# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 09/16/2013 :

Version:

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixtures

Product name. : TECH SELECT POE OIL CHARGE 6/4oz

Product code : 40059026

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : FOLLOW LABEL DIRECTIONS

#### 1.3. Details of the supplier of the safety data sheet

FOUR SEASONS MFG CO. 1801 WATERS RIDGE DR. LEWISVILLE, TX 75057

### 1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300

# **SECTION 2: Hazards identification**

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

### Classification (GHS-US)

Compressed gas H280

### 2.2. Label elements

### **GHS-US** labeling

Hazard pictograms (GHS-US)



GHS04

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H280 - Contains gas under pressure; may explode if heated

Precautionary statements (GHS-US) : P410+P403 - Protect from sunlight. Store in a well-ventilated place

P251 - Pressurized container: Do not pierce or burn, even after use P412 - Do not expose to temperatures exceeding 50℃ / 122℃

### 2.3. Other hazards

Other hazards not contributing to the classification

: Contact with liquid may cause cold burns/frostbite. Contains gas under pressure; may explode if

heated.

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

No data available

### **SECTION 3: Composition/information on ingredients**

# 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification (GHS-US)
1,1,1,2-tetrafluoroethane	(CAS No) 811-97-2	50 - 70	Compressed gas, H280
Zerol Ester 68	(CAS No) Proprietary	30 - 50	Not classified
PROPRIETARY INHIBITOR PACKAGE	(CAS No) Proprietary	5 - 10	Not classified

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by

warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : NFPA Aerosol Level 1.

### **SECTION 6: Accidental release measures**

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

### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

# 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of

vapor.

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

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container

closed when not in use.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

Storage area : Store in a well-ventilated place.

# 7.3. Specific end use(s)

Follow Label Directions.

# SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

# **SECTION 9: Physical and chemical properties**

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

Physical state : Gas

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Appearance : Gas.

Molecular mass : 102.03 g/mol
Color : Colourless.
Odor : Ether-like odour.
Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available

Melting point : -101 ℃

Freezing point : No data available

Boiling point : -26 ℃ LOWEST COMPONENT

Flash point : > 149  $^{\circ}$  C Critical temperature : 101  $^{\circ}$  Self ignition temperature : > 743  $^{\circ}$  Decomposition temperature : 368  $^{\circ}$  C

Flammability (solid, gas)

Vapor pressure

Critical pressure

Relative vapor density at 20 ℃

Relative density

Solution (2.27 ℃)

Page 14.000 kg (2.34 € 2.75 € 1.25 € 1

Density : 1206 kg/m³ (-27 °C)

Solubility : Poorly soluble in water. Soluble in ethanol. Soluble in ether. Soluble in hexane.

Water: 0.15 g/100ml (25 ℃)

Log Pow : 1.06 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

VOC content : 0 %

Gas group : Compressed gas

### SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

# 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

# 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

# 10.5. Incompatible materials

Strong acids. Strong bases.

# 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity : Not classified

1,1,1,2-tetrafluoroethane (811-97-2)		
LC50 inhalation rat (mg/l)	> 2000 mg/l/4h (Rat)	
LC50 inhalation rat (ppm)	> 359300 ppm/4h (Rat)	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
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Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classifiedBased on available data, the classification criteria are not met

Carcinogenicity : Not classified

Reproductive toxicity : Not classifiedBased on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classifiedBased on available data, the classification criteria are not met

Aspiration hazard : Not classifiedBased on available data, the classification criteria are not met

Potential Adverse human health effects and : Based on available data, the classification criteria are not met.

symptoms

# **SECTION 12: Ecological information**

### 12.1. Toxicity

1,1,1,2-tetrafluoroethane (811-97-2)	
LC50 fish 1	450 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	980 mg/l (48 h; Daphnia magna)

# 12.2. Persistence and degradability

TECH SELECT POE OIL CHARGE 6/4oz	
Persistence and degradability	Not established.

# Zerol Ester 68 (Proprietary)

Persistence and degradability Not established.

# PROPRIETARY INHIBITOR PACKAGE (Proprietary)

Persistence and degradability Not established.

# 1,1,1,2-tetrafluoroethane (811-97-2)

Persistence and degradability

Not readily biodegradable in water.

# 12.3. Bioaccumulative potential

TECH SELECT POE OIL CHARGE 6/4oz		
Log Pow		1.06 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative poter	ntial	Not established.

# Zerol Ester 68 (Proprietary)

Bioaccumulative potential Not established.

# PROPRIETARY INHIBITOR PACKAGE (Proprietary)

Bioaccumulative potential Not established.

### 1,1,1,2-tetrafluoroethane (811-97-2)

BCF other aquatic organisms 1	5 - 58 (Estimated value)
Log Pow	1.06 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

No additional information available

# 12.5. Other adverse effects

Other information : Avoid release to the environment.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

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### **SECTION 14: Transport information**

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

US DOT (ground): UN1078, Refrigerant gases, n.o.s., 2.2, Limited Quantity ICAO/IATA (air): UN1078, Refrigerant gases, n.o.s., 2.2, Limited Quantity IMO/IMDG (water): UN1078, Refrigerant gases, n.o.s., 2, Limited Quantity

Special Provisions: T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the applicable liquefied

compressed gases are authorized to be transported in portable tanks in accordance with the requirements of 173.313 of

this subchapter.

### **UN proper shipping name**

DOT Proper Shipping Name : Refrigerant gases, n.o.s.

Department of Transportation (DOT) Hazard

: 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115

Hazard labels (DOT) : 2.2 - Non-flammable compressed gas



**DOT Symbols** : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the

applicable liquefied compressed gases are authorized to be transported in portable tanks in accordance with the requirements of 173.313 of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) : 304 DOT Packaging Bulk (49 CFR 173.xxx) : 314;315

### 14.3. Additional information

Other information : No supplementary information available.

### **Overland transport**

No additional information available

### Transport by sea

**DOT Vessel Stowage Location** : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 75 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

CFR 175.75)

# **SECTION 15: Regulatory information**

# 15.1. US Federal regulations

TECH SELECT POE OIL CHARGE 6/4oz	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Sudden release of pressure hazard

# 1.1.1.2-tetrafluoroethane (811-97-2)

	1, 1, 1, 1, 1 to 1 to 1 to 1 to 1 to 1 t	
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
	SARA Section 311/312 Hazard Classes	mediate (acute) health hazard idden release of pressure hazard

### 15.2. International regulations

# **CANADA**

TECH SELECT POE OIL CHARGE 6/4oz	
WHMIS Classification	Class A - Compressed Gas

### **EU-Regulations**

No additional information available

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Classification according to Regulation (EC) No. 1272/2008 [CLP]

### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

### 15.2.2. National regulations

No additional information available

# 15.3. US State regulations

No additional information available

# **SECTION 16: Other information**

Indication of changes : Revision - See : \*.

Other information : None.

Full text of H-phrases: see section 16:

Compressed gas	Gases under pressure Compressed gas
H280	Contains gas under pressure; may explode if heated

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

incapacitation or possible residual injury unless prompt

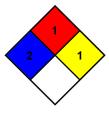
medical attention is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated

temperatures and pressures or may react with water with

some release of energy, but not violently.



# **HMIS III Rating**

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 1 Slight Hazard
Physical : 2 Moderate Hazard

SDS US (GHS HazCom 2012) - Technical Chemical

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compilance with the above. The date of manufacture is stamped on the product

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