



SAFETY DATA SHEET

1. Identification

Product identifier Unleaded Gasoline with Ethanol E-15

Other means of identification
Synonyms E-15 * Light Petroleum Distillate * Mixed Petroleum Hydrocarbon

Recommended use Fuel.

Recommended restrictions Uses other than the recommended use.

Manufacturer/Importer/Supplier/Distributor information

Company name CHS Inc.

Address P.O. Box 64089
 Mail Station 525
 St. Paul, MN 55164-0089
 United States of America

Telephone numbers Transportation Emergency (CHEMTREC):
 1-800-424-9300
 Technical Information:
 1-651-355-8443
 SDS Information:
 1-651-355-8445

2. Hazard(s) identification

Physical hazards Flammable liquids Category 1

Health hazards Skin corrosion/irritation Category 2
 Serious eye damage/eye irritation Category 2A
 Germ cell mutagenicity Category 1B
 Carcinogenicity Category 1A
 Reproductive toxicity Category 2
 Specific target organ toxicity, single exposure Category 3 narcotic effects
 Specific target organ toxicity, repeated exposure Category 1 (Hematopoietic system)
 Specific target organ toxicity, repeated exposure Category 2 (Central nervous system)
 Aspiration hazard Category 1

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 2
 Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Extremely flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs (Hematopoietic system) through prolonged or repeated exposure. May cause damage to organs (Central nervous system) through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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 mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: 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. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. Collect spillage.

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

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Gasoline	86290-81-5	60 - 100
Toluene	108-88-3	0 - 30
Ethanol	64-17-5	≤ 15
Benzene	71-43-2	0 - 10
1,2,4-Trimethylbenzene	95-63-6	0 - 5
Ethylbenzene	100-41-4	0 - 5

Composition comments Any concentration shown as a range is to protect confidentiality or is due to batch variation. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Call a poison center or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Aspiration may cause pulmonary edema and pneumonitis. Be aware that symptoms of chemical pneumonia (shortness of breath) may occur several hours after exposure. May cause drowsiness or dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Unconsciousness. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Cyanosis (blue tissue condition, nails, lips, and/or skin). Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed such as: Carbon monoxide. Carbon dioxide.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Extremely flammable liquid and vapor.
6. Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. The product is insoluble in water.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Do not store above the following temperature: 113°C (235.4°F). Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3
		1000 ppm
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3
		100 ppm

US. OSHA Table Z-2 Permissible Exposure Limits (PEL) (29 CFR 1910.1000)

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	10 ppm
Benzene (CAS 71-43-2)	TWA	0.02 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Gasoline (CAS 86290-81-5)	STEL	500 ppm
	TWA	300 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
Benzene (CAS 71-43-2)	IDLH	1.2 %
		500 ppm
Ethanol (CAS 64-17-5)	IDLH	3.3 %
		3300 ppm
Ethylbenzene (CAS 100-41-4)	IDLH	0.8 %
		800 ppm
Toluene (CAS 108-88-3)	IDLH	1.1 %
		500 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	125 mg/m3
		25 ppm
Benzene (CAS 71-43-2)	STEL	1 ppm
	TWA	0.1 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	STEL	1000 ppm
		545 mg/m3
	TWA	125 ppm 435 mg/m3
Toluene (CAS 108-88-3)	STEL	100 ppm
		560 mg/m3
	TWA	150 ppm 375 mg/m3 100 ppm

Biological limit values

ACGIH				
Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	500 µg/g	t,t-Muconic acid	Creatinine in urine	*

ACGIH Biological Exposure Indices (BEI)				
Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	150 mg/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Benzene (CAS 71-43-2) Can be absorbed through the skin.
 Toluene (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3) Skin designation applies.

US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2) Danger of cutaneous absorption

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear chemical splash goggles, face shield, or safety glasses with side shields as appropriate for risk of exposure.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Nitrile gloves are recommended. 4-8h break through time The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Skin protection

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Long sleeved clothing. Use of impervious boots is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Chemical respirator with organic vapor cartridge and full facepiece. Wear a NIOSH-approved (or equivalent) respirator as needed. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.
Color Reddish. Golden brown.

Odor Gasoline.
Odor threshold 10 ppm
pH Not applicable (negligibly soluble in water).
Melting point/freezing point Not available.
Initial boiling point and boiling range 79.99 °F (26.66 °C)
Flash point -49 °F (-45 °C) Pensky-Martens Closed Cup

Evaporation rate Slower.
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) 1.4 %
Explosive limit - upper (%) 7.6 %

Vapor pressure 53.3 kPa (68 °F (20 °C))
Vapor density 3 - 4 (Air = 1)
Relative density 0.68 - 0.78

Solubility(ies)

Solubility (water) Negligible.

Partition coefficient (n-octanol/water) Not applicable, product is a mixture.

Auto-ignition temperature 495 - 849.99 °F (257.22 - 454.44 °C)

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.
Oxidizing properties Not oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Acids. Halogens. Alkalis.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. Be aware that symptoms of chemical pneumonia (shortness of breath) may occur several hours after exposure. May cause drowsiness or dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Unconsciousness. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Cyanosis (blue tissue condition, nails, lips, and/or skin). Prolonged exposure may cause chronic effects.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
1,2,4-Trimethylbenzene (CAS 95-63-6)		
Acute		
Oral		
LD50	Rat	2720 - 3960 mg/kg
Benzene (CAS 71-43-2)		
Acute		
Dermal		
LD50	Rabbit	> 8260 mg/kg
Inhalation		
<i>Vapor</i>		
LC50	Rat	44.66 mg/l, 4 Hours
Oral		
LD50	Rat	810 mg/l
Ethanol (CAS 64-17-5)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Inhalation		
<i>Vapor</i>		
LC50	Mouse	39 g/m3, 4 Hours
Oral		
LD50	Rat	7000 - 11000 mg/kg
Ethylbenzene (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	15400 mg/kg
Inhalation		
LC50	Rat	17.4 mg/l, 4 hours
Oral		
LD50	Rat	3500 - 4700 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12200 mg/kg

Components	Species	Test Results
Inhalation Vapor LC50	Rat	28.1 mg/l, 4 Hours
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	May cause genetic defects.	
Carcinogenicity	May cause cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Benzene (CAS 71-43-2)	1 Carcinogenic to humans.	
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.	
Gasoline (CAS 86290-81-5)	2B Possibly carcinogenic to humans.	
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.	
NTP Report on Carcinogens		
Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Benzene (CAS 71-43-2)	Cancer	
Reproductive toxicity	Suspected of damaging fertility or the unborn child.	
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.	
Specific target organ toxicity - repeated exposure	Causes damage to organs (Hematopoietic system) through prolonged or repeated exposure. May cause damage to organs (Central nervous system) through prolonged or repeated exposure.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
1,2,4-Trimethylbenzene (CAS 95-63-6)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 7.72 mg/l, 96 hours
Benzene (CAS 71-43-2)		
Aquatic		
<i>Acute</i>		
Algae	EC50	<i>Pseudokirchneriella subcapitata</i> 29 mg/l, 72 Hours
Crustacea	EC50	<i>Daphnia magna</i> 10 mg/l, 48 hours
Fish	LC50	<i>Oncorhynchus mykiss</i> 5.3 mg/l, 96 hours
<i>Chronic</i>		
Algae	NOEC	<i>Selenastrum capricornutum</i> 41 mg/l, 8 days
Crustacea	NOEC	<i>Ceriodaphnia dubia</i> 3 mg/l, 7 days
Fish	NOEC	<i>Pimephales promelas</i> 0.8 mg/l, 32 days
Ethanol (CAS 64-17-5)		
Aquatic		
<i>Acute</i>		
Crustacea	LC50	<i>Ceriodaphnia dubia</i> 5012 mg/l, 48 hours
		<i>Daphnia magna</i> 454 mg/l, 11 days
Fish	LC50	<i>Pimephales promelas</i> 13480 mg/l, 96 hours

Components	Species	Test Results
<i>Chronic</i> Crustacea	NOEC Ceriodaphnia dubia	9.6 mg/l, 10 days
Ethylbenzene (CAS 100-41-4)		
Aquatic		
<i>Acute</i> Crustacea	EC50 Water flea (Daphnia magna)	1.81 - 2.38 mg/l, 48 hours
Fish	LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss)	4.2 mg/l, 96 hours
<i>Chronic</i> Crustacea	EC50 Ceriodaphnia dubia	3.6 mg/l, 7 days
Toluene (CAS 108-88-3)		
Aquatic		
<i>Acute</i> Crustacea	EC50 Daphnia magna	11.5 mg/l, 48 hours
Fish	LC50 Oncorhynchus kisutch	5.5 mg/l, 96 hours
<i>Chronic</i> Crustacea	NOEC Ceriodaphnia dubia	0.74 mg/l, 7 days
Fish	NOEC Oncorhynchus kisutch	1.4 mg/l, 40 days

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)

1,2,4-Trimethylbenzene (CAS 95-63-6)	3.78
Benzene (CAS 71-43-2)	2.13
Ethanol (CAS 64-17-5)	-0.31
Ethylbenzene (CAS 100-41-4)	3.15
Toluene (CAS 108-88-3)	2.73

Mobility in soil The product is insoluble in water.

Other adverse effects Oil spills are generally hazardous to the environment. The product contains volatile organic compounds which have a photochemical ozone creation potential. This product contains one or more substances identified as hazardous air pollutants (HAPs) per the US Federal Clean Air Act (see section 15).

13. Disposal considerations

Disposal instructions Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F
D018: Waste Benzene
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	
UN number	UN3475
UN proper shipping name	Ethanol and gasoline mixture or Ethanol and motor spirit mixture or Ethanol and petrol mixture, with more than 10 percent alcohol
Transport hazard class(es)	
Class	3
Subsidiary hazard	-

Label(s)	3
Packing group	II
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	144, 177, IB2, T4, TP1
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN3475
UN proper shipping name	Ethanol and petrol mixture with more than 10% ethanol
Transport hazard class(es)	
Class	3
Subsidiary hazard	-
Packing group	II
Environmental hazards	Yes
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN3475
UN proper shipping name	ETHANOL AND GASOLINE MIXTURE or ETHANOL AND MOTOR SPIRIT MIXTURE or ETHANOL AND PETROL MIXTURE, with more than 10% ethanol
Transport hazard class(es)	
Class	3
Subsidiary hazard	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Benzene (CAS 71-43-2)	Cancer
	Central nervous system
	Blood
	Aspiration
	Skin
	Eye
	respiratory tract irritation
	Flammability

Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Serious eye damage or eye irritation
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
1,2,4-Trimethylbenzene	95-63-6	0 - 5
Benzene	71-43-2	0 - 10
Ethylbenzene	100-41-4	0 - 5
Toluene	108-88-3	0 - 30

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzene (CAS 71-43-2)
Ethylbenzene (CAS 100-41-4)
Toluene (CAS 108-88-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 %WW

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3) 594

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethanol (CAS 64-17-5) Low priority

US state regulations

US. Massachusetts RTK - Substance List

1,2,4-Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

1,2,4-Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Toluene (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

1,2,4-Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Gasoline (CAS 86290-81-5)
Toluene (CAS 108-88-3)

US. Rhode Island RTK

1,2,4-Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Toluene (CAS 108-88-3)

California Proposition 65



WARNING: This product can expose you to chemicals including 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.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene (CAS 71-43-2)	Listed: February 27, 1987
Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004

California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2)	Listed: December 26, 1997
Toluene (CAS 108-88-3)	Listed: January 1, 1991

California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2)	Listed: December 26, 1997
-----------------------	---------------------------

16. Other information, including date of preparation or last revision

Issue date	22-August-2024
Revision date	-
Version #	01
HMIS® ratings	Health: 3* Flammability: 4 Physical hazard: 0

NFPA ratings



Disclaimer

Notice to reader:

THE INFORMATION CONTAINED IN THIS SDS RELATES ONLY TO THE SPECIFIC MATERIAL IDENTIFIED. IT DOES NOT COVER USE OF THAT MATERIAL IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PARTICULAR PROCESS. IN COMPLIANCE WITH 29 C.F.R. 1910.1200(g), CHS HAS PREPARED THIS SDS IN SEGMENTS, WITH THE INTENT THAT THOSE SEGMENTS BE READ TOGETHER AS A WHOLE WITHOUT TEXTUAL OMISSIONS OR ALTERATIONS. CHS BELIEVES THE INFORMATION CONTAINED HEREIN TO BE ACCURATE, BUT MAKES NO REPRESENTATION, GUARANTEE, OR WARRANTY, EXPRESS OR IMPLIED, ABOUT THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION OR ABOUT THE FITNESS OF CONTENTS HEREIN FOR EITHER GENERAL OR PARTICULAR PURPOSES. PERSONS REVIEWING THIS SDS SHOULD MAKE THEIR OWN DETERMINATION AS TO THE MATERIAL'S SUITABILITY AND COMPLETENESS FOR USE IN THEIR PARTICULAR APPLICATIONS.

CHS Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

