according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

#### **SECTION 1. IDENTIFICATION**

Product name : POE OIL 68 FOR 1234YF, 237 mL

Product code : 892.764831

Other means of identification : No data available

Manufacturer or supplier's details

Company name of supplier : Würth Canada Limited/Limitée

Address : 345 Hanlon Creek Blvd

GUELPH, ON N1C 0A1

Telephone : 1-800-263-5002

Telefax : 1-905-564-3671

Emergency telephone : Emergencies involving a spill, fire, explosion or exposure:

CHEMTREC (24/7): 1-800-424-9300

Urgences impliquant un déversement, incendie, explosion ou

exposition: CHEMTREC (24/7): 1-800-424-9300

E-mail address : prodsafe@wurth.ca

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

Restrictions on use : Not applicable

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the Hazardous Products Regulations

Skin sensitization : Sub-category 1A

Reproductive toxicity : Category 2

**GHS** label elements

Hazard pictograms





Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.

H361f Suspected of damaging fertility.

according to the Hazardous Products Regulations



### POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P261 Avoid breathing mist or vapors.

P272 Contaminated work clothing should not be allowed out of

the workplace.

P280 Wear protective gloves, protective clothing, eye protection

and face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P308 + P313 IF exposed or concerned: Get medical attention. P333 + P313 If skin irritation or rash occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container to an approved waste

disposal plant.

#### Other hazards

None known.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

#### Components

Chemical name	Common	CAS-No.	Concentration (% w/w)
	Name/Synonym		
[[(2-	2-Ethylhexyl	2461-15-6	
Ethylhex-	glycidyl ether		>= 1 - < 5 *
yl)oxy]methyl]oxirane			
Benzenamine, N-	4-(2,2,3-	68411-46-1	
phenyl-, reaction prod-	Trimethylbut-3-		
ucts with 2,4,4-	en-1-yl)-N-[4-		
trimethylpentene	(2,2,3-		>= 0.1 - < 1 *
	trimethylbut-3-		
	en-1-		
	yl)phenyl]aniline		

<sup>\*</sup> Actual concentration or concentration range is withheld as a trade secret

### **SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical ad-

according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and

delayed

May cause an allergic skin reaction. Suspected of damaging fertility.

Protection of first-aiders

First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

Carbon oxides

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

according to the Hazardous Products Regulations



### POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

04/14/2025 11526189-00001 Date of first issue: 04/14/2025 1.0

Evacuate area.

Special protective equipment:

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec: :

tive equipment and emer-

gency procedures

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

**Environmental precautions** Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up Soak up with inert absorbent material.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine

which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation Use only with adequate ventilation.

Advice on safe handling Do not get on skin or clothing.

Avoid breathing mist or vapors.

Do not swallow.

Avoid contact with eyes.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Take care to prevent spills, waste and minimize release to the

environment.

according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

Conditions for safe storage : Keep in properly labeled containers.

Store in accordance with the particular national regulations.

Materials to avoid : No special restrictions on storage with other products.

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the re-

commended guidelines, use respiratory protection.

Filter type : Organic vapor Type

Hand protection

Material : Nitrile rubber
Break through time : 240 min
Glove thickness : 1.2 mm

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of

workday.

Eye protection : Wear the following personal protective equipment:

Safety glasses

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures : If exposure to chemical is likely during typical use, provide

eye flushing systems and safety showers close to the wor-

king place.

When using do not eat, drink or smoke.

Contaminated work clothing should not be allowed out of the

workplace.

Wash contaminated clothing before re-use.

according to the Hazardous Products Regulations



# POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES** 

Appearance : liquid

Color : Greenish yellow

Odor : characteristic

Odor Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Pour point -30 °C

Method: ASTM D 97-66

Initial boiling point and boiling :

range

No data available

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Does not sustain combustion.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available

Relative vapor density : No data available

Density : 0.976 g/cm<sup>3</sup>

Solubility(ies)

Water solubility : emulsifiable

Partition coefficient: n-

octanol/water

Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

according to the Hazardous Products Regulations



### POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

Viscosity

Viscosity, kinematic : 68 cSt (40 °C)

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle characteristics

Particle size : Not applicable

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac- :

tions

None known.

Conditions to avoid : None known.

Incompatible materials : None.

Hazardous decomposition

products

No hazardous decomposition products are known.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

#### **Acute toxicity**

Not classified based on available information.

#### **Components:**

#### [[(2-Ethylhexyl)oxy]methyl]oxirane:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 0.15 mg/l

Exposure time: 7 h
Test atmosphere: vapor

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

Remarks: Based on data from similar materials

#### Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

#### Skin corrosion/irritation

Not classified based on available information.

#### Components:

#### [[(2-Ethylhexyl)oxy]methyl]oxirane:

Species : Rabbit Result : Skin irritation

### Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Mild skin irritation

#### Serious eye damage/eye irritation

Not classified based on available information.

#### **Components:**

### [[(2-Ethylhexyl)oxy]methyl]oxirane:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

### Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

#### Respiratory or skin sensitization

#### Skin sensitization

May cause an allergic skin reaction.

#### Respiratory sensitization

Not classified based on available information.

### **Components:**

### [[(2-Ethylhexyl)oxy]methyl]oxirane:

Test Type : Maurer optimisation test

according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

Routes of exposure : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406

Result : positive

Assessment : Probability or evidence of high skin sensitization rate in hu-

mans

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

[[(2-Ethylhexyl)oxy]methyl]oxirane:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Remarks: Based on data from similar materials

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Suspected of damaging fertility.

Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 443

Result: positive

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

Application Route: Ingestion

Method: OECD Test Guideline 422

Result: negative

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on sexual function and

fertility, based on animal experiments.

#### STOT-single exposure

Not classified based on available information.

#### STOT-repeated exposure

Not classified based on available information.

#### **Components:**

#### Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Assessment : No significant health effects observed in animals at concentra-

tions of 100 mg/kg bw or less.

#### Repeated dose toxicity

#### Components:

#### Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rat

NOAEL : 25 mg/kg

LOAEL : 75 mg/kg

Application Route : Ingestion

Exposure time : 53 Days

Method : OECD Test Guideline 422

#### **Aspiration toxicity**

Not classified based on available information.

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

#### **Components:**

### [[(2-Ethylhexyl)oxy]methyl]oxirane:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 5,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 7.2 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Toxicity to fish : LL50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 51 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

NOELR (Desmodesmus subspicatus (green algae)): > 1 mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

EL50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

EL10 (Daphnia magna (Water flea)): 1.69 mg/l

Exposure time: 21 d

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 211

#### Persistence and degradability

### **Components:**

### [[(2-Ethylhexyl)oxy]methyl]oxirane:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301F

#### Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 1 % Exposure time: 28 d

Method: OECD Test Guideline 301B

#### Bioaccumulative potential

### Components:

### [[(2-Ethylhexyl)oxy]methyl]oxirane:

Partition coefficient: n- : log

octanol/water

: log Pow: 3.83

#### Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Partition coefficient: n- : log Pow: > 4

according to the Hazardous Products Regulations



### POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

octanol/water Remarks: Calculation

Mobility in soil

No data available

Other adverse effects

No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Do not dispose of waste into sewer.

Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

#### **SECTION 14. TRANSPORT INFORMATION**

### **International Regulations**

### **UNRTDG**

Not regulated as a dangerous good

#### **IATA-DGR**

Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

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

Not applicable for product as supplied.

#### **Domestic regulation**

#### **TDG**

Not regulated as a dangerous good

### Special precautions for user

Not applicable

### **SECTION 15. REGULATORY INFORMATION**

Volatile organic compounds

(VOC) content

Canada - Volatile Organic Compound Concentration Limits for

Certain Products Regulations

VOC content: 0 %

#### The ingredients of this product are reported in the following inventories:

DSL : All chemical substances in this product comply with the CEPA

1999 and NSNR and are on or exempt from listing on the

Canadian Domestic Substances List (DSL).

according to the Hazardous Products Regulations



## POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

#### **SECTION 16. OTHER INFORMATION**

#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration: ICAO - International Civil Aviation Organization: IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods: IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety

Data Sheet

Dala Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Revision Date : 04/14/2025 Date format : mm/dd/yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS mate-

according to the Hazardous Products Regulations



# POE OIL 68 FOR 1234YF, 237 mL

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/14/2025 11526189-00001 Date of first issue: 04/14/2025

rial is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8