

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** DryWired® Glass and Ceramic  
**Recommended Use:** Water and oil repellent for glass and ceramic surfaces.  
**Supplier:** DryWired®  
**Address:** 5569 W. Washington Blvd.  
 Los Angeles, CA 90016  
**Phone:** 1-800-581-4528  
**Revised On:** 10/29/19  
**Emergency Phone:** US: 1-800-535-5053, International: 1-352-323-3500

## SECTION 2: HAZARDS IDENTIFICATION

**Hazard classification:** Classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Health	Environment	Physical
Eye Irritation	Not applicable	Flammable Category 2
Carcinogenicity		Liquids
Reproductive Toxicity		
Specific Target Organ Toxicity, Single Exposure (Eyes, CNS)		
Specific Target Organ Toxicity, Single Exposure (Respiratory)		

**Label elements:** Signal word: Danger



<u>Hazards Statements:</u>	<u>Precautionary Statements:</u>
H225 Highly flammable liquid and vapour.	P101 If medical advice is needed, have product container or label at hand.
H319 Causes serious eye irritation.	P102 Keep out of reach of children.
H335 May cause respiratory irritation.	P103 Read label before use.
H336 May cause drowsiness or dizziness.	P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
H351 Suspected of causing cancer.	P233 Keep container tightly closed.
H361 Suspected of damaging fertility or the unborn child.	P201 Obtain special instructions before use.
H370 Causes damage to organs.	P240 Ground/bond container and receiving equipment.
	P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242 Use only non-sparking tools.
	P243 Take precautionary measures against static discharge.
	P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
	P264 Wash skin thoroughly after handling.
	P270 Do not eat, drink or smoke when using this product.
	P271 Use only outdoors or in a well-ventilated area.
	P280 Wear protective gloves/protective clothing/eye protection/face protection.
	P281 Use personal protective equipment as required.
	P303 + P361 + P353 IF ON SKIN (or hair): Remove/ take off immediately all contaminated clothing. Rinse skin with water/ shower.
	P304 + P340 + P312 IF INHALED: 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.
	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
	P337 + P313 If eye irritation persists: Get medical advice/ attention.
	P370 + P378 In case of fire: Use CO2, extinguishing powder or water spray for extinction.
	P403 + P235 Store in a well-ventilated place. Keep cool.
	P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
	P501 Dispose of contents/container according to local/regional/national/international regulations.

**Hazards not otherwise classified:** None.

## SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS



# Safety Data Sheet

## DryWired® Glass and Ceramic

### Chemical Characterization: Mixtures

Component	CAS No.	Weight %
Ethanol	64-17-5	45.0-90.0%
Methanol	67-56-1	0.9%-4.5%
Methyl isobutyl ketone	108-10-1	0.9%-4.5%
Ethyl Acetate	141-78-6	0.9%-4.5%
Naphtha (pet), hydrotreated It AND/OR Heptane, branched, cyclic and linear AND/OR Solvent naphtha (pet), It aliph.	64742-49-0 / 426260-76-6 / 64742-89-8	0.1%-0.9%
Heptane	142-82-5	0.1%-0.9%

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures:

**Inhalation:** If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

**Skin Contact:** If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

**Eye Contact:** Flush eyes with water as a precaution. Keep eye wide open while rinsing. If irritation persists, consult a specialist.

**If Swallowed:** Clean mouth with water and drink afterwards plenty of water. Keep respiratory tract clear. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

**Indication of any immediate medical attention and special treatment required:** No further relevant information available.

-----Bring this SDS when seeking medical attention.-----

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## SECTION 5: FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media: High volume water jet.

**Special hazards arising from the substance or mixture:** Do not allow run-off from fire fighting to enter drains or water courses. No hazardous combustion products are known.

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information:** Use a water spray to cool fully closed containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. FPA Flammable and Combustible Liquids Classification: Flammable Liquid Class IB.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up:** Contain spillage. Collect with noncombustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

**Reference to other sections:** For personal protection see section 8. For disposal see section 13.

## SECTION 7: HANDLINGS AND STORAGE

**Precautions for safe handling:** Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

**Conditions for safe storage, including any incompatibilities:** No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

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### Control Parameters: Components with workplace control parameters:

Component	CAS No.	Value	Control Parameters	Basis	
Methanol	67-56-1	TWA	200 ppm	USA. ACHIS TLV	
		Remarks: Headache, Nausea, Dizziness, Eye Damage, Substances for which there is a Biological Exposure Index or Indices (see BEI® section), Danger of cutaneous absorption			
		STEL	250 ppm	USA. NIOSH Recommended Exposure Limits	
		Remarks: Headache, Nausea, Dizziness, Eye Damage, Substances for which there is a Biological Exposure Index or Indices (see BEI® section), Danger of cutaneous absorption			
		TWA	200 ppm/260 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
		Remarks: Potential for dermal absorption			
		ST	250ppm/325mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
Remarks: Potential for dermal absorption					
Ethanol	64-17-5	TWA	1000 ppm	USA. ACHIS TLV	
		TWA	1000 ppm, 1900 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
		TWA	1000 ppm, 1900 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000 Table Z-1).	
		TWA	1000 ppm, 1900 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000).	
		STEL	1000 ppm	USA. ACHIS TLV	
Methyl isobutyl ketone	108-10-1	TWA	20 ppm	USA. ACHIS TLV	
		STEL	75 ppm	USA. ACHIS TLV	
		TWA	50 ppm, 205 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
		ST	75 ppm, 300 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
		TWA	100 ppm, 410 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000 Table Z-1).	
		TWA	50 ppm, 205 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000).	
		STEL	75 ppm, 300 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000).	
Ethyl acetate	141-78-6	TWA	400 ppm, 1400 mg/m <sup>3</sup>	USA. ACHIS TLV	
		TWA	400 ppm, 1400 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
		TWA	400 ppm, 1400 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000 Table Z-1).	
		TWA	400 ppm, 1400 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000).	
Heptane	142-82-5	TWA	85 ppm, 350 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
		C	440 ppm, 1800 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits	
		TWA	500 ppm, 1200 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000 Table Z-1).	
		TWA	400 ppm, 1600 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000).	
		STEL	500 ppm, 2000 mg/m <sup>3</sup>	USA. OSHA PEL 29 (CFR 1915.1000).	

### Biological occupational exposure limits:

Component	CAS No.	Biological Specimens	Sample Time	Permissible Concentration	Basis
Methanol	67-56-1	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
Methyl isobutyl ketone	108-10-1	Urine	End of shift (As soon as possible after exposure ceases)	1 mg/l	ACGIH BEI

### Appropriate engineering controls:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment:** Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: butyl-rubber, Minimum layer thickness: 0.3 mm, Break through time: 480 min

Splash contact: Material: Nitrile rubber, Minimum layer thickness: 0.4 mm, Break through time: 31 min

Body Protection: Complete suit to protect against chemicals, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to concentration/amount of the dangerous substance at the workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Colorless liquid	<b>Odour:</b>	Alcohol-like
<b>Odour Threshold:</b>	No data available.	<b>pH:</b>	No data available.
<b>Melting Point/Freezing Point:</b>	No data available.	<b>Boiling Point:</b>	78.3°C (173.0°F)
<b>Flash Point:</b>	12.8°C (55.0°F)	<b>Evaporation Rate:</b>	2.0 n-Butyl Acetate
<b>Flammability (solid, gas):</b>	Vapours can mix with air to form explosive mixtures.	<b>Upper/Lower Flammability of Explosive Limits:</b>	3.3% LEL/ 19% UEL
<b>Vapour Pressure:</b>	44 mmHg at 20°C (68°F)	<b>Vapour Density:</b>	1.6 (Air=1.0)
<b>Relative Density:</b>	0.789-0.830 at 16°C (60°F)	<b>Solubility:</b>	Fully Miscible.
<b>Partition Coefficient: n-octanol and water:</b>	No data available.	<b>Auto-Ignition Temperature:</b>	416.11°C
<b>Decomposition Temperature:</b>	No data available.	<b>Viscosity:</b>	1.2 mPa.s

**Other Information:** No further relevant information available.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** Vapours may form explosive mixture with air.

**Conditions to avoid:** Heat, flames, and sparks. Ignition sources. Extremely high temperatures and direct sunlight.

**Incompatible materials:** Acids, aldehydes, alkali metals, aluminum, amines, ammonia, bases, copper, copper alloys, halogens, inorganic materials, lead, nitrates, oxidizing agents, peroxides, sodium, strong reducing agents, zinc.

**Hazardous decomposition products:** No data available. In the event of fire: see section 5

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Acute Toxicity:

Acute oral toxicity estimate: 2,035 mg/kg, Calculation method. Acute inhalation toxicity estimate: Acute toxicity estimate: > 40 mg/l, 4h, Test atmosphere: vapour, Calculation method. Acute dermal toxicity: Acute toxicity estimate: > 5,000 mg/kg, Calculation method.

Ethanol, CAS No. 64-17-5: Acute oral toxicity: LD50 (Rat): 7,060 mg/kg; Acute inhalation toxicity: LC50 (Rat): 124.7 mg/l; Acute dermal toxicity: No data available.

Methanol, 67-56-1: Acute oral toxicity: LD50 (Rat): 100 mg/kg. The component/mixture is toxic after single ingestion. Acute inhalation toxicity: LC50 (Rat): 5 mg/l. The component/mixture is toxic after short-term inhalation. Acute dermal toxicity: LD50 (Rabbit): 300 mg/kg. The component/mixture is toxic after single contact with skin.

Methyl isobutyl ketone, 108-10-1: Acute oral toxicity: LD50 (Rat): 2,080 mg/kg, OECD Test Guideline 401. The substance or mixture has no acute oral toxicity. Acute inhalation toxicity: LC50(Rat): 10 mg/l, 4h, Test atmosphere: vapour. The component/mixture is moderately toxic after short-term inhalation. Acute dermal toxicity: LD50(Rat, male and female): > 2,000 mg/kg, OECD Test Guideline 402 GLP: yes. The substance or mixture has no acute dermal toxicity.

Ethyl acetate, 141-78-6: Acute oral toxicity: LD50 (Rat): 5,620 mg/kg; Acute inhalation toxicity: LD0 (Rat, male and female): > 22.5 mg/l, 6h Test atmosphere: vapour. The substance or mixture is classified as specific target organ toxicant. Single exposure, category 3 with narcotic effects. Not classified. Acute dermal toxicity: LD50(Rabbit): >20,000 mg/kg

Naphtha (pet), Hydrotreated It AND/OR Heptane, branched, cyclic and linear AND/OR Solvent naphtha (pet), It aliph, 64742-49-0 / 426260-76-6 / 64742-89-8: Acute oral toxicity: LD50 (Rat, male and female): > 5,000 mg/kg, OECD Test Guideline 401, GLP: yes. Acute inhalation toxicity: LC50 (Rat, male and female): > 73.5 mg/l, 4h, Test atmosphere: vapour, OECD Test Guideline 403. Information given is based on data obtained from similar substances; Acute dermal toxicity: LD50 (Rabbit, male and female): > 2,000 mg/kg, Method: OECD Test Guideline 402, GLP: yes

Heptane, 142-82-5: Acute oral toxicity: LD50 (Rat, male and female): 5,000 mg/kg, OECD Test Guideline 401, Symptoms: Salivation GLP: yes. Information given is based on data obtained from similar substances; Acute inhalation toxicity: LC50 Rat (male and female): 73.5 mg/l, 4h, vapour, OECD Test Guideline 403; Acute dermal toxicity: LD50 (Rabbit, male and female): > 2,000 mg/kg, OECD Test Guideline 402, GLP: yes. Information given is based on data obtained from similar substances.

#### Likely routes of exposure and symptoms:

Ethanol 64-17-5	Methanol 67-56-1	Methyl isobutyl ketone 108-10-1	Ethyl acetate 141-78-6	Naphtha 64742-49-0 / 426260-76- 6 / 64742-89-8	Heptane 142-82-5
<b>Skin irritation/corrosion:</b>					
Rabbit, No skin irritation.	Rabbit, No skin irritation.	Rabbit, 4h, OECD Test Guideline 404, No skin irritation	Rabbit, Mild skin irritation.	Rabbit, 24h, OECD Test Guideline 404. Irritating to skin. GLP: yes.	Rabbit, 24h, OECD Test Guideline 404, Irritating to skin. GLP:

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		GLP: yes		Information based on data obtained from similar substances.	yes. Based on a similar product formulation.
<b>Serious eye damage/eye irritation:</b>					
Rabbit, Irritating to eyes.	Rabbit, No eye irritation.	Rabbit, Irritating to eyes, OECD Test Guideline 405 GLP: yes.	Rabbit, Irritating to eyes.	No eye irritation.	No data available.
<b>Respiratory or skin sensitization:</b>					
Lymph node assay, Mouse, OECD Test Guideline 429 GLP: No data available. Did not cause sensitisation on laboratory animals.	Maximisation Test (GPMT), Guinea pig, OECD Test Guideline 406. Did not cause sensitisation on laboratory animals.	Maximisation Test (GPMT), Guinea pig, OECD Test Guideline 406. Did not cause sensitisation on laboratory animals.	Guinea pig- Did not cause sensitisation on laboratory animals.	Maximization test, Guinea pig, OECD Test Guideline 406. Did not cause sensitisation on laboratory animals. Based on a similar product formulation.	Maximization test, Guinea pig, OECD Test Guideline 406. Does not cause skin sensitisation. Based on a similar product formulation.
Ethanol (64-17-5)	Methanol 67-56-1	Methyl isobutyl ketone 108-10-1	Ethyl acetate 141-78-6	Naphtha 64742-49-0/ 426260-76-6/ 64742-89-8	Heptane 142-82-5
<b>Germ Cell Mutagenicity:</b>					
Mammalian cell gene mutation assay, mouse, lymphoma cells, with and without metabolic activation, OECD Test Guideline 476. Result: negative. GLP: No data available. Dominant lethal assay, Mouse (male), Oral, 10 or 40% ethanol in water, OECD Test Guideline 478. Result: negative. GLP: No data. Mutagenicity classification not possible from current data.	DNA damage and/or repair, with and without metabolic activation. Result: Ambiguous. In vivo micronucleus test, Mouse (male and female), Bone marrow, Intraperitoneal, Single Dose, 0, 1920, 3200, 4480 mg/kg. Result: negative. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.	Ames test, with and without metabolic activation, OECD Test Guideline 471. Result: negative. GLP: yes. In vivo micronucleus test, Mouse, Bone marrow, Intraperitoneal, 12-48h, OECD Test Guideline 474. Result: negative. GLP: yes. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.	Ames test, Salmonella typhimurium, with and without metabolic activation, OECD Test Guideline 471. Result: negative. GLP: No data available. Chromosome aberration test in vitro, Chinese hamster ovary (CHO), with and without metabolic activation, OECD Test Guideline 473. Result: negative. GLP: No data available. Animal testing did not show any mutagenic effects.	Mutagenicity classification not possible from current data.	Chromosome aberration test in vitro, Rat liver, Without metabolic activation, OECD Test Guideline 473. Result: negative. Ames test, with and without metabolic activation, OECD Test Guideline 471. Result: negative. Did not show mutagenic effects in animal experiments.
<b>Carcinogenicity:</b>					
Carcinogenicity classification not possible from current data.	Not classifiable as a human carcinogen.	Rat (male and female) inhalation, 2 yr, 0, 450, 900, 1800ppm, 6h/d, 5d/wk NOAEL: 450ppm, OECD Test Guideline 451. Evidence of renal carcinogenesis that is not relevant to humans. GLP: yes. Not classifiable as a human carcinogen.	Mouse (male and female) intraperitoneal injection, 8wk, 150, 750 mg/kg bw/injection, 3d/wk. Animal testing did not show any carcinogenic effects.	Not classifiable as a human carcinogen.	This information is not available. Carcinogenicity classification not possible from current data.
<b>Reproductive Toxicity:</b>					
Effects on fertility: Two-generation study, Mouse: male and female, oral, 5, 10 and 15% v/v in water, General Toxicity - Parent: NOAEL: 15 % diet, General Toxicity F1: NOAEL: 10 % diet. Reduced litter size. Reduced sperm motility in F1 generation. OECD Test Guideline 416, GLP: No data available. Effects on fetal development: Rat,	Effects on fertility: Two-generation study, Rat: male and female, Inhalation, 0, 0.013, 0.13, 1.3 mg/L, 20 h General Toxicity - Parent: NOAEC: 1.3 mg/l, General Toxicity F1: NOAEC: 0.13 mg/l, Fertility: NOAEC: 1.3 mg/l. Effects on postnatal development: Animal testing did not show any effects on fertility. Classification not	Effects on fertility: Two-generation study, Rat: male and female, inhalation, 0, 500, 1000, 2000 ppm, 6h 7 days/week, General Toxicity - Parent: NOAEC: 1,000 ppm, General Toxicity F1: NOAEC: 1,000 ppm, Fertility: NOAEC: 2,000 ppm. Maternal effects sedation. OECD Test Guideline 416. Animal testing did not show any effects on fertility.	Effects on fertility: Two-generation study, Mouse, male and female, Oral, 5, 10, 15% v/v in water, General Toxicity - Parent: NOAEL: 15 % diet, General Toxicity F1: NOAEL: 10 % diet, Reduced litter size. OECD Test Guideline 416, GLP: No data available. Information based on data obtained from similar substances. Rat, male, Inhalation, 350, 750, 1500 ppm, 6h,	Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.	Effects on fertility: Two-generation study, Rat: male and female, Inhalation, 0, 900, 3000, 9000 ppm, 5 d/wk, General Toxicity - Parent: NOAEC: 3,000 ppm, General Toxicity F1: NOAEC: 3,000 ppm, Fertility: NOAEC: 9,000 ppm. Reduced maternal body weight gain Reduced offspring weight gain. OECD Test Guideline 416. No reproductive effects.



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Inhalation, 10000, 16000, 20000 ppm. General Toxicity Maternal: NOAEL: 16,000 ppm, Teratogenicity: NOAEL: > 20,000 ppm. No malformations were observed. OECD Test Guideline 414, GLP: No data available. Classification not possible from current data. Embryotoxicity classification not possible from current data.	possible from current data. Embryotoxicity classification not possible from current data.	Effects on fetal development: Rat, inhalation, 0, 300, 1000, 3000 ppm, 10d, 6h/day, General Toxicity Maternal: NOAEC: 1,000 ppm, Teratogenicity: NOAEC: 3,000 ppm. Maternal toxicity, Specific developmental abnormalities, Reduced body weight, Reduced number of viable fetuses. OECD Test Guideline 414. No teratogenic effects, GLP: yes. No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.	5 d/wk, General Toxicity-Parent: NOAEL: 1,500 ppm. Animal testing did not show any effects on fertility. GLP: yes. Effects on fetal development: Rat, Inhalation, 10,000, 16,000, 20,000 ppm, General Toxicity Maternal: NOAEL: 16,000 ppm, Teratogenicity: NOAEL: > 20,000 ppm. No malformations were observed. OECD Test Guideline 414, GLP: No data. Information based on data obtained from similar substances. No toxicity to reproduction. Animal testing did not show any effects on fetal development.	GLP: yes. Information based on data obtained from similar substances. Effects on fetal development: Mouse, inhalation, 0, 900, 3000, 9000 ppm, 10d, 6h/day, General Toxicity Maternal: NOAEC: 900 ppm Developmental Toxicity: NOAEC: 3,000 ppm. Skeletal malformations. OECD Test Guideline 414 GLP: yes. Information based on data obtained from similar substances. Animal testing did not show any effects on fertility. Embryotoxicity classification not possible from current data.
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Ethanol (64-17-5)	Methanol 67-56-1	Methyl isobutyl ketone 108-10-1	Ethyl acetate 141-78-6	Naphtha 64742-49-0/426260-76-6/64742-89-8	Heptane 142-82-5
<b>Specific Target Organ Toxicity - Single Exposure:</b>					
Inhalation, central nervous system, may cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. Inhalation, respiratory system, may cause respiratory irritation. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.	Eyes, central nervous system, causes damage to organs., The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.	Inhalation, respiratory tract, may cause respiratory irritation. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.	Inhalation, central nervous system, may cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	Inhalation, central nervous system, may cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	Inhalation, central nervous system, may cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
<b>Specific Target Organ Toxicity - Repeated Exposure:</b>					
No data available.	No data available.	No data available.	No data available.	No data available.	No data available.
<b>Repeated Dose Toxicity:</b>					
Rat (male and female) NOAEL: 10 ml/kg, Oral, 7 or 14 wk, 2 times/d, 7 d/wk, 5, 10, 20ml/kg of 16.25% etoh, OECD Test Guideline 408, GLP: yes.	Mouse (male and female) NOAEL: 1.3 mg/l, inhalation, 12 mth, Continuous, 0, 0.013, 0.13, 1.3 mg/L	Rat (male and female) 250 mg/kg, Oral, 13 wk, 7 d/wk, 0, 50, 250, 1000 mg/kg bw/day, OECD Test Guideline 408, GLP: yes. Kidney disorders. Male rat hydrocarbon nephropathy not relevant to humans.	Rat (male and female), NOAEL: 900 mg/kg, LOAEL: 3,600 mg/kg, Oral, 90-92 d, daily, 0, 300, 900 and 3600 mg/kg bw, GLP: yes. Rat (male and female) NOAEL: 350 ppm, Inhalation, 94 d, 6 h/d, 5 d/wk, 0, 350, 750, 1500 ppm. Local irritation.	Rat (male) NOAEL: 12470 mg/m3, inhalation, 16 wks, 12 h/d, 7 d/wk, 0, 12470 mg/m3. Information based on data obtained from similar substances. Rat (male and female) NOAEL: 1402, inhalation, 13 wk, 6 h/d, 5 d/wk, 322, 1402, 9869 mg/m3 GLP: yes. Kidneys. Nasal and ocular discharge.	Rat (male) NOAEL: 12470 mg/m3, inhalation, 16 wks, 12 h/d, 7 d/wk, 0, 12470 mg/3. Causes skin irritation.
<b>Aspiration Toxicity:</b>					
No aspiration toxicity classification.	No aspiration toxicity classification.	No aspiration toxicity classification.	No aspiration toxicity classification.	May be fatal if swallowed and enters airways.	May be fatal if swallowed and enters airways.

**Further product information:** Solvents may degrade the skin.



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**SECTION 12: ECOLOGICAL & ECOTOXICOLOGICAL INFORMATION**

Ethanol (64-17-5)	Methanol 67-56-1	Methyl isobutyl ketone 108-10-1	Ethyl acetate 141-78-6	Naphtha 64742-49-0 / 426260- 76-6 / 64742-89-8	Heptane 142-82-5
<b>Ecotoxicity:</b>					
<p>Toxicity to fish: LC50 (Pimephales promelas): 15,300 mg/l 96h, flow-through test Toxicity to daphnia and other aquatic invertebrates: EC50 (Ceriodaphnia dubia): 5012mg/l 48h, static test Toxicity to algae: EC50 (Chlorella vulgaris): 275mg/l End point: Growth rate 72h Static test, OECD Test Guideline 201 GLP: No data available.</p>	<p>Toxicity to fish: LC50 (Lepomis macrochirus): 15,400mg/l 96h, flow-through test Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna): &gt; 10,000 mg/l 48h, static test Toxicity to algae: EC50 (Scenedesmus capricornutum): 22,000 mg/l End point: Growth rate 96h Test Type: static test Method: OECD Test Guideline 201 Toxicity to bacteria: LC50 (activated sludge): &gt; 1000mg/l End point: Growth rate 3h Static Test OECD Test Guideline 209</p>	<p>Toxicity to fish: LC50 (Danio rerio): &gt;179 mg/l 96h, static test, OECD Test Guideline 203 Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna): &gt;200mg/l 48h, static test, OECD Test Guideline 202 GLP: yes Toxicity to algae: EC50 (Pseudokirchneriella subcapitata): 400 mg/l End point: Growth rate 96h Static Test</p>	<p>Toxicity to fish: LC50 (Pimephales promelas) 220mg/l 96h Toxicity to daphnia and other aquatic invertebrate : EC50 (Daphnia magna): 2,300 mg/l 24h Toxicity to algae: EC50 (Desmodes mussubspicatus): 4,300 mg/l 24h</p>	<p>Toxicity to fish: LC50 (Carassius auratus): 4 mg/l 24h. Information based on data obtained from similar substances. Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna): 1.5 mg/l 48h Static test. Information based on data obtained from similar substances. Toxicity to algae: EC50 (Pseudokirchneriella subcapitata): 3.7 mg/l 96h Static test. Very toxic to aquatic life. Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.</p>	<p>Toxicity to fish: LC50 (Carassius auratus): 4 mg/l 24h. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna): 1.5 mg/l 48h Static test. Very toxic to aquatic organisms. Toxicity to algae: No data available. Very toxic to aquatic life. Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.</p>
<b>Persistence and degradability:</b>					
<p>Readily biodegradable</p>	<p>Readily biodegradable Biodegradation: 72%. Readily biodegradable Biochemical Oxygen Demand: 600-1120mg/g Chemical Oxygen Demand: 1420mg/g BOD/COD: BOD: 600-1120 COD: 1420 Stability in water: Hydrolysis: 91% 19°C 72h. Hydrolyses on water contact.</p>	<p>Activated sludge Biodegradation: 83% 28d, OECD Test Guideline 301F. Readily biodegradable. Biochemical Oxygen Demand: 1,940 mg/g Chemical Oxygen Demand: 2,160 mg/g Theoretical Oxygen Demand: 0.00272 mg/g</p>	<p>Activated sludge. Readily biodegradable.</p>	<p>Activated sludge, 20 mg/l, Biodegradation: 74.3% 56d, GLP: yes. Inherently biodegradable.</p>	<p>Activated sludge, 100mg/l, Biodegradation: 100%, 2d, 25d. Readily biodegradable.</p>
<b>Bioaccumulative potential:</b>					
<p>Bioaccumulation is unlikely.</p>	<p>Cyprinus carpio Bioconcentration factor: 1.0 72d 20°C, 5 mg/l. Partition coefficient: noctanol/ water: log Pow: -0.77</p>	<p>Bioaccumulation is unlikely. Partition coefficient: noctanol/water: Pow: 24 log Pow: Calculated 1.9</p>	<p>Partition coefficient: noctanol/water: log Pow: 0.68 (25°C) pH:7</p>	<p>Partition coefficient: noctanol/water: log Pow: 2.13 - 4.85 (25 °C)</p>	<p>No data available.</p>
<b>Mobility in soil:</b>					
<p>No data available.</p>	<p>No data available.</p>	<p>Stability in soil: Not expected to adsorb on soil.</p>	<p>No data available.</p>	<p>No data available.</p>	<p>No data available.</p>

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Disposal Methods:** Should be taken to an authorized industrial waste handler. Do not allow to reach water supply.

**Uncleaned Packaging:** Recommendation: Dispose of as unused product according to official regulations.

**SECTION 14: TRANSPORT INFORMATION**

<p><b>DOT (US):</b> UN number: 1170 Class: 3 Packing group: II Proper shipping name: Glass and Ceramic (contains ethanol)</p>	<p><b>IMDG:</b> UN number: 1170 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: Glass and Ceramic (contains ethanol)</p>	<p><b>IATA:</b> UN number: 1170 Class: 3 Packing group: II Proper shipping name: Glass and Ceramic (contains ethanol)</p>
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## Safety Data Sheet

### DryWired® Glass and Ceramic

Poison Inhalation Hazard: No	Ceramic (contains ethanol)	
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*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. DryWired® transportation classifications are based on product formulation, packaging, DryWired® policies and DryWired® understanding of applicable current regulations. DryWired® does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original DryWired® package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

## SECTION 15: REGULATORY INFORMATION

**International Regulations:** Contact DryWired® for more information.

**US Federal Regulations:** Contact DryWired® for more information.

**SARA Section 311/312 Hazards:** Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**SARA Section 313:** Methanol, 67-56-1, 4.6134 %; Methyl isobutyl ketone 108-10-1, 1.9515 %

**State Regulations:** Contact DryWired® for more information.

**Massachusetts Right To Know Components:** Ethanol 64-17-5, 90-100%; Methanol 67-56-1, 1-5%; Methyl isobutyl ketone 108-10-1, 1-5%; Ethyl acetate 141-78-6, 1-5%; Acetaldehyde 75-07-0, 0-0.1%

**Pennsylvania Right To Know Components:** Ethanol 64-17-5, 90-100%; Methanol 67-56-1, 1-5%; Methyl isobutyl ketone 108-10-1, 1-5%; Ethyl acetate 141-78-6, 1-5%; Acetaldehyde 75-07-0, 0-0.1%; 108-88-3 Toluene 0-0.1%

**New Jersey Right To Know Components:** Ethanol 64-17-5, 90-100%; Methanol 67-56-1, 1-5%; Methyl isobutyl ketone 108-10-1, 1-5%; Ethyl acetate 141-78-6, 1-5%

**California Proposition 65 Components:**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Methanol 67-56-1; Methyl isobutyl ketone 108-10-1; 108-88-3 Toluene; Benzene, 71-43-2

WARNING! This product contains a chemical known to the State of California to cause cancer. Methyl isobutyl ketone, 108-10-1; Acetaldehyde, 75-07-0; Ethylbenzene, 100-41-4; Benzene, 71-43-2; Cumene, 98-82-8; Naphthalene, 91-20-3.

**Chemical Inventories:** The components of this product are in compliance with the chemical notification requirements of TSCA.

## SECTION 16: ADDITIONAL INFORMATION

**DISCLAIMER:** The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued.

DRYWIREDMAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE.

User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application.

Given the variety of factors that can affect the use and application of a DryWired® product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the DryWired® product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.