

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 : Chemtrec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 3 H226
Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Muta. 1B H340
Carc. 1B H350
STOT SE 3 H335
STOT SE 3 H336
Asp. Tox. 1 H304

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 or in contact with skin
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious 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 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 it before reuse.
In case of fire: Use carbon dioxide (CO₂), dry extinguishing powder, foam to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
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. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

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

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 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/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

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 product, 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

Trimethylbenzene (25551-13-7)		
ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	Remark (ACGIH)	CNS impair; asthma; hematologic eff
cumene (98-82-8)		
ACGIH	ACGIH 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) (mg/m ³)	245 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
xylene (1330-20-7)		
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	ACGIH STEL (ppm)	150 ppm
ACGIH	Remark (ACGIH)	URT & eye irr; CNS impair
OSHA	OSHA PEL (TWA) (mg/m ³)	435 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm

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	: Yellow. clear.
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

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. Dermal: Harmful in contact with skin.

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

Trimethylbenzene (25551-13-7)	
LD50 oral rat	500 mg/kg
LD50 dermal rabbit	1100 mg/kg

xylene (1330-20-7)	
LC50 inhalation rat (ppm)	4550 ppmV/4h
ATE CLP (dermal)	1100 mg/kg body weight
ATE CLP (gases)	4550 ppmV/4h
ATE CLP (dust, mist)	1.5 mg/l/4h

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

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

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

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

xylene (1330-20-7)	
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/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

SOLVESSO 100 (64742-95-6)	
LC50 fish 1	18 mg/l (Pisces)
EC50 Daphnia 1	21 mg/l (Daphnia sp.)
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)

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.

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

Product/Packaging 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. 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.

1,2,4-trimethylbenzene	CAS-No. 95-63-6	15-40%
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Fuel Aid Plus

Safety Data Sheet

cumene	CAS-No. 98-82-8	4-10%
xylene	CAS-No. 1330-20-7	0.5-5%

1,2,4-trimethylbenzene (95-63-6)	
Subject to reporting requirements of United States SARA Section 313	

cumene (98-82-8)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb

xylene (1330-20-7)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb

⚠ WARNING

This product can expose you to benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

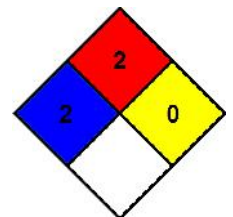
SECTION 16: Other information

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

Full text of H-phrases:

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 - 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

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.