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

1.1. Identification of the label/ trade name

Isopropyl alcohol

1.2. Use of the substance/ preparation

Product categories [PC]

Cleaner liquids. Disinfectant liquids.

Remark

The product is intended for professional use.

This product is not intended for food, drug or household use.

1.3. Identified uses

Solution for cleaning of surfaces and thinning of stamping ink

1.4. Company/ undertaking identification

Supplier (manufacturer/importer/downstream user/distributor)

Octopus Fluids GmbH & Co. KG
Street: Hamburger Str. 14d
Postal code/ City: D-01067 Dresden
Telephone: +49-(0)351-7968925
Telefax: +49-(0)351-8894982
E-mail: mail@octopus-fluids.de
Department responsible for information:
Research & Development

1.5. Emergency telephone

Telephone: +49-(0)351-7968925 (Only available during office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance/ mixture

Classification according to regulation (EC) No. 1272/2008 (CLP)

Flamm. Liq. Cat. 2; H225
Eye irritation Cat.2; H319
Specific target organ toxicity – single exposure Cat.3; Central nervous system; H336

2.2. Label elements

Labelling according to regulation (EC) No. 1272/2008 (CLP)

Product identifier

Cleaner / Thinner

Hazard-determining components of labelling

1-Methyl-2-propanol (EG-No. 203-639-1 CAS-No. 107-98-2)

Signal word: Danger

Safety statements:

H225	Flammable liquid and vapour.
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness.

Prevention statements:

P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, lighting, ventilating equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P261 - Avoid breathing mist, vapours, spray.

P264 - Wash exposed skin thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear eye protection, face protection, protective clothing, protective gloves.

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

P312 -Call a POISON CENTER or doctor/physician if you feel unwell.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2) to extinguish

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container to comply with local, state and federal regulations.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/ information on ingredients

3.1. Substance related information

2-Propanol, *sec*-Propyl alcohol, Isopropyl alcohol, Isopropanol

3.2. Preparation related information

Description

Hazardous ingredients

2-Propanol (EC-No. 200-661-7 INDEX-No. 603-117-00-0 Registry-No. CAS-No. 67-63-0)

% Weight: = 100%
Classification according regulation (EC) No. 200-661-7: Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336

Concentration limits:>= 20 %: STOT SE 3, H336

Substances with common limiting values

none

3.3. Additional Information

Full text of R-, H- and EUH-phrases see sections 16 and 2.2.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of lasting health problems, consult a physician.

In case of inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Following of skin contact

Wash off with soap and plenty of water. Consult a physician.

Following of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In case of ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms/effects, acute and delayed

Irritations
Drowsiness
Nausea
Headache

Skin irritation

Eye irritation

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand

Unsuitable extinguishing media: Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

In case of fire may be liberated: Carbon oxides

5.2. Special protective equipment for firefighters

Use suitable breathing apparatus.

5.3. Additional information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1. Personal precautions

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2. Methods for cleaning up

Suitable material for taking up:

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

6.3. Environmental precaution

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.4. Additional information

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SECTION 7: Handling and storage

7.1. Advices on safe handling

Protective measures

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Hints on general industry hygiene

Do not eat, drink or smoke in areas where work is done. Remove stained, saturated clothing immediately. Wash hands before breaks and at the end of the day.

7.2. Hints on joint storage

Packaging materials

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be

carefully resealed and kept upright to prevent leakage.
Handle and store under inert gas. hygroscopic

Further information on storage conditions

Storage temperature: Store in cool place

SECTION 8: Exposure controls / Personal protection

8.1. Exposure limit values

Control parameters:

ACGIHACGIH TWA: 200 ppm

ACGIHACGIH STEL: 400 ppm

NIOSHNIOSH REL (TWA): 980 mg/m³

NIOSHNIOSH REL (TWA): 400 ppm

NIOSHNIOSH REL (STEL): 1225 mg/m³

NIOSHNIOSH REL (STEL): 500 ppm

8.2. Exposure controls

Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

Personal protective equipment

Personal protective equipment is to be chosen depending on concentration and amount of hazardous material.

Face/ eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Body protection

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous

substance at the specific workplace.

Thermal hazards

No thermal hazards are to be expected if product is used properly.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

SECTION 9: Physical and chemical properties

9.1. Safety relevant basis data

Appearance

Black liquid with specific odor

Form	liquid	
Colour	colourless	
Smell	Alcohol odour	
pH value	Not applicable	
Melting point	-89,5	°C
Boiling point	82,0	°C
Flash point	12,0	°C
Autoignition temperature	425,0	°C
Explosion limit, lower	2,0	Vol%
Explosion limit, upper	13,4	Vol%
Vapour pressure	43,2	hPa
Density	0,8 (20 °C)	kg/dm³
Solubility in water	soluble	
Viskosity, dynamic	2,1 (25 °C)	mPa*s

9.2. Other safety related information

Surface tension 20,8 mN/m at 25,0 °C

SECTION 10: Stability and Reactivity

10.1. Reactivity

Violent to explosive reaction with (strong) oxidizers. Prolonged storage/in large quantities: may form peroxides.

10.2. Chemical stability

The product is chemically stable under normal environmental conditions (room temperature).

10.3. Possible hazardous reactions

With proper handling and storage no hazardous reactions occur.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Materials to avoid

Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids

10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

SECTION 11: Toxicological information

11.1. Toxicological tests

Acute oral toxicity:

Toxicity:	1-Methyl-2-propanol: LD50 (oral, Rat) 5200 mg/kg LD50 (dermal, Rabbit) >14.000 mg/kg LD50 (inhaled, Rat, 4 h) >54,6 mg/kg
Irritation:	not irritating
Corrosive:	not corrosive
Sensitization:	Due to the availability of data classification criteria are not met.
Toxicity continuous administration:	not irritating
Carcinogenity:	not tested
Mutagenicity:	not tested
Reproductive toxicity:	not tested

Additional information

Toxicological classification was done according to the calculation method of regulation 1999/45/EEC (conventional method).

SECTION 12: Ecological information

12.1. Toxicity

Biological degradation:
Toxicity (Fish): flow-through test LC50 - Pimephales promelas (fathead minnow) - 9.640 mg/l - 96 h(US-EPA)
Toxicity (Daphnia): EC50 - Daphnia magna (Water flea) - 13.299 mg/l - 48 h
Remarks: (IUCLID)
Toxicity (Algae): IC50 - Desmodesmus subspicatus (green algae) - > 1.000 mg/l - 72 h
Remarks: (IUCLID)
Toxicity (Bacteria): EC5 - Pseudomonas putida - 1.050 mg/l - 16 h
Remarks: (Lit.)

12.2. Persistence and degradation

Biodegradability aerobic - Exposure time 21 d
Result: 95 % - Readily biodegradable.
(OECD Test Guideline 301E)

12.3. Bioaccumulation potential

No bioaccumulation is to be expected (log Pow <= 4).

12.4. Mobility in soil

No data available.

12.5. Results of the PBT- and vPvB evaluation

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Remarks

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SECTION 13: Disposal considerations

13.1. Disposal

Dispose in accordance with local/ national regulations

Advice

Contact disposal contractor for exact determination of waste classification

Packaging

Contaminated packaging

Dispose of as unused product.

Cleaned packaging

Cleaned packaging may be reused.

SECTION 14: Transport information

	Street/ Railway transport (GGVS/ ADR/ GGVE/ RID)/	Ship (ADN/IMDG)/	Airplane (IATA)/
14.1. UN-Number	UN 1219	UN 1219	UN 1219
14.2. UN Proper shipping name	ISOPROPANOL	ISOPROPANOL	Isopropanol
14.3. Transport hazard classes	3	3	3
14.4. Packaging group	II	II	II
14.5. Environmental hazards	no	no	no
14.6. Special precautions for user	-	-	-

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

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SECTION 15: Regulatory information

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

National regulations

TA-Luft (DE):
Wassergefährdungsklasse (DE):
Other information

15.2. Indication of changes

-

15.3. Abbreviations and acronyms

BAT = Biologische Arbeitsplatztoleranz
MAK = Maximale Arbeitsplatzkonzentration
WGK = Wassergefährdungsklasse

15.4. Key literature references and sources for data

- Gefahrstoffdatenbank (GESTIS) - http://www.dguv.de/ifa/Gefahrstoffdatenbanken/index.jsp
- Gefahrstoffliste 2014 - Gefahrstoffe am Arbeitsplatz (IFA Report 2/2014) - http://publikationen.dguv.de/dguv/pdf/10002/rep0114.pdf

15.5. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to regulation (EC) No. 1272/2008 (CLP)	Calculation procedure
Flamm. Liq. Cat. 3, H225.	Calculation method
Serious eye irritation, H319	Calculation method
STOT (SE) Cat. 3; H336	Calculation method

15.6. Relevant R-phrases and/or H-statements (number and full text)

H225: Flammable liquid and vapour.
H336: May cause drowsiness or dizziness.

H319: Causes serious eye irritation.

15.7. Training advice

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15.8. Further information

Article number: ISOPP

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