

**Issuing Date** no data available

**Revision Date** 16-Oct-2015

**Revision Number** 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** Volatiles in Soil

**Product Number** 721  
**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Laboratory use only  
**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Supplier** ERA a Waters Company  
**Supplier Address** 16341 Table Mountain Parkway, Golden, CO 80403 USA  
**Non-Emergency Telephone Number** +1-303-431-8454  
**Supplier Email** sdsinfo@waters.com  
**Emergency telephone number**  
**Company Emergency Phone Number** In case of EMERGENCY call CHEMTREC Day or Night  
 Within USA and Canada: 800-424-9300  
 International Call Collect: +1-703-527-3887

## 2. HAZARDS IDENTIFICATION


**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Specific target organ toxicity (single exposure)	Category 1
Flammable Liquids	Category 2

**GHS Label elements, including precautionary statements**

### Emergency Overview

<b>Signal word</b>	<b>Danger</b>
<b>Hazard Statements</b> Toxic if inhaled Causes damage to organs Highly flammable liquid and vapor	
	
<b>Appearance</b> Clear, colorless	<b>Physical state</b> Liquid->Liquid
	<b>Odor</b> Alcohol

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
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  
Keep cool

**Precautionary Statements - Response**

Specific treatment (see .? on this label)  
IF exposed: Call a POISON CENTER or doctor/physician  
Specific treatment (see supplemental first aid instructions on this label)

**Skin**

Call a POISON CENTER or doctor/physician if you feel unwell  
Wash contaminated clothing before reuse  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth

**Fire**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

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

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

**Other information**

Harmful to aquatic life with long lasting effects

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

**Interactions with Other Chemicals**

No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Note: only the components contributing to the product's GHS hazard classification are listed in this section.

Chemical Name	CAS-No	Percent
Methanol	67-56-1	99.17 - 99.86

### 4. FIRST AID MEASURES

**First aid measures**

<b>General Advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Skin contact</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

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

**Most Important Symptoms and Effects** Coughing and/ or wheezing. Difficulty in breathing.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

**Unsuitable extinguishing media**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

Vapors can form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

**Uniform Fire Code** Highly Toxic: Liquid  
Flammable Liquid: I-B

**Hazardous Combustion Products**

Carbon oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** No.

**Sensitivity to Static Discharge** Yes.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Full encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Stop leak if you can do it without risk.

#### **Other Information**

#### **Environmental precautions**

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

#### **Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas.

#### **Methods and material for containment and cleaning up**

#### **Methods for containment**

A vapor suppressing foam may be used to reduce vapors. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

#### **Methods for cleaning up**

Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. Use only with adequate ventilation and in closed systems. Use personal protection equipment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

### Conditions for safe storage, including any incompatibilities

#### **Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from moisture. Store away from other materials. Store locked up. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

#### **Incompatible Products**

None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methanol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m <sup>3</sup> (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

#### **Other Exposure Guidelines**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

### Appropriate engineering controls

**Engineering Measures**

Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tight sealing safety goggles.

**Skin and body protection**

Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves. Antistatic boots.

**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. No information available. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not breathe the vapor or mist. Contaminated work clothing should not be allowed out of the workplace.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and Chemical Properties****Physical state**

Liquid->Liquid

**Appearance**

Clear, colorless

**Color**

No information available

**Odor**

Alcohol

**Odor Threshold**

No information available

**Property****Values****Remarks Method****pH**

UNKNOWN

None known

**Melting / freezing point**

no data available

None known

**Boiling point / boiling range**

no data available

None known

**Flash Point**

no data available C / 72 F

None known

**Evaporation Rate**

no data available

None known

**Flammability (solid, gas)**

no data available

None known

**Flammability Limit in Air****Upper flammability limit**

no data available

**Lower flammability limit**

no data available

**Vapor pressure**

no data available

None known

**Vapor density**

no data available

None known

**Specific Gravity**

0.791

None known

**Water Solubility**

Soluble in water

None known

**Solubility in other solvents**

no data available

None known

**Partition coefficient: n-octanol/water**

no data available

None known

**Autoignition temperature**

no data available

None known

**Decomposition temperature**

no data available

None known

**Kinematic viscosity**

no data available

None known

**Dynamic viscosity**

no data available

None known

**Explosive properties**

no data available

**Oxidizing properties**

no data available

**Other Information****Softening Point**

no data available

**Particle Size**

no data available

**Particle Size Distribution**

## 10. STABILITY AND REACTIVITY

### Reactivity

no data available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to avoid

Excessive heat. Heat, flames and sparks.

### Incompatible materials

None known based on information supplied.

### Hazardous Decomposition Products

Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

##### Inhalation

Specific test data for the substance or mixture is not available. Toxic by inhalation. (based on components).

##### Eye contact

Specific test data for the substance or mixture is not available.

##### Skin contact

Specific test data for the substance or mixture is not available. Toxic in contact with skin. May be absorbed through the skin in harmful amounts. (based on components).

##### Ingestion

Specific test data for the substance or mixture is not available. Toxic if swallowed. (based on components).

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol 67-56-1	= 6200 mg/kg ( Rat )	= 15800 mg/kg ( Rabbit )	= 22500 ppm ( Rat ) 8 h = 64000 ppm ( Rat ) 4 h

### Information on toxicological effects

#### Symptoms

Coughing and/ or wheezing. Difficulty in breathing.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Sensitization

No information available.

#### Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

#### Reproductive toxicity

No information available.

#### STOT - single exposure

Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. Detailed substance and/or ingredient information may be provided in other sections of this SDS. Target organs effects listed in this document may result from a single overexposure to this product. Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

#### STOT - repeated exposure

No information available.

##### Chronic Toxicity

No known effect based on information supplied. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions.

##### Target Organ Effects

Respiratory system. Systemic Toxicity.

#### Aspiration Hazard

No information available.

**Numerical measures of toxicity Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**

100.00 mg/kg

**ATEmix (dermal)**

300.00 mg/kg (ATE)

**ATEmix (inhalation-dust/mist)**

0.50 mg/L

**ATEmix (inhalation-vapor)**

3.00 ATEmix

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methanol 67-56-1		96h LC50: = 28200 mg/L (Pimephales promelas) 96h LC50: > 100 mg/L (Pimephales promelas) 96h LC50: 19500 - 20700 mg/L (Oncorhynchus mykiss) 96h LC50: 18 - 20 mL/L (Oncorhynchus mykiss) 96h LC50: 13500 - 17600 mg/L (Lepomis macrochirus)		

**Persistence and Degradability**

No information available.

**Bioaccumulation**

Chemical Name	Log Pow
Methanol 67-56-1	-0.77

**Other adverse effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Disposal methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated Packaging**

Dispose of contents/containers in accordance with local regulations.

**US EPA Waste Number**

D001 D018 D021 D022 D027 D028 D033 D034 D039 D040 D043 U002 U003 U019 U029  
U037 U042 U043 U044 U045 U055 U066 U067 U068 U070 U071 U072 U075 U076 U077  
U078 U079 U080 U083 U084 U121 U128 U131 U154 U159 U161 U165 U208 U209 U210  
U211 U220 U225 U226 U227 U228 P003 P022

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methanol 67-56-1		Included in waste stream: F039		U154

**California Hazardous Waste Codes 212**

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Methanol 67-56-1	Toxic Ignitable

## 14. TRANSPORT INFORMATION

<b>DOT</b>	Not regulated
<b>UN-No.</b>	UN1230
<b>Proper Shipping Name</b>	METHANOL
<b>Hazard Class</b>	3
<b>Subsidiary class</b>	6.1
<b>Packing Group</b>	II
<b>Reportable Quantity (RQ) (RQ/% in mixture)</b>	ETHANE, 1,2-DIBROMO-: RQ KG= 4540.00, 2-PROPENAL: RQ KG= 4540.00, METHANOL: RQ KG= 2273.18, VINYL CHLORIDE: RQ KG= 4540.00, HEXACHLOROBUTADIENE: RQ KG= 4540.00, 1,2-DIBROMO-3-CHLOROPROPANE: RQ KG= 4540.00
<b>Description</b>	UN1230, METHANOL, 3 (6.1), II, RQ
<b>Emergency Response Guide Number</b>	131
<b>TDG</b>	Not regulated
<b>UN-No.</b>	UN1230
<b>Proper Shipping Name</b>	METHANOL
<b>Hazard Class</b>	3, (6.1)
<b>Subsidiary class</b>	6.1
<b>Packing Group</b>	II
<b>Description</b>	UN1230, METHANOL, 3 (6.1), II
<b>MEX</b>	
<b>UN-No.</b>	UN1230
<b>Proper Shipping Name</b>	METHANOL
<b>Hazard Class</b>	3
<b>Subsidiary class</b>	6.1
<b>Packing Group</b>	II
<b>Description</b>	UN1230, METHANOL, 3 (6.1), II
<b>ICAO</b>	
<b>UN-No.</b>	UN1230
<b>Proper Shipping Name</b>	METHANOL
<b>Hazard Class</b>	3
<b>Subsidiary class</b>	6.1
<b>Packing Group</b>	II
<b>Description</b>	UN1230, METHANOL, 3 (6.1), II
<b>IATA</b>	Not regulated
<b>UN-No.</b>	UN1230
<b>Proper Shipping Name</b>	METHANOL
<b>Hazard Class</b>	3
<b>Subsidiary class</b>	6.1
<b>Packing Group</b>	II
<b>Description</b>	UN1230, METHANOL, 3 (6.1), II
<b>IMDG</b>	Not regulated
<b>UN-No.</b>	UN1230
<b>Proper Shipping Name</b>	METHANOL
<b>Hazard Class</b>	3
<b>Subsidiary class</b>	6.1
<b>Packing Group</b>	II
<b>EmS-No.</b>	F-E, S-D
<b>Description</b>	UN1230, METHANOL, 3 (6.1), II, (22°C C.C.)
<b>RID</b>	
<b>UN-No.</b>	UN1230



**Proper Shipping Name** METHANOL  
**Hazard Class** 3  
**Packing Group** II  
**Classification code** FT1  
**Description** UN1230, METHANOL, ENVIRONMENTALLY HAZARDOUS, 3 (6.1), II  
**ADR/RID-Labels** 6.1

**ADR**

**UN-No.** UN1230  
**Proper Shipping Name** METHANOL  
**Hazard Class** 3  
**Packing Group** II  
**Classification code** FT1  
**Tunnel restriction code** (D/E)  
**Description** UN1230, METHANOL, ENVIRONMENTALLY HAZARDOUS, 3 (6.1), II  
**ADR/RID-Labels** 3 6.1

**ADN**

**UN-No.** UN1230  
**Proper Shipping Name** METHANOL  
**Hazard Class** 3  
**Packing Group** II  
**Classification code** FT1  
**Special Provisions** 279, 802  
**Description** UN1230, METHANOL, ENVIRONMENTALLY HAZARDOUS, 3 (6.1), II  
**Hazard Labels** 3 + 6.1  
**Limited Quantity** 1 L  
**Ventilation** VE01, VE02

## 15. REGULATORY INFORMATION

**International Inventories**

**TSCA** Complies  
**DSL** All components are listed either on the DSL or NDSL.  
**IECSC** -

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS-No	Percent	SARA 313 - Threshold Values %
Methanol - 67-56-1	67-56-1	99.17 - 99.86	1.0

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** Yes  
**Chronic Health Hazard** Yes  
**Fire Hazard** Yes  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
---------------	--------------------------	------------------------------------	----

Methanol 67-56-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
---------------------	---------	--	--

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations****International Regulations**

Component	Carcinogen Status	Exposure Limits
Methanol 67-56-1 ( 99.17 - 99.86 )		Mexico: TWA 200 ppm Mexico: TWA 260 mg/m <sup>3</sup> Mexico: STEL 250 ppm Mexico: STEL 310 mg/m <sup>3</sup>

**Canada****WHMIS Hazard Class**

Not determined

## 16. OTHER INFORMATION

<b>NFPA</b>	<b>Health Hazards</b> 4	<b>Flammability</b> 3	<b>Instability</b> 0	<b>Physical and Chemical Hazards -</b>
<b>HMIS</b>	<b>Health Hazards</b> 3 *	<b>Flammability</b> 3	<b>Physical Hazard</b> 0	<b>Personal Protection</b>
				X

**Prepared By** Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

**Revision Date** 16-Oct-2015

**Revision Note** No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text



The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved

**End of Safety Data Sheet**