SAFETY DATA SHEET

1. Identification

Product identifier EPA Method 524.4 Purgeable Organic Compounds Mixture

Other means of identification

ItemM-EPA5244POCN1Recommended useFor Laboratory Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service, Inc.
Address 660 Tower Lane

West Chester, PA 19380

United States

Telephone Toll Free 800-452-9994

Direct 610-692-3026

Website www.chemservice.com
E-mail info@chemservice.com

Emergency phone number Chemtrec US 800-424-9300

Chemtrec outside US +1 703-527-3887

2. Hazard(s) identification

 Physical hazards
 Flammable liquids
 Category 2

 Health hazards
 Acute toxicity, oral
 Category 3

 Acute toxicity, dermal
 Category 3

 Acute toxicity, inhelation
 Category 3

Acute toxicity, inhalation

Category 3

Serious eye damage/eye irritation

Category 2A

Reproductive toxicity

Category 1B

Specific target organ toxicity, single exposure

Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes serious

eye irritation. Toxic if inhaled. May cause drowsiness or dizziness. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or

repeated exposure.

Precautionary statement Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.

Storage

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

Disposal

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

Hazard(s) not otherwise classified (HNOC)

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

Supplemental information

94.79% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 94.79% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methanol		67-56-1	94.79
Water		7732-18-5	4.97
Hydroquinone		123-31-9	0.02
1,4-Dichloro-2-butene cis & trans	3	764-41-0	0.01
1-Chlorobutane		109-69-3	0.01
2-Butanone		78-93-3	0.01
2-Hexanone		591-78-6	0.01
2-Nitropropane		79-46-9	0.01
4-Methyl-2-pentanone		108-10-1	0.01
Acetone		67-64-1	0.01
Acrylonitrile		107-13-1	0.01
Carbon disulfide		75-15-0	0.01
Chloroacetonitrile		107-14-2	0.01
Ethyl ether		60-29-7	0.01
Ethyl methacrylate		97-63-2	0.01
Hexachloroethane		67-72-1	0.01
Methacrylonitrile		126-98-7	0.01
Methyl acrylate		96-33-3	0.01
Methyl iodide		74-88-4	0.01
Methyl methacrylate		80-62-6	0.01
Nitrobenzene		98-95-3	0.01
Pentachloroethane		76-01-7	0.01
Propionitrile		107-12-0	0.01
tert-Butyl methyl ether		1634-04-4	0.01
Tetrahydrofuran		109-99-9	0.01

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

Eye contact

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

Ingestion

Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

General information

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.

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

Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source

Do not use water jet as an extinguisher, as this will spread the fire.

of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods

General fire hazards

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist/vapors. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Specifically Regulated S Components	Substances (29 CFR 1910.100 Type	1-1050) Value	
Acrylonitrile (CAS 107-13-1)	STEL	10 ppm	
	TWA	2 ppm	
US. OSHA Table Z-1 Limits for Air	Contaminants (29 CFR 1910.	1000)	
Components	Туре	Value	
2-Butanone (CAS 78-93-3)	PEL	590 mg/m3	
		200 ppm	
2-Hexanone (CAS 591-78-6)	PEL	410 mg/m3	
		100 ppm	
2-Nitropropane (CAS 79-46-9)	PEL	90 mg/m3	
		25 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	PEL	410 mg/m3	
		100 ppm	
Acetone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
Ethyl ether (CAS 60-29-7)	PEL	1200 mg/m3	
		400 ppm	
Hexachloroethane (CAS 67-72-1)	PEL	10 mg/m3	
		1 ppm	

US. OSHA Table Z-1 Limits for Air Contar Components	minants (29 CFR 1910.1000) Type	Value
Hydroquinone (CAS 123-31-9)	PEL	2 mg/m3
Methanol (CAS 67-56-1)	PEL	260 mg/m3
		200 ppm
Methyl acrylate (CAS 96-33-3)	PEL	35 mg/m3
		10 ppm
Methyl iodide (CAS 74-88-4)	PEL	28 mg/m3
		5 ppm
Methyl methacrylate (CAS 80-62-6)	PEL	410 mg/m3
		100 ppm
Nitrobenzene (CAS 98-95-3)	PEL	5 mg/m3
		1 ppm
Tetrahydrofuran (CAS 109-99-9)	PEL	590 mg/m3
US. OSHA Table Z-2 (29 CFR 1910.1000)		200 ppm
Components	Туре	Value
Carbon disulfide (CAS 75-15-0)	Ceiling	30 ppm
	TWA	20 ppm
US. ACGIH Threshold Limit Values Components	Туре	Value
1,4-Dichloro-2-butene cis & trans (CAS 764-41-0)	TWA	0.005 ppm
0.0.1 (0.4.0.70.00.0)	OTEL	300 ppm
2-Butanone (CAS 78-93-3)	STEL	ooo ppiii
2-Butanone (CAS 78-93-3)	TWA	200 ppm
2-Hexanone (CAS 78-93-3) 2-Hexanone (CAS 591-78-6)		
2-Hexanone (CAS	TWA	200 ppm
2-Hexanone (CAS	TWA STEL	200 ppm 10 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS	TWA STEL TWA	200 ppm 10 ppm 5 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS	TWA STEL TWA TWA	200 ppm 10 ppm 5 ppm 10 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS	TWA STEL TWA TWA STEL	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1)	TWA STEL TWA TWA STEL TWA	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1)	TWA STEL TWA TWA STEL TWA STEL	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm 500 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1) Acetone (CAS 67-64-1) Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS 75-15-0)	TWA STEL TWA TWA STEL TWA STEL TWA STEL TWA TWA TWA	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm 500 ppm 250 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1) Acetone (CAS 67-64-1) Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS	TWA STEL TWA TWA STEL TWA STEL TWA STEL TWA TWA	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm 500 ppm 250 ppm 2 ppm 2 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1) Acetone (CAS 67-64-1) Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS 75-15-0)	TWA STEL TWA TWA STEL TWA STEL TWA STEL TWA TWA TWA	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm 500 ppm 250 ppm 2 ppm 1 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1) Acetone (CAS 67-64-1) Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS 75-15-0) Ethyl ether (CAS 60-29-7) Hexachloroethane (CAS 67-72-1)	TWA STEL TWA TWA STEL TWA STEL TWA TWA TWA TWA TWA STEL	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm 500 ppm 250 ppm 2 ppm 1 ppm 1 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1) Acetone (CAS 67-64-1) Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS 75-15-0) Ethyl ether (CAS 60-29-7) Hexachloroethane (CAS 67-72-1) Hydroquinone (CAS 123-31-9)	TWA STEL TWA TWA STEL TWA STEL TWA TWA TWA TWA TWA TWA TWA TWA	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm 500 ppm 250 ppm 2 ppm 1 ppm 500 ppm 400 ppm
2-Hexanone (CAS 591-78-6) 2-Nitropropane (CAS 79-46-9) 4-Methyl-2-pentanone (CAS 108-10-1) Acetone (CAS 67-64-1) Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS 75-15-0) Ethyl ether (CAS 60-29-7) Hexachloroethane (CAS 67-72-1) Hydroquinone (CAS	TWA STEL TWA TWA STEL TWA STEL TWA TWA TWA TWA TWA TWA TWA TWA	200 ppm 10 ppm 5 ppm 10 ppm 75 ppm 20 ppm 500 ppm 250 ppm 2 ppm 1 ppm 500 ppm 1 ppm 500 ppm 1 ppm

US. ACGIH Threshold Limit Values Components	Туре	Value	
	TWA	200 ppm	
Methyl acrylate (CAS 96-33-3)	TWA	2 ppm	
Methyl iodide (CAS 74-88-4)	TWA	2 ppm	
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Nitrobenzene (CAS 98-95-3)	TWA	1 ppm	
tert-Butyl methyl ether (CAS 1634-04-4)	TWA	50 ppm	
Tetrahydrofuran (CAS 109-99-9)	STEL	100 ppm	
	TWA	50 ppm	
US. NIOSH: Pocket Guide to Chemic Components	cal Hazards Type	Value	
2-Butanone (CAS 78-93-3)	STEL	885 mg/m3	
•		300 ppm	
	TWA	590 mg/m3	
		200 ppm	
2-Hexanone (CAS 591-78-6)	TWA	4 mg/m3	
		1 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	300 mg/m3	
		75 ppm	
	TWA	205 mg/m3	
		50 ppm	
Acetone (CAS 67-64-1)	TWA	590 mg/m3	
		250 ppm	
Acrylonitrile (CAS 107-13-1)	Ceiling	10 ppm	
	TWA	1 ppm	
Carbon disulfide (CAS 75-15-0)	STEL	30 mg/m3	
		10 ppm	
	TWA	3 mg/m3	
		1 ppm	
Hexachloroethane (CAS 67-72-1)	TWA	10 mg/m3	
	.	1 ppm	
Hydroquinone (CAS 123-31-9)	Ceiling	2 mg/m3	
Methacrylonitrile (CAS 126-98-7)	TWA	3 mg/m3	
Mathamal (CAS 07 50 4)	OTE!	1 ppm	
Methanol (CAS 67-56-1)	STEL	325 mg/m3	
	T\A/2	250 ppm	
	TWA	260 mg/m3	
		200 ppm	

cal Hazards		
Type	Value	
TWA	35 mg/m3	
	10 ppm	
TWA	10 mg/m3	
	2 ppm	
TWA	410 mg/m3	
	100 ppm	
TWA	5 mg/m3	
	1 ppm	
TWA	14 mg/m3	
	6 ppm	
STEL	735 mg/m3	
	250 ppm	
TWA	590 mg/m3	
	200 ppm	
	Type TWA TWA TWA TWA TWA STEL	Type Value TWA 35 mg/m3 10 ppm TWA 10 mg/m3 2 ppm TWA 410 mg/m3 100 ppm TWA 5 mg/m3 1 ppm TWA 14 mg/m3 6 ppm STEL 735 mg/m3 TWA 250 ppm TWA 590 mg/m3

Biological limit values

ACGIH Biolog	ical Exposure	Indices
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Components	Value	Determinant	Specimen	Sampling Time
2-Butanone (CAS 78-93-3)) 2 mg/l	MEK	Urine	*
4-Methyl-2-pentanone (CA 108-10-1)	S1 mg/l	Methyl isobutyl ketone	Urine	*
Acetone (CAS 67-64-1)	25 mg/l	Acetone	Urine	*
Carbon disulfide (CAS 75-15-0)	0.5 mg/g	2-Thiothiazolidi ne-4-carboxylic acid (TTCA)	Creatinine in urine	*
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*
Nitrobenzene (CAS 98-95-3)	5 %	Methemoglobin	Hemoglobin in blood	*
Tetrahydrofuran (CAS 109-99-9)	2 mg/l	Tetrahydrofura n	Urine	*

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

Exposure guidelines

US - California OELs: Skin designation

- Camornia OELS: Skin designation	
1,4-Dichloro-2-butene cis & trans (CAS 764-41-0)	Can be absorbed through the skin.
2-Hexanone (CAS 591-78-6)	Can be absorbed through the skin.
Acrylonitrile (CAS 107-13-1)	Can be absorbed through the skin.
Carbon disulfide (CAS 75-15-0)	Can be absorbed through the skin.
Hexachloroethane (CAS 67-72-1)	Can be absorbed through the skin.
Methacrylonitrile (CAS 126-98-7)	Can be absorbed through the skin.
Methanol (CAS 67-56-1)	Can be absorbed through the skin.
Methyl acrylate (CAS 96-33-3)	Can be absorbed through the skin.
Methyl iodide (CAS 74-88-4)	Can be absorbed through the skin.
Nitrobenzene (CAS 98-95-3)	Can be absorbed through the skin.
- Minnesota Haz Subs: Skin designation applies	
1,4-Dichloro-2-butene cis & trans (CAS 764-41-0)	Skin designation applies.

US -

Acrylonitrile (CAS 107-13-1) Skin designation applies. Carbon disulfide (CAS 75-15-0) Skin designation applies. Hexachloroethane (CAS 67-72-1) Skin designation applies. Methacrylonitrile (CAS 126-98-7) Skin designation applies. Methanol (CAS 67-56-1) Skin designation applies. Methyl acrylate (CAS 96-33-3)Skin designation applies.Methyl iodide (CAS 74-88-4)Skin designation applies.Nitrobenzene (CAS 98-95-3)Skin designation applies.

US - Tennessee OELs: Skin designation

Acrylonitrile (CAS 107-13-1) Can be absorbed through the skin. Carbon disulfide (CAS 75-15-0) Can be absorbed through the skin. Hexachloroethane (CAS 67-72-1) Can be absorbed through the skin. Methacrylonitrile (CAS 126-98-7) Can be absorbed through the skin. Methanol (CAS 67-56-1) Can be absorbed through the skin. Methyl acrylate (CAS 96-33-3) Can be absorbed through the skin. Methyl iodide (CAS 74-88-4) Can be absorbed through the skin. Can be absorbed through the skin. Nitrobenzene (CAS 98-95-3)

US ACGIH Threshold Limit Values: Skin designation

1,4-Dichloro-2-butene cis & trans (CAS 764-41-0) Danger of cutaneous absorption 2-Hexanone (CAS 591-78-6) Danger of cutaneous absorption Acrylonitrile (CAS 107-13-1) Danger of cutaneous absorption Carbon disulfide (CAS 75-15-0) Danger of cutaneous absorption Danger of cutaneous absorption Hexachloroethane (CAS 67-72-1) Methacrylonitrile (CAS 126-98-7) Danger of cutaneous absorption Methanol (CAS 67-56-1) Danger of cutaneous absorption Methyl acrylate (CAS 96-33-3) Danger of cutaneous absorption Methyl iodide (CAS 74-88-4) Danger of cutaneous absorption Nitrobenzene (CAS 98-95-3) Danger of cutaneous absorption Tetrahydrofuran (CAS 109-99-9) Danger of cutaneous absorption

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Acrylonitrile (CAS 107-13-1) Can be absorbed through the skin. Carbon disulfide (CAS 75-15-0) Can be absorbed through the skin. Hexachloroethane (CAS 67-72-1) Can be absorbed through the skin. Methacrylonitrile (CAS 126-98-7) Can be absorbed through the skin. Methanol (CAS 67-56-1) Can be absorbed through the skin. Methyl acrylate (CAS 96-33-3) Can be absorbed through the skin. Methyl iodide (CAS 74-88-4) Can be absorbed through the skin. Nitrobenzene (CAS 98-95-3) Can be absorbed through the skin.

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

Hexachloroethane (CAS 67-72-1)

Methyl acrylate (CAS 96-33-3)

Methyl iodide (CAS 74-88-4)

Nitrobenzene (CAS 98-95-3)

Can be absorbed through the skin.

Can be absorbed through the skin.

Can be absorbed through the skin.

Appropriate engineering

controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

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

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color Not available.

Odor Not available. **Odor threshold** Not available. Ηq Not available.

Melting point/freezing point -144.04 °F (-97.8 °C) estimated 148.46 °F (64.7 °C) estimated Initial boiling point and boiling

range

53.6 °F (12.0 °C) estimated Flash point

Evaporation rate Not available. Not applicable. Flammability (solid, gas) Upper/lower flammability or explosive limits Explosive limit - lower (%) 7.3 % estimated 36 % estimated Explosive limit - upper (%) Vapor pressure 169.3 hPa estimated

Not available. Vapor density Not available. Relative density

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

867.2 °F (464 °C) estimated **Auto-ignition temperature**

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Density 0.78721 g/cm3 estimated

Not explosive. **Explosive properties**

Flammable IB estimated Flammability class

Not oxidizing Oxidizing properties Percent volatile 99.84 % estimated 0.79 estimated Specific gravity 99.84 % estimated VOC 94.91 % estimated

10. Stability and reactivity

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

Material is stable under normal conditions. **Chemical stability** Hazardous polymerization does not occur. Possibility of hazardous

reactions

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Toxic if inhaled. May cause damage to organs by inhalation. May cause drowsiness or dizziness.

Headache. Nausea, vomiting.

Skin contact Toxic in contact with skin. Eye contact Causes serious eye irritation.

Ingestion Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Acute toxicity

Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.

Components	Species	Test Results
1,4-Dichloro-2-butene cis &	trans (CAS 764-41-0)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	620 mg/kg
Inhalation		
Vapor		
LC50	Rat	86 ppm, 4 Hours
		4.1 mg/l, 30 Minutes
Oral		
LD50	Rat	120 - 300 mg/kg
1-Chlorobutane (CAS 109-6	69-3)	
<u>Acute</u>		
Inhalation		
Aerosol	Det	. 7.74
LC50	Rat	> 7.74 mg/l, 4 Hours
Oral	Det	2.07 - 11
LD50	Rat	2.67 g/kg
2-Butanone (CAS 78-93-3)		
<u>Acute</u>		
Oral LD50	Rat	2054 mg/kg
		2004 Hig/kg
2-Hexanone (CAS 591-78-6	0)	
<u>Acute</u> Dermal		
LD50	Rabbit	4800 mg/kg
	Nabbit	4000 Hig/kg
Oral LD50	Rat	2.59 g/kg
		2.59 g/kg
2-Nitropropane (CAS 79-46	5-9)	
<u>Acute</u> Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral	, tabbit	
LD50	Rat	565 - 885 mg/kg
4-Methyl-2-pentanone (CAS		555 555 mg/kg
Acute	3 100-10-1)	
<u> Dermal</u>		
LD50	Rabbit	> 16000 mg/kg
Inhalation		3 3
LC50	-	8.2 - 16.4 mg/l, 4 Hours
Oral		5.2 · · · · · · · · · · · · · · · · · · ·
LD50	Rat	2.08 g/kg
Acetone (CAS 67-64-1)		- - 5 · · 5
Acute		
Inhalation		
Vapor		
LC50	Rat	50.1 mg/l, 4 Hours
Oral		•
LD50	Rat	5800 mg/kg

Material name: EPA Method 524.4 Purgeable Organic Compounds Mixture M-EPA5244POCN1 Version #: 01 Issue date: 05-06-2022

Components **Species Test Results** Acrylonitrile (CAS 107-13-1) **Acute** Dermal LD50 Rat 148 mg/kg Inhalation Vapor LC50 Various 200 mg/m3, 4 Hours Oral LD50 Rat 78 mg/kg Carbon disulfide (CAS 75-15-0) **Acute** Inhalation LC50 690 mg/m3, 1 Hours Chloroacetonitrile (CAS 107-14-2) **Acute** Oral LD50 Rat 220 mg/kg Ethyl ether (CAS 60-29-7) **Acute Dermal** LD50 Rabbit > 20000 mg/kg, 24 Hours Oral LD50 Rat 1200 mg/kg Ethyl methacrylate (CAS 97-63-2) **Acute Dermal** LD50 Rabbit > 9.1 g/kg Inhalation LC50 Rat 55 mg/l, 4 Hours Oral LD50 Rat 13420 mg/kg Hexachloroethane (CAS 67-72-1) **Acute Dermal** LD50 Rabbit > 32000 mg/kg Oral LD50 Rat 4460 mg/kg Hydroquinone (CAS 123-31-9) **Acute Dermal** LD50 Rat > 900 mg/kg Oral LD50 Rat 300 - 600 mg/kg Methacrylonitrile (CAS 126-98-7) **Acute Dermal** LD50 Rabbit 0.32 - 0.35 mg/kg Oral LD50 Rat 64 mg/kg

Species Test Results Components Methanol (CAS 67-56-1) **Acute** Dermal LD50 Rabbit 15800 mg/kg Inhalation Vapor LC50 Rat 82.1 mg/l, 6 Hours Methyl acrylate (CAS 96-33-3) **Acute Dermal** LD50 Rabbit > 190 mg/kg, 24 Hours Inhalation Vapor LC50 Rat 1.3 - 1.8 mg/l, 4 Hours Oral LD50 Rat 300 mg/kg Methyl iodide (CAS 74-88-4) **Acute** Inhalation LC50 1300 mg/m3, 4 Hours Oral LD50 Rat 76 mg/kg Methyl methacrylate (CAS 80-62-6) **Acute Dermal** LD50 Rabbit > 5000 mg/kg, 24 Hours Inhalation Vapor LC50 Rat 29.8 mg/l, 4 Hours Oral LD50 Rat 7800 mg/kg Nitrobenzene (CAS 98-95-3) **Acute** Dermal LD50 Rabbit 760 mg/kg, 24 Hours Pentachloroethane (CAS 76-01-7) **Acute** Oral Rat LD50 920 mg/kg Propionitrile (CAS 107-12-0) **Acute** Oral LD50 Rat 39 mg/kg tert-Butyl methyl ether (CAS 1634-04-4) **Acute Dermal** LD50 Rat > 2000 mg/kg Inhalation LC50 Rat 85 mg/l, 4 Hours

Species Test Results Components

Oral

LD50 Rat > 2000 mg/kg

Tetrahydrofuran (CAS 109-99-9)

Acute **Dermal**

LD50 Rat > 2000 mg/kg, 24 Hours

Inhalation

LC50 Rat > 14.7 mg/l, 6 Hours

Oral

LD50 Rat 1.65 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

ACGIH sensitization

Hydroquinone (CAS 123-31-9) Dermal sensitization Methyl acrylate (CAS 96-33-3) Dermal sensitization Methyl methacrylate (CAS 80-62-6) Dermal sensitization

Respiratory sensitization Not a respiratory sensitizer.

This product is not expected to cause skin sensitization. Skin sensitization

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Nitropropane (CAS 79-46-9) 2B Possibly carcinogenic to humans. 2B Possibly carcinogenic to humans. 4-Methyl-2-pentanone (CAS 108-10-1) Acrylonitrile (CAS 107-13-1) 2B Possibly carcinogenic to humans.

Chloroacetonitrile (CAS 107-14-2) 3 Not classifiable as to carcinogenicity to humans. Ethyl ether (CAS 60-29-7) 3 Not classifiable as to carcinogenicity to humans.

Hexachloroethane (CAS 67-72-1) 2B Possibly carcinogenic to humans.

Hydroquinone (CAS 123-31-9) 3 Not classifiable as to carcinogenicity to humans.

Methyl acrylate (CAS 96-33-3) 2B Possibly carcinogenic to humans.

Methyl iodide (CAS 74-88-4) 3 Not classifiable as to carcinogenicity to humans. Methyl methacrylate (CAS 80-62-6) 3 Not classifiable as to carcinogenicity to humans.

Nitrobenzene (CAS 98-95-3) 2B Possibly carcinogenic to humans.

Pentachloroethane (CAS 76-01-7) 3 Not classifiable as to carcinogenicity to humans. tert-Butyl methyl ether (CAS 1634-04-4) 3 Not classifiable as to carcinogenicity to humans.

2B Possibly carcinogenic to humans. Tetrahydrofuran (CAS 109-99-9)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Acrylonitrile (CAS 107-13-1) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

2-Nitropropane (CAS 79-46-9) Reasonably Anticipated to be a Human Carcinogen. Acrylonitrile (CAS 107-13-1) Reasonably Anticipated to be a Human Carcinogen. Hexachloroethane (CAS 67-72-1) Reasonably Anticipated to be a Human Carcinogen. Nitrobenzene (CAS 98-95-3) Reasonably Anticipated to be a Human Carcinogen.

May damage fertility or the unborn child. Reproductive toxicity

Specific target organ toxicity -

single exposure

Causes damage to organs. May cause drowsiness or dizziness.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Not an aspiration hazard. **Aspiration hazard**

Chronic effects Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated

exposure.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
1-Chlorobutane (CAS 10	09-69-3)		
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	3020 mg/l, 48 hours
2-Butanone (CAS 78-93	3-3)		
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	>= 4025 - <= 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours
2-Hexanone (CAS 591-7	78-6)		
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	428 mg/l, 96 hours
2-Nitropropane (CAS 79	9-46-9)		
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	< 210 mg/l, 96 hours
4-Methyl-2-pentanone (0	CAS 108-10-1)		
Aquatic			
Acute	1.050	E (I) (D: 1)	
Fish	LC50	Fathead minnow (Pimephales promelas)	>= 492 - <= 593 mg/l, 96 nours
Acetone (CAS 67-64-1)			
Aquatic			
Acute	F050	M-4	10004 1 47704 1 40 b
Crustacea	EC50	Water flea (Daphnia magna)	>= 10294 - <= 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	>= 4740 - <= 6330 mg/l, 96 hours
Acrylonitrile (CAS 107-1	3-1)		
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	7.38 mg/l, 48 hours
Fish	LC50	Grass carp, white amur (Ctenopharyngodon idella)	5.38 mg/l, 96 hours
Carbon disulfide (CAS 7	' 5-15-0)		
Aquatic			
Acute	1.0-0	0 (0 111 11 11 11	
Fish	LC50	Guppy (Poecilia reticulata)	>= 3 - <= 5.8 mg/l, 96 hours
Chloroacetonitrile (CAS	107-14-2)		
Aquatic			
Acute	1.050	Eathered with a con (D)	. 445 . 450 . ".00"
Fish	LC50	Fathead minnow (Pimephales promelas)	>= 1.15 - <= 1.58 mg/l, 96 hours
Ethyl ether (CAS 60-29-	·7)		
Aquatic			
Acute	1.050		0500 # 001
Fish	LC50	Fathead minnow (Pimephales promelas)	2560 mg/l, 96 hours

Material name: EPA Method 524.4 Purgeable Organic Compounds Mixture M-EPA5244POCN1 Version #: 01 Issue date: 05-06-2022

Components		Species	Test Results
Hexachloroethane (CAS 67-	72-1)		
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	>= 1.6 - <= 2.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	>= 0.727 - <= 1.92 mg/l, 96 hours
Hydroquinone (CAS 123-31-	9)		
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	>= 0.12 - <= 0.15 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.044 mg/l, 96 hours
Methanol (CAS 67-56-1)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Methyl methacrylate (CAS 80	0-62-6)		
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	130 mg/l, 96 hours
Nitrobenzene (CAS 98-95-3)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	>= 25.6 - <= 42 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	>= 36 - <= 49 mg/l, 96 hours
Pentachloroethane (CAS 76-	01-7)		
Aquatic			
Acute	E050	Material (Devilenia espera)	5 5 mm/l 40 haves
Crustacea	EC50	Water flea (Daphnia magna)	>= 4 - <= 5.5 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	>= 6 - <= 8.4 mg/l, 96 hours
Propionitrile (CAS 107-12-0)			
Aquatic			
Acute	1.050	E-thduring on (Discouled by 1)	1450 4 4500 mm/l 00 h
Fish	LC50	Fathead minnow (Pimephales promelas)	>= 1450 - <= 1580 mg/i, 96 nours
tert-Butyl methyl ether (CAS	1634-04-4)		
Aquatic			
<i>Acute</i> Fish	LC50	Fathead minnow (Pimephales promelas)	672 mg/l 96 hours
Tetrahydrofuran (CAS 109-9		r autoad minitow (r intepriales profiletas)	or z mg/i, ao nouis
Aquatic	ਹ - ਹ)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	>= 1970 - <= 2360 mg/l. 96 hours
		vailable on the degradability of any ingredier	-
sistence and degradability accumulative potential	NO data is a	valiable of the degradability of any ingredier	ins in the mixture.
		. Kana	
Partition coefficient n-octa 1-Chlorobutane	noi / water (log	2.39	
2-Butanone		0.29	
2-Hexanone		1.38	
2-Nitropropane		0.93 1.31	
4-Methyl-2-pentanone Acetone		-0.24	

Partition coefficient n-octanol / water (log Kow)

Acrylonitrile	0.25
Carbon disulfide	1.94
Chloroacetonitrile	0.45
Ethyl ether	0.89
Ethyl methacrylate	1.94
Hexachloroethane	4.14
Hydroquinone	0.59
Methacrylonitrile	0.68
Methanol	-0.77
Methyl acrylate	0.8
Methyl iodide	1.51
Methyl methacrylate	1.38
Nitrobenzene	1.85
Pentachloroethane	3.22
Propionitrile	0.16
tert-Butyl methyl ether	0.94
Tetrahydrofuran	0.46

No data available. Mobility in soil

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation

0.05

potential.

13. Disposal considerations

Dispose of this material and its container to hazardous or special waste collection point. Incinerate **Disposal instructions**

the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of

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

Local disposal regulations Dispose in accordance with all applicable regulations.

D001: Waste Flammable material with a flash point <140 F Hazardous waste code

D034: Waste Hexachloroethane D036: Waste Nitrobenzene

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

US RCRA Hazardous Waste P List: Reference

Carbon disulfide (CAS 75-15-0) P022 Propionitrile (CAS 107-12-0) P101

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN1230 **UN** number

UN proper shipping name Methanol, solution (Methanol RQ = 5275 LBS)

Transport hazard class(es)

Class 3 Subsidiary risk 3 Label(s) Ш Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions IB2, T7, TP2

Packaging exceptions 150 Packaging non bulk 202 242 Packaging bulk

IATA

UN1230 **UN** number

Methanol solution (Methanol) **UN proper shipping name**

Transport hazard class(es) 3 Class

Subsidiary risk 6.1 Packing group П **Environmental hazards** No. **ERG Code** 3L

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed with restrictions.

Not established.

Allowed with restrictions. Cargo aircraft only

IMDG

UN1230 **UN** number

UN proper shipping name METHANOL SOLUTION (Methanol)

Transport hazard class(es)

3 Class Subsidiary risk 6.1 Packing group Ш **Environmental hazards**

Marine pollutant No. F-E, S-D **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

DOT



IATA; IMDG



15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US federal regulations**

Standard, 29 CFR 1910,1200.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated "active".

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

2-Hexanone (CAS 591-78-6) 1.0 % One-Time Export Notification only. Pentachloroethane (CAS 76-01-7) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

1,4-Dichloro-2-butene cis & trans (CAS 764-41-0) Listed. 1-Chlorobutane (CAS 109-69-3) Listed. 2-Butanone (CAS 78-93-3) Listed. 2-Hexanone (CAS 591-78-6) Listed. 2-Nitropropane (CAS 79-46-9) Listed.

4-Methyl-2-pentanone (CAS 108-10-1)	Listed.
Acetone (CAS 67-64-1)	Listed.
Acrylonitrile (CAS 107-13-1)	Listed.
Carbon disulfide (CAS 75-15-0)	Listed.
Ethyl ether (CAS 60-29-7)	Listed.
Ethyl methacrylate (CAS 97-63-2)	Listed.
Hexachloroethane (CAS 67-72-1)	Listed.
Hydroquinone (CAS 123-31-9)	Listed.
Methacrylonitrile (CAS 126-98-7)	Listed.
Methanol (CAS 67-56-1)	Listed.
Methyl acrylate (CAS 96-33-3)	Listed.
Methyl iodide (CAS 74-88-4)	Listed.
Methyl methacrylate (CAS 80-62-6)	Listed.
Nitrobenzene (CAS 98-95-3)	Listed.
Pentachloroethane (CAS 76-01-7)	Listed.
Propionitrile (CAS 107-12-0)	Listed.
tert-Butyl methyl ether (CAS 1634-04-4)	Listed.
Tetrahydrofuran (CAS 109-99-9)	Listed.

SARA 304 Emergency release notification

2-Propenenitrile (CAS 107-13-1) 100 LBS 2-Propenenitrile, 2-methyl- (CAS 126-98-7) 1000 LBS Carbon disulfide (CAS 75-15-0) 100 LBS Ethyl cyanide (CAS 107-12-0) 10 LBS Hydroquinone (CAS 123-31-9) 100 LBS Nitrobenzene (CAS 98-95-3) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Acrylonitrile (CAS 107-13-1) Cancer

Central nervous system

Liver

Skin sensitization Skin irritation Respiratory irritation Eye irritation Acute toxicity

Flammability

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Hydroquinone	123-31-9	100		500	10000
Acrylonitrile	107-13-1	100	10000		
Carbon disulfide	75-15-0	100	10000		
Methacrylonitrile	126-98-7	1000	500		
Nitrobenzene	98-95-3	1000	10000		
Propionitrile	107-12-0	10	500		
- 10β101111110 SΔRΔ 311/312 Hazai					

SARA 311/312 Hazardous

chemical

Classified hazard Flammable (gases, aerosols, liquids, or solids) categories

Acute toxicity (any route of exposure) Serious eye damage or eye irritation

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

Hazard not otherwise classified (HNOC)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Methanol	67-56-1	94.79

Other federal regulations

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

2-Nitropropane (CAS 79-46-9)

4-Methyl-2-pentanone (CAS 108-10-1)

Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS 75-15-0) Hexachloroethane (CAS 67-72-1) Hydroquinone (CAS 123-31-9) Methanol (CAS 67-56-1) Methyl iodide (CAS 74-88-4) Methyl methacrylate (CAS 80-62-6) Nitrobenzene (CAS 98-95-3)

tert-Butyl methyl ether (CAS 1634-04-4)

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

Acrylonitrile (CAS 107-13-1) Carbon disulfide (CAS 75-15-0) Ethyl ether (CAS 60-29-7) Methacrylonitrile (CAS 126-98-7) Propionitrile (CAS 107-12-0)

Safe Drinking Water Act

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

(SDWA)

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

2-Butanone (CAS 78-93-3) 6714 4-Methyl-2-pentanone (CAS 108-10-1) 6715 Acetone (CAS 67-64-1) 6532 Ethyl ether (CAS 60-29-7) 6584

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

2-Butanone (CAS 78-93-3) 35 %WV 4-Methyl-2-pentanone (CAS 108-10-1) 35 %WV Acetone (CAS 67-64-1) 35 %WV Ethyl ether (CAS 60-29-7) 35 %WV

DEA Exempt Chemical Mixtures Code Number

2-Butanone (CAS 78-93-3) 6714 4-Methyl-2-pentanone (CAS 108-10-1) 6715 Acetone (CAS 67-64-1) 6532 Ethyl ether (CAS 60-29-7) 6584

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

2-Butanone (CAS 78-93-3) Low priority 4-Methyl-2-pentanone (CAS 108-10-1) Low priority Acetone (CAS 67-64-1) Low priority Methyl methacrylate (CAS 80-62-6) Low priority

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

1,4-Dichloro-2-butene cis & trans (CAS 764-41-0)

2-Butanone (CAS 78-93-3)

2-Hexanone (CAS 591-78-6)

2-Nitropropane (CAS 79-46-9)

4-Methyl-2-pentanone (CAS 108-10-1)

Acetone (CAS 67-64-1)

Acrylonitrile (CAS 107-13-1)

Ethyl ether (CAS 60-29-7)

Hexachloroethane (CAS 67-72-1)

Methanol (CAS 67-56-1)

Methyl acrylate (CAS 96-33-3)

Methyl methacrylate (CAS 80-62-6)

Nitrobenzene (CAS 98-95-3)

tert-Butyl methyl ether (CAS 1634-04-4)

Tetrahydrofuran (CAS 109-99-9)

California Proposition 65



WARNING: This product can expose you to chemicals including 4-Methyl-2-pentanone, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-Dichloro-2-butene cis & trans (CAS 764-41-0) Listed: January 1, 1990 2-Nitropropane (CAS 79-46-9)
Listed: January 1, 1988
4-Methyl-2-pentanone (CAS 108-10-1)
Listed: November 4, 2011
Listed: July 1, 1987
Hexachloroethane (CAS 67-72-1)
Listed: July 1, 1990
Methyl iodide (CAS 74-88-4)
Nitrobenzene (CAS 98-95-3)
Listed: August 26, 1997

California Proposition 65 - CRT: Listed date/Developmental toxin

 2-Hexanone (CAS 591-78-6)
 Listed: December 4, 2015

 4-Methyl-2-pentanone (CAS 108-10-1)
 Listed: March 28, 2014

 Carbon disulfide (CAS 75-15-0)
 Listed: July 1, 1989

 Methanol (CAS 67-56-1)
 Listed: March 16, 2012

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

Carbon disulfide (CAS 75-15-0) Listed: July 1, 1989

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

Inventory name

 2-Hexanone (CAS 591-78-6)
 Listed: August 7, 2009

 Carbon disulfide (CAS 75-15-0)
 Listed: July 1, 1989

 Nitrobenzene (CAS 98-95-3)
 Listed: March 30, 2010

International Inventories

Australia

Country(s) or region

Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes

Australian Inventory of Industrial Chemicals (AICIS)

(PICCS)

TaiwanTaiwan Chemical Substance Inventory (TCSI)YesUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

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

Issue date 05-06-2022

Version # 01

NFPA ratings Health: 4

Flammability: 3 Instability: 0

Material name: EPA Method 524.4 Purgeable Organic Compounds Mixture M-EPA5244POCN1 Version #: 01 Issue date: 05-06-2022

On inventory (yes/no)*

Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Disclaimer

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