

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

FINO Orange Solvent Cleaning Agent

**REF** 69010**Further trade names**

CITRUS AURANTIUM DULCIS EXTRACT

CAS No: 8028-48-6

EC No: 232-433-8

UFI: 6U35-N66G-X00M-43R9

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

The product is intended for professional use.

**Uses advised against**

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.

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

Company name:	FINO GmbH	
Street:	Mangelsfeld 18	
Place:	D-97708 Bad Bocklet	
Telephone:	+49-97 08-90 94 20	Telefax: +49-97 08-90 94 21
e-mail:	info@fino.com	Internet: www.fino.com
Contact person:	Joachim Mahlmeister	Telephone: +49-97 08-90 94 20
e-mail:	info@fino.com	
Responsible Department:	This number can only be reached during our office hours, Monday to Friday from 8 a.m. to 5 p.m.	

**1.4. Emergency telephone number:**+49-89-1 92 40  
POISON CENTER München  
24 hour(s) 7 day(s)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**Flam. Liq. 2; H225  
Asp. Tox. 1; H304  
Skin Irrit. 2; H315  
Eye Irrit. 2; H319  
Skin Sens. 1; H317  
STOT SE 3; H336  
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Hazard components for labelling**Orange terpene  
Isopropanol**Signal word:** Danger

**Pictograms:**

**Hazard statements**

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Eye protection/Wear protective gloves.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

**Special labelling of certain mixtures**

No information available.

**Additional advice on labelling**

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

**2.3. Other hazards**

Results of PBT and vPvB assessment not applicable.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Chemical characterization**

Mixture from the below listed substances with harmless additives.

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
8028-48-6	Orange terpene			10-25%
	232-433-8			
	Flam. Liq. 2, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H319 H317 H304 H411			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			50-100%
	200-661-7	603-117-00-0		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
67-63-0	200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	50-100% %
		dermal: LD50 = 12800 mg/kg; oral: LD50 = 5050 mg/kg	

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

No special measures are necessary.

**After inhalation**

Provide fresh air.

Call a physician immediately.

If unconscious but breathing normally, place in recovery position and seek medical advice.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap.

**After contact with eyes**

Rinse opened eye for several minutes under running water.

In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**

Do NOT induce vomiting.

Call a physician immediately.

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

This information is not available.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Sand, Extinguishing powder Never use water.

**Unsuitable extinguishing media**

Full water jet

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

Carbon monoxide

Can form explosive gas-air mixtures.

**5.3. Advice for firefighters**

Use suitable breathing apparatus.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Use appropriate respiratory protection. Provide adequate ventilation. Use personal protection equipment. Keep unprotected persons away.

**For non-emergency personnel**

Emergency procedures

Remove victim out of the danger area. Remove persons to safety. The danger areas must be delimited and identified using relevant warning and safety signs.

**For emergency responders**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Wear personal protection equipment (refer to section 8).

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

**6.3. Methods and material for containment and cleaning up****For containment**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Following consultation with waste management company and after biological pre-treatment, landfill together with household waste.

**For cleaning up**

For cleaning, approved industrial vacuum cleaners are recommended, dust class:

Collect in closed and suitable containers for disposal.

**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Provide adequate ventilation. Do not flush with water or watery cleaning agents

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Treat the recovered material as prescribed in the section on waste disposal. Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Ensure good ventilation / exhaustion at the workplace.

Avoid the formation of aerosol.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

**Advice on general occupational hygiene**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated, saturated clothing immediately.

Wash hands before breaks and after work.

When using do not eat, drink or smoke.

Avoid contact with eyes and skin.

Do not breathe gas/vapour/aerosol.

**Further information on handling**

Keep container tightly closed.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Store in a cool dry place.

**Hints on joint storage**

Keep/Store only in original container.

**Further information on storage conditions**

Keep container tightly closed in a cool place. Keep container dry.

Betriebssicherheitsverordnung (BetrSichV) Highly flammable

**7.3. Specific end use(s)**

Auxiliary for dental technology

**SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
8028-48-6	Orange terpene			
Worker DNEL, long-term		inhalation	systemic	31,1 mg/m <sup>3</sup>

#### Additional advice on limit values

The lists valid during the making were used as basis.

### 8.2. Exposure controls



#### Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Tightly sealed safety glasses.

##### Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The precise time of rupture can be found out from the manufacturer of the protective gloves and must be observed.

Suitable material: PVC (polyvinyl chloride), PE (polyethylene)

##### Skin protection

lab coat

##### Respiratory protection

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	clear
Odour:	characteristic

#### Test method

#### Changes in the physical state

Melting point/freezing point: not determined

Boiling point or initial boiling point and boiling range: 82 °C

Softening point: not applicable

Flash point: 13 °C

**Flammability**

Solid/liquid: not applicable

**Explosive properties**

not explosive according to EU A.14 However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits: 2,0 vol. %

Upper explosion limits: 12,0 vol. %

Auto-ignition temperature: 425 °C

**Self-ignition temperature**

Solid: Product is not selfigniting.

Decomposition temperature: not determined

Water solubility: partially miscible

Partition coefficient n-octanol/water: not determined

Vapour pressure: 43 hPa

(at 20 °C)

Density (at 20 °C): 0,81 g/cm³

Bulk density: ISO 1183 (A)

Relative vapour density: not determined

**9.2. Other information**
**Information with regard to physical hazard classes**

Sustaining combustion: No data available

Oxidizing properties

Not oxidising.

**Other safety characteristics**

Solvent content: Organic solvents: 100,0%

Maximum VOC content: 100 %

Evaporation rate: not determined

**Further Information**
**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

No specific test data related to reactivity available for this product or its ingredients.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

No decomposition if used according to specifications.

**10.5. Incompatible materials**

No specific if used according to specifications.

**10.6. Hazardous decomposition products**

No dangerous decomposition products known.

**SECTION 11: Toxicological information**
**11.1. Information on hazard classes as defined in GB CLP Regulation**
**Acute toxicity**

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 mg/kg	5050	Rat	
	dermal	LD50 mg/kg	12800	Rabbit	

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye irritation.

**Sensitising effects**

May cause an allergic skin reaction. (Orange terpene)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

May cause drowsiness or dizziness. (propan-2-ol; isopropyl alcohol; isopropanol)

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

May be fatal if swallowed and enters airways.

**Specific effects in experiment on an animal**

Toxicological analyses are not available.

**Additional information on tests**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: irritant.

**Practical experience**

No special references.

**11.2. Information on other hazards**
**Endocrine disrupting properties**

Based on available data, the classification criteria are not met.

**Other information**

No special precautionary measures.

**SECTION 12: Ecological information**
**12.1. Toxicity**

Danger to drinking water if even small quantities leak into soil.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
8028-48-6	Orange terpene					
	Acute fish toxicity	LL50 mg/l	5,65	96 h	ECHA	
	Acute crustacea toxicity	EL50	1,1 mg/l	48 h	ECHA	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50 mg/l	9640	96 h		
	Acute crustacea toxicity	EC50 mg/l	1400	48 h		

## 12.2. Persistence and degradability

none Evidence exists for biodegradation processes.

## 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

## Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05

## 12.4. Mobility in soil

Respective data are not available.

## 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

## 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

No information available.

## 12.7. Other adverse effects

Toxic to fish.

Very toxic to aquatic organisms.

## Further information

Do not allow to enter into surface water or drains.

Water hazard class hazardous to water (WGK 2)

# SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

### Disposal recommendations

Must not be disposed together with household garbage.

Do not allow to enter into surface water or drains.

### List of Wastes Code - residues/unused products

200113 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Solvents; hazardous waste

### List of Wastes Code - used product

200113 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Solvents; hazardous waste

### Contaminated packaging


Dispose of waste according to applicable legislation.




**SECTION 14: Transport information**
**Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 1993
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (propan-2-ol; isopropyl alcohol; isopropanol), Orange terpene)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
	
Classification code:	F1
Special Provisions:	274 601 640D
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 1993
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (propan-2-ol; isopropyl alcohol; isopropanol), Orange terpene)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
	
Classification code:	F1
Special Provisions:	274 601 640D
Limited quantity:	1 L
Excepted quantity:	E2

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	UN 1993
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S.
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
	
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-E

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	UN 1993
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S.
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3



Special Provisions: A3  
 Limited quantity Passenger: 1 L  
 Passenger LQ: Y341  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 353  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 364  
 IATA-max. quantity - Cargo: 60 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



#### 14.6. Special precautions for user

Warning: Flammable liquids

#### 14.7. Maritime transport in bulk according to IMO instruments

No special precautionary measures.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

2004/42/EC (VOC): none  
 Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS  
 Additional information: P5c

##### Additional information

The product is classified and labelled according to EC directives or corresponding national laws.  
 Classification according to Regulation (EC) No 1272/2008 [CLP]

##### National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

##### Additional information

Betriebssicherheitsverordnung (BetrSichV) Highly flammable  
 No further data.

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 2,5,9,11,12,15.

\* Data changed compared with the previous version.

#### Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
 (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 "IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)"

ICAO: International Civil Aviation Organization  
 "ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)"  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds (USA, EU)  
 PBT: Persistent, Bioaccumulative and Toxic  
 SVHC: Substances of Very High Concern  
 vPvB: very Persistent and very Bioaccumulative  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 Flam. Gas. 1: Flammable gases, Hazard Category 1  
 Aerosol 1: Aerosole, Hazard Category 1  
 Press. Gas Comp: Gases under pressure - compacted gas  
 Flam. Liq. 2: Flammable liquids, Hazard Category 2  
 Flam. Liq. 3: Flammable liquids, Hazard Category 3  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2  
 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

**Relevant H and EUH statements (number and full text)**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

**Identified uses**

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Cleaning agent	C	20	21	15	2, 6a, 6b	0	26	2682-20-4

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)