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SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
212517	Bottle Tb Decolorizer 250MI	No data available

Recommended restrictions

Recommended use: Laboratory Chemicals
Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: BD, Integrated Diagnostic Solutions
Address: 7 Loveton Circle
Sparks, MD 21152
USA

Telephone: 1 844 823 5433
Fax: not available
Contact Person: Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Acute toxicity (Oral) Category 4
Specific Target Organ Toxicity -
Single Exposure Category 2

Label Elements

Hazard Symbol:

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Signal Word:	Danger
Hazard Statement:	H225: Highly flammable liquid and vapor. H302: Harmful if swallowed. H371: May cause damage to organs.
Precautionary Statements	
Prevention:	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240: Ground and bond container and receiving equipment. P241: Use explosion-proof electrical, ventilating and lighting equipment. P242: Use non-sparking tools. P243: Take action to prevent static discharges. P260: Do not breathe dust/fume/gas/mist/vapors/spray. P264: Wash face, hands and any exposed skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P330: Rinse mouth. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:	P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P233: Keep container tightly closed.
Disposal:	P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.



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Other hazards which do not result in GHS classification:

FK: Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment.
Spark: Sparks may ignite liquid and vapor.
H241: May cause flash fire or explosion.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Ethanol	No data available.	64-17-5	92.3%
Methanol	No data available.	67-56-1	4.7%
Hydrochloric acid	No data available.	7647-01-0	3%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

- General information:** Get immediate medical advice/attention. If medical advice is needed, have product container or label at hand. Harmful if swallowed. May cause damage to organs.
- Inhalation:** Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.
- Skin Contact:** Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.
- Eye contact:** Important! Immediately rinse with water for at least 15 minutes.
- Ingestion:** If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Get medical attention immediately.
- Personal Protection for First-aid Responders:** No data available.



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Most important symptoms and effects, both acute and delayed
Symptoms: Symptoms may be delayed.

Hazards: May cause damage to organs. Harmful if swallowed.

Indication of immediate medical attention and special treatment needed

Treatment: If swallowed, rinse mouth with water (only if the person is conscious). Get immediate medical advice/attention.

5. Fire-fighting measures

General Fire Hazards: Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water to keep fire exposed containers cool and disperse vapors.

Suitable (and unsuitable) extinguishing media
Suitable extinguishing media: Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Special hazards arising from the substance or mixture: COMBUSTIBLE. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: May form explosive or toxic mixtures with air. Static charges generated by emptying package in or near flammable vapor may cause flash fire. May travel considerable distance to source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Contact local authorities in case of spillage to drain/aquatic environment.

Accidental release measures: No data available.



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Methods and material for containment and cleaning up:

Absorb spillage with suitable absorbent material. Stop leak if possible without any risk. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.

Environmental Precautions:

Do not release into the environment. Environmental manager must be informed of all major spillages.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):

Adequate ventilation should be provided whenever the material is heated or mists are generated.

Safe handling advice:

Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes and avoid contact with skin and clothing. Wash promptly with soap and water if skin becomes contaminated. When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required.

Contact avoidance measures:

No data available.

Storage

Safe storage conditions:

Store in tightly closed original container in a dry, cool and well-ventilated place. Store locked up. Follow rules for flammable liquids.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Ethanol	AN ESL	1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	10,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL	1,880 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	18,800	US. Texas. Effects Screening Levels (Texas



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			µg/m3	Commission on Environmental Quality), as amended
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	1,000 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	IDLH	3,300 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	LEL		3.3 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	PEL	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	TWA PEL	1,000 ppm	1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
Methanol	STEL	250 ppm	325 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	200 ppm	260 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	250 ppm	325 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	TWA	200 ppm	260 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	ST ESL		2,620 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		262 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	STEL	250 ppm	325 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	TWA PEL	200 ppm	260 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	Ceiling	1,000 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	STEL	250 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	200 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	200 ppm	260 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended



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	STEL	250 ppm	325 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	200 ppm	260 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	IDLH	6,000 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
Hydrochloric acid	Ceiling	5 ppm	7 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	Ceiling	5 ppm	7 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	ST ESL		130 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		5.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		8.4 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		190 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	Ceiling	5 ppm	7 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	Ceiling	2 ppm		US. ACGIH Threshold Limit Values, as amended
	Ceiling_Time	5 ppm	7 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	Ceiling	5 ppm	7 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	IDLH	50 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

Chemical name	Parameters / Sampling Time	Exposure Limit Values	Source
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Appropriate Engineering Controls

Adequate ventilation should be provided whenever the material is heated or mists are generated.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Chemical goggles are recommended.



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Skin Protection

- Hand Protection:** Material: Chemical resistant gloves
- Skin and Body Protection:** Wear appropriate clothing to prevent any possibility of skin contact.
- 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.
- Hygiene measures:** Do not eat, drink or smoke when using the product. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Avoid contact with skin. Do not breathe dust/fume/gas/mist/vapors/spray.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

- Physical state:** liquid
- Form:** liquid
- Color:** According to product specification.
- Odor:** Characteristic
- Odor Threshold:** No data available.
- Freezing point:** No data available.
- Boiling Point:** 172 °F/78 °C
- Flammability:** No data available.

Upper/lower limit on flammability or explosive limits

- Explosive limit - upper:** No data available.
- Explosive limit - lower:** No data available.
- Flash Point:** 59.9 °F/15.5 °C
- Self Ignition Temperature:** No data available.
- Decomposition Temperature:** No data available.
- pH:** No data available.

Viscosity

- Dynamic viscosity:** Not determined.
- Kinematic viscosity:** Not determined.
- Flow Time:** No data available.

Solubility(ies)



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Solubility in Water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Bulk density:	No data available.
Relative vapor density:	No data available.

Particle characteristics

Particle Size:	No data available.
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.

Other information

Metal Corrosion:	Non-corrosive per US Department of Transportation testing protocol.
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10. Stability and reactivity

Reactivity:	Material is stable under normal conditions.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Stable; however, may decompose if heated. At elevated temperature may liberate poisonous gas.
Conditions to avoid:	Heat, sparks, flames. Shocks and physical damage. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
Incompatible Materials:	Strong oxidizing agents. Peroxides. Strong acids. Other metals or alloys.
Hazardous Decomposition Products:	By fire, toxic gases may be formed (CO _x , NO _x).



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11. Toxicological information

General information: Symptoms may be delayed.

Information on toxicological effects

- Inhalation:** No data available.
- Skin Contact:** No data available.
- Eye contact:** No data available.
- Ingestion:** Harmful if swallowed.

Information on likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

- Product:** ATEmix: 2,986.75 mg/kg
ATEmix: 1,986.75 mg/kg
- Components:**
 - Ethanol LD 50 (Rat): 10,470 mg/kg
Experimental result, Key study
 - Methanol LD 50 (Pig): 5,000 mg/kg
 - Hydrochloric acid LD 50 (Rabbit): 900 mg/kg

Dermal

- Product:** ATEmix: 5,637.91 mg/kg
- Components:**
 - Ethanol LD 50 (Rabbit): 17,100 mg/kg
LD 50 (Rabbit): 17,100 mg/kg
Read-across from supporting substance (structural analogue or surrogate), Supporting study
 - Methanol LD 50 (Rabbit): 17,100 mg/kg
 - Hydrochloric acid LD 50 (Mouse): 1,449 mg/kg

Inhalation

- Product:** ATEmix: 63.83 mg/l Vapour
- Components:**
 - Ethanol LC 50 (Rat, 4 h): 117 - 125 mg/l 2 = reliable with restrictions; LC 50 (Rat, 4 h): > 115.9 mg/l Vapor; 2 = reliable with restrictions; Vapor, Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study LC 50: 0.039 g/m³ LC 50: 20000 ppm
 - Methanol LOAEL (Rat, 6 h): 0.27 - 13.3 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation



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Hydrochloric acid

LC 50 (Rat, 4 h): 1405 ppm LC 50 (Rat, 1 h): 2810 ppm LOAEL (Guinea pig, 30 min): <= 320 ppm Gas; 2 = reliable with restrictions; Experimental result, Supporting study, Gas LC 50 (Mouse, 5 min): 2644 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 40989 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LC 50 (Rat, 5 min): 4701 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LC 50 (Mouse, 5 min): 13745 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Mouse, 5 min): 3.2 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 8.3 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LD (Guinea pig, 30 min): >= 1040 ppm Gas; 2 = reliable with restrictions; Experimental result, Supporting study, Gas LC 50 (Mouse, 5 min): 16.5 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 45.6 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation

Repeated dose toxicity

Product:

No data available.

Components:

Ethanol

Based on available data, the classification criteria are not met.
NOAEL (Mouse(female), Oral, 90 d): > 9,400 mg/kg Oral Experimental result, Supporting study
NOAEL (Mouse(Male), Oral, 90 d): < 9,700 mg/kg Oral Experimental result, Supporting study
NOAEL (Rat(female), Oral, 90 d): < 4,400 mg/kg Oral Experimental result, Supporting study
NOAEL (Monkey(Female, Male), Oral, <= 48 Months): < 6,200 mg/kg Oral Experimental result, Supporting study

Methanol

NOAEL (Mouse(Female, Male), Inhalation, 7,202 - 7,373 h): 0.13 mg/l Experimental result, Weight of Evidence study Inhalation
NOAEL (Rat(Male), Inhalation, 1 - 6 Weeks): 2.65 mg/l Experimental result, Supporting study Inhalation
NOAEL (Rat(Male), Inhalation): 1.06 mg/l Experimental result, Supporting study Inhalation
NOAEL (Rat(Female, Male), Inhalation, 7,318 - 7,496 h): 0.13 mg/l Experimental result, Weight of Evidence study Inhalation
LOAEL (Rat(Female, Male), Inhalation, 7,318 - 7,496 h): 1.3 mg/l Experimental result, Weight of Evidence study Inhalation

Hydrochloric acid

NOAEL (Mouse(Female, Male), Inhalation, 4 - 91 d): 20 ppm(m) Experimental result, Key study Inhalation
NOAEL (Rat(Female, Male), Inhalation, 4 - 91 d): 10 ppm(m) Experimental result, Key study Inhalation
NOAEL (Rat(Female, Male), Inhalation, 4 - 91 d): 20 ppm(m) Experimental result, Key study Inhalation
LOAEL (Mouse(Female, Male), Inhalation, 4 - 91 d): 50 ppm(m) Experimental result, Key study Inhalation
NOAEL (Guinea pig; Monkey; Rabbit(female), Inhalation, 2 - 20 d): 0.05 mg/l Experimental result, Supporting study Inhalation



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Skin Corrosion/Irritation

Product: No data available.
Components:
Ethanol in vivo (Rabbit): Not irritant
in vivo (Human): Not irritant
Methanol No data available.
Hydrochloric acid Corrosive

Serious Eye Damage/Eye Irritation

Product: No data available.
Components:
Ethanol Not irritating in vivo Rabbit, 24 - 72 hrs: EU
Methanol Not irritating in vivo Rabbit, 24 - 72 hrs:
Hydrochloric acid Category 1 in vivo Rabbit, 1 hrs: EU
Category 1 in vivo Rabbit, 1 hrs: EU
Category 1 in vivo Rabbit, 1 d: EU
Category 1 in vivo Rabbit, 1 hrs: EU
Category 1 in vivo Rabbit, 1 - 21 d: EU
Category 1 in vivo Rabbit, 1 d: EU
Category 1 in vivo Rabbit, 1 hrs: EU
Category 1 in vivo Rabbit, 3 - 7 d: EU
Category 1 in vivo Rabbit, 1 - 24 hrs: EU
Category 1 in vivo Rabbit, 1 d: EU
Category 1 in vivo Rabbit, 1 hrs: EU
Category 1 in vivo Rabbit, 1 - 7 d: EU
Category 1 in vivo Rabbit, 1 - 2 d: EU
Category 1 in vivo Rabbit, 1 - 2 d: EU

Respiratory or Skin Sensitization

Product: No data available.
Components:
Ethanol Based on available data, the classification criteria are not met.
Skin sensitization:, in vivo (Guinea pig): Non sensitising
Methanol Skin sensitization:, in vivo (Guinea pig): Non sensitising
Hydrochloric acid No data available.

Carcinogenicity

Product: No data available.
Components:
Ethanol Based on available data, the classification criteria are not met.
Methanol No data available.
Hydrochloric acid No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities



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US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product: No data available.
Components:
Ethanol Based on available data, the classification criteria are not met.
Methanol No data available.
Hydrochloric acid No data available.

In vivo

Product: No data available.
Components:
Ethanol Based on available data, the classification criteria are not met.
Methanol No data available.
Hydrochloric acid No data available.

Reproductive toxicity

Product: No data available.
Components:
Ethanol Based on available data, the classification criteria are not met.
Methanol No data available.
Hydrochloric acid No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.
Components:
Ethanol Based on available data, the classification criteria are not met.
Methanol Oral: Nervous System - Causes damage to organs.
Hydrochloric acid No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.
Components:
Ethanol Based on available data, the classification criteria are not met.
Methanol No data available.
Hydrochloric acid No data available.

Aspiration Hazard

Product: No data available.
Components:
Ethanol No data available.
Methanol No data available.
Hydrochloric acid No data available.



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Information on health hazards

Other hazards

Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Components:

Ethanol	LC 50 (Fathead Minnow, 96 h): 14,200 mg/l LC 50 (Fathead Minnow, 96 h): 15,300 mg/l LC 50 (Oncorhynchus mykiss, 24 h): 11,200 mg/l Experimental result, Supporting study
Methanol	LC 50 (Pimephales promelas, 96 h): 29,400 mg/l EC 50 (Pimephales promelas, 96 h): 28,900 mg/l Experimental result, Supporting study LC 50 (Pimephales promelas, 48 h): 28,400 mg/l Experimental result, Supporting study LC 50 (Pimephales promelas, 96 h): 28,100 mg/l Experimental result, Supporting study LC 50 (Trachinotus carolinus, 24 h): 10,112 mg/l Experimental result, Supporting study
Hydrochloric acid	LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 282 mg/l Mortality LC 50 (Western mosquitofish (Gambusia affinis), 48 h): 282 mg/l Mortality LC 50 (Western mosquitofish (Gambusia affinis), 24 h): 282 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Components:

Ethanol	LC 50 (Water flea (Ceriodaphnia dubia), 48 h): 5,012 mg/l LC 50 (Grass shrimp, freshwater prawn (Palaemonetes kadiakensis), 18 h): 10,100 mg/l LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l Experimental result, Key study LC 50 (Grass shrimp, freshwater prawn (Palaemonetes kadiakensis), 96 h): > 250 mg/l Mortality
Methanol	EC 50 (Daphnia magna, 96 h): 18,260 mg/l Experimental result, Key study
Hydrochloric acid	LC 50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 260 mg/l Mortality LC 50 (Green or European shore crab (Carcinus maenas), 48 h): 240 mg/l Mortality



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Toxicity to Aquatic Plants

Product: No data available.
Components:
Ethanol EC 50 (Green algae (*Chlorella vulgaris*), 72 h): 275 mg/l
Methanol No data available.
Hydrochloric acid No data available.

Toxicity to microorganisms

Product: No data available.
Components:
Ethanol LC 50 (Turbellarian, flatworm (*Dugesia tigrina*), 96 h): > 100 mg/l Mortality
Methanol LC 50 (Turbellarian, flatworm (*Dugesia tigrina*), 96 h): > 100 mg/l Mortality
Hydrochloric acid No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.
Components:
Ethanol NOAEL (*Oryzias latipes*, 200 h): 7,900 mg/l (Static) Read-across from supporting substance (structural analogue or surrogate), Supporting study
Methanol NOAEL (*Oryzias latipes*, 200 h): 11,850 mg/l (Static) Experimental result, Supporting study
EC 50 (*Oryzias latipes*, 200 h): 9,164 mg/l (Static) Experimental result, Supporting study
LOAEL (*Oryzias latipes*, 200 h): 7,900 mg/l (Static) Experimental result, Supporting study
Hydrochloric acid No data available.

Aquatic Invertebrates

Product: No data available.
Components:
Ethanol EC10 (Water flea (*Daphnia magna*), 10 d): 454 mg/l
NOEC (Water flea (*Daphnia magna*), 10 d): 9.6 mg/l
NOAEL (*Ceriodaphnia dubia*, 10 d): 9.6 mg/l (semi-static) Experimental result, Key study
NOAEL (*Daphnia magna*, 9 d): 9.6 mg/l (semi-static) Experimental result, Key study
Methanol NOAEL (*Daphnia magna*, 21 d): 208 mg/l Estimated by calculation, Weight of Evidence study
Hydrochloric acid No data available.

Toxicity to Aquatic Plants

Product: No data available.
Components:
Ethanol No data available.
Methanol No data available.



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Hydrochloric acid No data available.

Toxicity to microorganisms

Product: No data available.

Components:

Ethanol LC 50 (Turbellarian, flatworm (*Dugesia tigrina*), 96 h): > 100 mg/l Mortality
Methanol LC 50 (Turbellarian, flatworm (*Dugesia tigrina*), 96 h): > 100 mg/l Mortality
Hydrochloric acid No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Components:

Ethanol Readily biodegradable
13.6 % (5 d) Soil Read-across from supporting substance (structural analogue or surrogate), Supporting study
89 % (14 d) Detected in water. Experimental result, Supporting study
53.4 % (5 d) Soil Read-across from supporting substance (structural analogue or surrogate), Supporting study
46.3 % (5 d) Soil Read-across from supporting substance (structural analogue or surrogate), Supporting study
Methanol 84 % Experimental result, Key study Detected in water.
46.3 % (5 d) Experimental result, Supporting study Soil
69 % Experimental result, Key study Detected in water.
71.5 % (5 d) Experimental result, Key study Detected in water.
82.7 % (5 d) Experimental result, Key study Detected in water.
Hydrochloric acid No data available.

BOD/COD Ratio

Product: No data available.

Components:

Ethanol No data available.
Methanol No data available.
Hydrochloric acid No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:



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Ethanol	Potential to bioaccumulate is low. Cyprinus carpio, Bioconcentration Factor (BCF): 3 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 1 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study
Methanol	Leuciscus idus, Bioconcentration Factor (BCF): < 10 Aquatic sediment Experimental result, Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Experimental result, Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 1 Aquatic sediment Experimental result, Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 3 Aquatic sediment Experimental result, Supporting study Green algae (Chlorella fusca vacuolata), Bioconcentration Factor (BCF): 28,400 (Static)
Hydrochloric acid	No data available.

Partition Coefficient n-octanol / water (log Kow)

Product:	Log Kow: No data available.
Components:	
Ethanol	No data available.
Methanol	Log Kow: -0.77
Hydrochloric acid	No data available.

Mobility in soil:

Product	No data available.
Components:	
Ethanol	soil - Very mobile liquid
Methanol	No data available.
Hydrochloric acid	No data available.

Results of PBT and vPvB assessment:

Product	No data available.
Components:	
Ethanol	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria
Methanol	No data available.
Hydrochloric acid	No data available.

Other adverse effects:



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Other hazards

Product: No data available.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority requirements.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

Contaminated Packaging: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

14. Transport information

DOT

UN number or ID number: UN 3316
UN Proper Shipping Name: Chemical kits
Transport Hazard Class(es)
Class: 9
Label(s): 9
Packing Group: II
Marine Pollutant: No

Special precautions for user: Not regulated.

IMDG

UN number or ID number: UN 3316
UN Proper Shipping Name: CHEMICAL KIT
Transport Hazard Class(es)
Class: 9
Subsidiary risk: 9
EmS No.: F-A, S-P
Packing Group: II
Environmental Hazards
Marine Pollutant: No

Special precautions for user: Not regulated.



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IATA

UN number or ID number:	UN 3316
Proper Shipping Name:	Chemical kit
Transport Hazard Class(es):	
Class:	9
Subsidiary risk:	9MI
Packing Group:	II
Environmental Hazards	
Marine pollutant:	No
Special precautions for user:	Not regulated.

15. Regulatory information**US Federal Regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity

Ethanol
Methanol
Hydrochloric acid

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Flammable (gases, aerosols, liquids, or solids), Acute toxicity (any route of exposure), Specific target organ toxicity (single or repeated exposure), Hazards Not Otherwise Classified (HNOC)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required



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<u>Chemical Identity</u>	<u>% by weight</u>
Methanol	1.0%
Hydrochloric acid	1.0%

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

Chemical Identity
Hydrochloric acid
Hydrochloric acid

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Chemical Identity
Hydrochloric acid

US State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including, Ethanol which is [are] known to the State of California to cause cancer and birth defects or other reproductive harm.

This product can expose you to chemicals including, Methanol which is [are] known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

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

Chemical Identity
Ethanol
Methanol
Hydrochloric acid

US. Massachusetts RTK - Substance List

Chemical Identity
Ethanol
Methanol
Hydrochloric acid

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Ethanol
Methanol
Hydrochloric acid

US. Rhode Island RTK

Chemical Identity
Ethanol
Methanol
Hydrochloric acid



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International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

16. Other information, including date of preparation or last revision
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Further Information: No data available.

Disclaimer: Disclaimer:
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