

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/08/2020

Reviewed on 07/08/2020

1 Identification

- **Product identifier**
- **Trade name: FINE CLEANER (0,5 L)**
- **Article number:** 1 35343
- **Application of the substance / the mixture** Degreasing agent.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
RETECH, s.r.o.
Vackova 1541/4
155 00 Praha 5 - Stodůlky
Czech Republic
Tel: +420327596428
info@retech.cz, www.retech.com
- **Emergency telephone number:** RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic;
Telephone number: +420 327 596 128 (7.30-16.00 hour)

2 Hazard(s) identification

- **Classification of the substance or mixture**

Flam. Liq. 2 H225 Highly flammable liquid and vapor.
Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

GHS02 GHS07
- **Signal word** Danger
- **Hazard-determining components of labeling:**
propan-2-ol
- **Hazard statements**
H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/eye protection.
P304+P340 IF INHALED: 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.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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P405 Store locked up.
 P501 Dispose of contents/container in accordance with national regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2
 Fire = 3
 Reactivity = 0

- **WHMIS-ratings (scale 0 - 4)**



Health = *2
 Fire = 3
 Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

67-63-0	propan-2-ol	75-<100%
5593-70-4	tetra-n-butoxytitanium	1-<2.5%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Water haze
- Fire-extinguishing powder
- Carbon dioxide
- Alcohol resistant foam
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.

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- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

67-63-0	propan-2-ol	400 ppm
5593-70-4	tetra-n-butoxytitanium	0.67 ppm

- **PAC-2:**

67-63-0	propan-2-ol	2000* ppm
5593-70-4	tetra-n-butoxytitanium	7.4 ppm

- **PAC-3:**

67-63-0	propan-2-ol	12000** ppm
5593-70-4	tetra-n-butoxytitanium	44 ppm

7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- **Information about protection against explosions and fires:**

Do not spray on a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

· **Requirements to be met by storerooms and receptacles:** Store in a cool location.

- **Information about storage in one common storage facility:**

Observe official regulations on storing packagings with pressurized containers.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

67-63-0 propan-2-ol

PEL Long-term value: 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm
Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm
Long-term value: 492 mg/m³, 200 ppm
BEI

· **Ingredients with biological limit values:**

67-63-0 propan-2-ol

BEI 40 mg/L
Medium: urine
Time: end of shift at end of workweek
Parameter: Acetone (background, nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A2/P2

· **Protection of hands:**



Protective gloves

Solvent resistant gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

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.

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.5 mm

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:**

Safety glasses



Tightly sealed goggles

· **Body protection:** Use protective suit.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Liquid
· Color:	Colorless
· Odor:	Alcohol-like
· Odor threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

· Melting point/Melting range:	-89.5 °C (-129.1 °F)
· Boiling point/Boiling range:	82 °C (179.6 °F)

· **Flash point:** 13 °C (55.4 °F)· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 425 °C (797 °F)· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· **Explosion limits:**

· Lower:	2 Vol %
· Upper:	12 Vol %

· **Vapor pressure at 20 °C (68 °F):** 43 hPa (32.3 mm Hg)· **Density at 20 °C (68 °F):** 0.79 g/cm³ (6.593 lbs/gal)· **Relative density** Not determined.· **Vapor density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with**· **Water at 20 °C (68 °F):** 1 g/l· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:**

· Dynamic at 20 °C (68 °F):	2.43 mPas
· Kinematic:	Not determined.

· **Solvent content:**· **Organic solvents:** 100.0 %· **Solids content:** 0.0 %

10 Stability and reactivity

· **Reactivity** No further relevant information available.

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- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

67-63-0 propan-2-ol

Oral	LD50	5840 mg/kg (Rat)
Dermal	LD50	13900 mg/kg (Rabbit)
Inhalative	LC50 (6h)	25000 mg/m3 (Rat)

5593-70-4 tetra-n-butoxytitanium

Oral	LD50	>2000 mg/kg (Rat)
	NOAEL	125 mg/kg/d (Rat)
Dermal	LD50	5300 mg/kg (Rabbit)
Inhalative	LC50/4 h	20100 mg/l (Rat)
	LC50	20100 mg/L (Rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

67-63-0 propan-2-ol

3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health**

Administration) None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

67-63-0 propan-2-ol

LOEC (8 days)	1000 mg/l (Algae)
LC50 (96h)	9640 mg/l (Pimephales promelas)
LC50 (24h)	9714 mg/l (Daphnia magna)

5593-70-4 tetra-n-butoxytitanium

NOEC (21 days)	4 mg/l (Daphnia magna)
LC50 (96h)	1825 mg/l (Fish)

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EC50 (48h)	1300 mg/l (Daphnia magna)
EC50 (96h)	225 mg/l (Algae)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
 - Water hazard class 1 (Self-assessment): slightly hazardous for water
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, ADN, IMDG · IATA | <ul style="list-style-type: none"> UN1993 UN1090 |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR, ADN · IMDG · IATA | <ul style="list-style-type: none"> Flammable liquids, n.o.s. (Isopropanol) UN1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)) FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)) ACETONE |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label |
| <ul style="list-style-type: none"> · ADR, IMDG, IATA | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label |
| | <ul style="list-style-type: none"> 3 Flammable liquids 3 3 Flammable liquids 3 |

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· ADN	
· ADN/R Class:	3 Flammable liquids
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Flammable liquids
· Hazard identification number (Kemler code):	33
· EMS Number:	F-E, <u>S-E</u>
· Stowage Category	B
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II

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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· **Section 355 (extremely hazardous substances):** None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

67-63-0 | propan-2-ol

· **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

· **Hazardous Air Pollutants** None

of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for**

females: None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for**

males: None of the ingredients is listed.

· **Chemicals known to cause developmental**

toxicity: None of the ingredients is listed.

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· Cancerogenity categories
· EPA (Environmental Protection
Agency) None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

67-63-0|propan-2-ol

A4

· MAK (German Maximum Workplace
Concentration) None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and
Health) None of the ingredients is listed.

· National regulations:

Class	Share in %
NK	100

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision 07/08/2020

· Abbreviations and acronyms:

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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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