

# NO. 7

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
 Issue date: 8/17/2023 Revision date: 8/22/2023 Supersedes: 8/17/2023 Version: 1.1

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
 Trade name : NO. 7

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

##### Manufacturer

RectorSeal, LLC  
 2601 Spenwick Drive  
 Houston, Texas 77055  
 USA  
 T (800)-231-3345 or (713)263-8001  
[www.rectorseal.com](http://www.rectorseal.com)

#### 1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week  
 Within USA and Canada: 1.800.424.9300  
 Outside USA and Canada: +1.703.527.3887  
 (collect calls accepted)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Respiratory sensitization, Category 1	H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Carcinogenicity Category 1B	H350	May cause cancer
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H226 - Flammable liquid and vapor  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled  
 H336 - May cause drowsiness or dizziness  
 H350 - May cause cancer  
 H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US)

: P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233 - Keep container tightly closed.  
 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.  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

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P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P272 - Contaminated work clothing must not be allowed out of the workplace.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P284 - [In case of inadequate ventilation] wear respiratory protection.  
P302+P352 - If on skin: Wash with plenty of water.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
P304+P341 - If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - If exposed or concerned: Get medical advice/attention.  
P312 - Call a poison center or doctor if you feel unwell.  
P314 - Get medical advice/attention if you feel unwell.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.  
P363 - Wash contaminated clothing before reuse.  
P370+P378 - In case of fire: Use media other than water to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
ethyl acetate	CAS-No.: 141-78-6	20 – 40	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
4-hydroxy-4-methyl-2-pentanone	CAS-No.: 123-42-2	17.2161 – 17.39	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:vapour), H331 Eye Irrit. 2, H319
4,4'-Diphenylmethane Diisocyanate	CAS-No.: 101-68-8	2.8444512 – 4.740752	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
2,4-Toluene Diisocyanate	CAS-No.: 584-84-9	0.255553903 44 – 0.425923172 4	Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 3, H335

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Name	Product identifier	%	GHS US classification
2,6-Toluene Diisocyanate	CAS-No.: 91-08-7	0.063888475 86 – 0.106480793 1	Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: If exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures

: Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ground/bond container and receiving equipment.

Storage conditions

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

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>NO. 7</b>	
No additional information available	
<b>2,4-Toluene Diisocyanate (584-84-9)</b>	
No additional information available	
<b>2,6-Toluene Diisocyanate (91-08-7)</b>	
No additional information available	
<b>4,4'-Diphenylmethane Diisocyanate (101-68-8)</b>	
No additional information available	
<b>ethyl acetate (141-78-6)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Ethyl acetate
ACGIH OEL TWA [ppm]	400 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr
Regulatory reference	ACGIH 2021
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Ethyl acetate
OSHA PEL (TWA) [1]	1400 mg/m <sup>3</sup>
OSHA PEL (TWA) [2]	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Diacetone alcohol
ACGIH OEL TWA [ppm]	50 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr
Regulatory reference	ACGIH 2021

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4-hydroxy-4-methyl-2-pentanone (123-42-2)				
<b>USA - OSHA - Occupational Exposure Limits</b>				
Local name	Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)			
OSHA PEL (TWA) [1]	240 mg/m <sup>3</sup>			
OSHA PEL (TWA) [2]	50 ppm			
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1			
<b>8.2. Appropriate engineering controls</b>				
Appropriate engineering controls	: Ensure good ventilation of the work station.			
Environmental exposure controls	: Avoid release to the environment.			
<b>8.3. Individual protection measures/Personal protective equipment</b>				
<b>Materials for protective clothing:</b>				
Wear protective clothing				
<b>Hand protection:</b>				
Neoprene or nitrile rubber gloves				
<b>Type</b>	<b>Material</b>	<b>Permeation</b>	<b>Thickness (mm)</b>	<b>Penetration</b>
Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	> 0.6 mm	
<b>Eye protection:</b>				
Wear eye protection				
<b>Skin and body protection:</b>				
Wear suitable protective clothing				
<b>Respiratory protection:</b>				
No respiratory protection needed under normal use conditions				

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Pasty liquid.
Color	: Black
Odor	: Mild odor
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: 161 °C @ 760 mmHg
Boiling point	: No data available
Flash point	: 25 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 0.3 @ 20°C
Relative vapor density at 20°C	: 1.1
Relative density	: No data available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: > 23 mm <sup>2</sup> /s
Viscosity, dynamic	: No data available

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Explosion limits : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available

### 9.2. Other information

VOC content : 28 % Theoretical value

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapor.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### 2,4-Toluene Diisocyanate (584-84-9)

ATE US (dust, mist)	0.05 mg/l/4h
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#### 2,6-Toluene Diisocyanate (91-08-7)

ATE US (dust, mist)	0.05 mg/l/4h
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#### 4,4'-Diphenylmethane Diisocyanate (101-68-8)

ATE US (dust, mist)	1.5 mg/l/4h
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#### ethyl acetate (141-78-6)

LD50 oral rat	10200 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)
LD50 oral	4940 mg/kg
LD50 dermal rabbit	> 20000 mg/kg body weight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat (Vapours)	49.9 mg/l/4h
ATE US (oral)	4940 mg/kg body weight
ATE US (vapors)	49.9 mg/l/4h

#### 4-hydroxy-4-methyl-2-pentanone (123-42-2)

LD50 oral rat	3002 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2738 - 3290
LD50 oral	4000 mg/kg
LD50 dermal rat	> 1875 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 1875 mg/kg Source: ECHA
LC50 Inhalation - Rat (Vapours)	≥ 7.6 mg/l Source: ECHA
ATE US (oral)	3002 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight

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<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
ATE US (vapors)	3 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
<b>2,4-Toluene Diisocyanate (584-84-9)</b>	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
<b>2,6-Toluene Diisocyanate (91-08-7)</b>	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
<b>4,4'-Diphenylmethane Diisocyanate (101-68-8)</b>	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
<b>2,4-Toluene Diisocyanate (584-84-9)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>2,6-Toluene Diisocyanate (91-08-7)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>4,4'-Diphenylmethane Diisocyanate (101-68-8)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>ethyl acetate (141-78-6)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
<b>4,4'-Diphenylmethane Diisocyanate (101-68-8)</b>	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
<b>ethyl acetate (141-78-6)</b>	
LOAEL (oral,rat,90 days)	3600 mg/kg body weight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
NOAEL (oral,rat,90 days)	900 mg/kg body weight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
LOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation,rat,vapor,90 days)	≥ 4.106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
Aspiration hazard	: Not classified
Viscosity, kinematic	: > 23 mm <sup>2</sup> /s
<b>ethyl acetate (141-78-6)</b>	
Viscosity, kinematic	0.489 mm <sup>2</sup> /s (25 °C)

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<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
Viscosity, kinematic	1.966 mm <sup>2</sup> /s
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
<b>SECTION 12: Ecological information</b>	
<b>12.1. Toxicity</b>	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
<b>ethyl acetate (141-78-6)</b>	
LC50 - Fish [1]	230 mg/l
EC50 - Crustacea [1]	2500 mg/l
NOEC (chronic)	2.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
<b>12.2. Persistence and degradability</b>	
<b>ethyl acetate (141-78-6)</b>	
Not rapidly degradable	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.293 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.69 g O <sub>2</sub> /g substance
ThOD	1.82 g O <sub>2</sub> /g substance
<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.07 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.11 g O <sub>2</sub> /g substance
ThOD	2.21 g O <sub>2</sub> /g substance
<b>12.3. Bioaccumulative potential</b>	
<b>ethyl acetate (141-78-6)</b>	
BCF - Fish [1]	30 (3 day(s), Leuciscus idus, Static system, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
Partition coefficient n-octanol/water (Log Pow)	1.9 (Read-across, Equivalent or similar to OECD 117)

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4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Mobility in soil	
ethyl acetate (141-78-6)	
Surface tension	0.024 N/m (20 °C)
Ecology - soil	Low potential for adsorption in soil.
4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Ecology - soil	Low potential for adsorption in soil.
12.5. Other adverse effects	
No additional information available	

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	: Flammable vapors may accumulate in the container.

### SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
1993	UN1993	1993	1993
14.2. Proper Shipping Name			
Flammable liquids, n.o.s. (MIXTURE)	FLAMMABLE LIQUID, N.O.S. (MIXTURE)	FLAMMABLE LIQUID, N.O.S. (MIXTURE)	Flammable liquid, n.o.s. (MIXTURE)
Transport document description			
UN1993 Flammable liquids, n.o.s. (MIXTURE), 3, III	UN1993 FLAMMABLE LIQUID, N.O.S. (MIXTURE), 3, III	UN 1993 FLAMMABLE LIQUID, N.O.S. (MIXTURE), 3, III	UN 1993 Flammable liquid, n.o.s. (MIXTURE), 3, III
14.3. Transport hazard class(es)			
3	3	3	3
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			

#### 14.6. Special precautions for user

##### DOT

UN-No.(DOT) : UN1993

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DOT Special Provisions (49 CFR 172.102)	: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

### TDG

UN-No. (TDG)	: UN1993
TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan). SOR-2019-101
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 60 L
Emergency Response Guide (ERG) Number	: 128

### IMDG

Special provision (IMDG)	: 223, 274, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001

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IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG)	: A

### IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provision (IATA)	: A3
ERG code (IATA)	: 3L

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

2,4-Toluene Diisocyanate	CAS-No. 584-84-9	0.25555390344 – 0.4259231724%
2,6-Toluene Diisocyanate	CAS-No. 91-08-7	0.06388847586 – 0.1064807931%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

2,4-Toluene Diisocyanate	CAS-No. 584-84-9	0.25555390344 – 0.4259231724%
2,6-Toluene Diisocyanate	CAS-No. 91-08-7	0.06388847586 – 0.1064807931%
4,4'-Diphenylmethane Diisocyanate	CAS-No. 101-68-8	2.8444512 – 4.740752%

### 2,4-Toluene Diisocyanate (584-84-9)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

### 2,6-Toluene Diisocyanate (91-08-7)

CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	100 lb

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<b>4,4'-Diphenylmethane Diisocyanate (101-68-8)</b>	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	5000 lb

<b>ethyl acetate (141-78-6)</b>	
CERCLA RQ	5000 lb

### 15.2. International regulations

#### CANADA

<b>2,4-Toluene Diisocyanate (584-84-9)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

<b>2,6-Toluene Diisocyanate (91-08-7)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

<b>4,4'-Diphenylmethane Diisocyanate (101-68-8)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

<b>ethyl acetate (141-78-6)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

#### EU-Regulations

<b>2,4-Toluene Diisocyanate (584-84-9)</b>	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

<b>2,6-Toluene Diisocyanate (91-08-7)</b>	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

<b>4,4'-Diphenylmethane Diisocyanate (101-68-8)</b>	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

<b>ethyl acetate (141-78-6)</b>	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

<b>4-hydroxy-4-methyl-2-pentanone (123-42-2)</b>	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

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### National regulations

#### 2,4-Toluene Diisocyanate (584-84-9)

Listed as carcinogen on NTP (National Toxicology Program)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

#### 2,6-Toluene Diisocyanate (91-08-7)

Listed as carcinogen on NTP (National Toxicology Program)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

#### 4,4'-Diphenylmethane Diisocyanate (101-68-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

#### ethyl acetate (141-78-6)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

#### 4-hydroxy-4-methyl-2-pentanone (123-42-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

### 15.3. US State regulations

 **WARNING:** This product can expose you to Methyl isobutyl ketone, 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](http://www.P65Warnings.ca.gov).

Component	State or local regulations
2,4-Toluene Diisocyanate(584-84-9)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New Jersey - TCPA - Extraordinarily Hazardous Substances (EHS); U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
2,6-Toluene Diisocyanate(91-08-7)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

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Component	State or local regulations
4,4'-Diphenylmethane Diisocyanate(101-68-8)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
ethyl acetate(141-78-6)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Methyl isobutyl ketone(108-10-1)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
4-hydroxy-4-methyl-2-pentanone(123-42-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
graphite(7782-42-5)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
quartz, 1%≤conc respirable crystalline silica<10%(14808-60-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
talc(14807-96-6)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
magnesium carbonate(546-93-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List

### SECTION 16: Other information

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Revision date

: 8/22/2023

Full text of H-phrases	
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.