

# Olga's Original Ointment

Precision Light Duty Vapor Degreasing

## Technical Data Sheet

### Introducing OOO!

Olga's Original Ointment is an effective blend consisting of nonflammable fluorinated solvents (including HFEs, HFCs, etc.) and trans-1,2-dichloroethylene (t-DCE). This chemical is formulated for precision degreasing applications, including removal of particulates, light oils, and fingerprints.

Olga's Original Ointment is a reliable and effective alternative to Vertrel MCA and other vapor degreasing solvents.

Olga's Original Ointment possessed multiple beneficial properties as a cleaning solvent, such as a high density, low viscosity and low surface tension. These properties allow for an excellent cleaning process.

### Material Friendly

Olga's Original Ointment is suitable with all metal surfaces, ceramic and other materials that are non-conducting. It is generally compatible with most elastomeric materials, except fluoroelastomers, such as Viton, which can cause swelling. It is always highly recommended to test all materials prior to using.

### Benefits of OOO

Olga's Original Ointment successfully balances optimal performance, worker safety and preferable environmental attributes.

- Non-ozone depleting chemical
- Drop-in replacement for Vertel MCA, AK-225, and similar vapor degreasing solvents
- Low global warming potential
- Non-hazardous with low toxicity, providing a high allowable exposure limit
- Non-flammable
- Chemically stable

	Compatible	Additional Testing Required
<b>Metals</b>	Aluminum, Copper, Stainless Steel, Titanium, BCASs, Tungsten	N/A
<b>Elastome</b>	Neoprene, Butyl Rubber, EPDM, Kynar (PVDF)	Viton A & B, Kalrez
<b>Plastics</b>	Acrylic, HDPE, PTFE, Nylon, PVC, Epoxy, Phenolic, ABS, Polycarbonate	N/A

## Physical Properties

Property	OOO	Asahi AK-225	DuPont Vertrel MCA	nPB
Boiling Point °C [°F]	TBD	54 [129]	39 [102]	71[160]
Density at 25°C (77°F) kg/liter [lb/gal]	1.23 [10.2]	1.55 [12.9]	1.41 [11.7]	1.35[11.26]
Surface Tension at 25°C (77°F) dyne/cm	17.8	16.2	21.2	25.9
Viscosity at 25°C (77°F), cPs	0.46	0.59	0.59	0.49
Vapor Pressure at 25°C (77°F) kPa	69	38.5	62	20.3
Heat of Vaporization @bp cal/g	50.3	35	67.3	58.8
Global Warming Potential	<560	370	806	N/A
Ozone Depleting Chemical	No	Yes	No	No
Volatile Organic Compounds (VOC) g/l	423	0	536	1,350
Allowable Exposure Limit (AEL) ppm	775	100	200	<10
Worker Exposure Ceiling (ppm)	No	No	400	10
KB Value	45	31	50	125

### Keeping Workers Safe

Results from acute toxicity studies have proven that Olga's Original Ointment has a low toxicity with a calculated Acceptable Exposure Limit of 775 ppm. The ingredients in Olga's Original Ointment do not possess any acute or chronic toxicity associations, making it a friendly solvent to workers.

*Please refer to the SDS for more information related to exposure limits and toxicity-related data.*

LssChemicals Olga's Original Ointment is not classified as a flammable liquid per the definitions by NFPA and DOT, as it does not exhibit closed cup or open cup flash point. However, because it is volatile, there is still an associated risk of vapors becoming flammable in the air. Flash point data and vapor flammability limits are shown below.

### Flammability

	Test Method	Olga's Original Ointment
Flash Point (CC)	ASTM D93	None
Flash Point (OC)	ASTM D1310	None
Flammability in Air	ASTM E681	
Lower Explosivity		5.4 vol%
Upper Explosivity		9.4 vol%

## **Storage Info**

Olga's Original Ointment is very stable both thermally & chemically. Some notable features of the solvent include:

- Non-reactive
- Low water solubility
- Will not oxidize or degrade when exposed to air
- No effects by sunlight or UV radiation

Standard industrial storage practices include keeping the solvent away from food sources and volatile temperature conditions. Freezing temperatures can cause compression of the drums, while hot temperatures will cause ballooning of the drum. If undergoing these conditions, the product will still be usable and effective.

## **Recycling!**

By adding commercially available modular recycling units, Olga's Original Ointment can be reclaimed and reused through a simple distillation process. With its phenomenal chemical stability, recycling can recover the solvent with a typical yield range of 80 to 95% resulting in sizable savings. Contact technical services for more information!

## **Olga's Original Ointment Specifications**

A typical Olga's Original Ointment solvent contains:

<b>Fluorinated Fluid Mixture</b>	>60 wt%
<b>Trans-dichloroethylene</b>	<40 wt%
<b>Water</b>	<100 ppm
<b>Non-volatile Residue</b>	<50 ppm (drums) <200 ppm (pails)
<b>Appearance</b>	Clear, odorless