H302                      | Harmful if swallowed                                        |
| H304                      | May be fatal if swallowed and enters airways                |
| H312                      | Harmful in contact with skin                                |
| H315                      | Causes skin irritation                                      |
| H319                      | Causes serious eye irritation                               |
| H320                      | Causes eye irritation                                       |
| H332                      | Harmful if inhaled                                          |
| H335                      | May cause respiratory irritation                            |
| H336                      | May cause drowsiness or dizziness                           |
| H340                      | May cause genetic defects                                   |
| H350                      | May cause cancer                                            |
| H351                      | Suspected of causing cancer                                 |

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

*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. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.*