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# 1 Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- Trade name: 824-I
- · Other Means of Identification: Isopropyl Alcohol: Electronics Cleaner
- · Related Part Number:

824-Liquid, 824-100ML, 824-500ML, 824-1L, 824-4L, 824-20L, 824-205L, 824-1G, 824-100MLCA, 824-1LCA, 824-1LX6, 824-500MLCA

CAS Number:

67-63-0

• **EC number:** 200-661-7

· Index number:

603-117-00-0

- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Cleaner for electronics
- · Uses advised against Not for use on monitor screens or glass with anti-glare coatings

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### 2 Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the GB CLP regulation.

· Hazard pictograms





GHS02 GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

propan-2-ol

Hazard statements

H225 Highly flammable liquid and vapour.

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.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or 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.

P370+P378

In case of fire: Use CO2, powder or water spray to extinguish.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Determination of endocrine-disrupting properties

Endocrine Disruptor substance ≥ 0.1% = none

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## 3 Composition/information on ingredients

· 3.1 Substances

• CAS No. Description 67-63-0 propan-2-ol

· Identification number(s)

· EC number: 200-661-7

· Index number: 603-117-00-0

## 4 First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

• **4.3 Indication of any immediate medical attention and special treatment needed**No further relevant information available.

# 5 Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

Vapors are heavier than air. Vapors may travel to sources of ignition near the ground. They can cause flash fire or ignite explosively.

- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Dilute with plenty of water.

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

· 6.3 Methods and material for containment and cleaning up:

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

· 6.4 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.

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## 7 Handling and storage

- · 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 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: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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

## 8 Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

#### 67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as 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.

- Respiratory protection: Not required.
- · Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

· Penetration time of glove material

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

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· Eye/face protection

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Tightly sealed goggles

## 9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Fluid · Colour: Clear · Odour: Alcohol-like · Odour threshold: Not determined. -89.5 °C

Melting point/freezing point:

· Boiling point or initial boiling point and

82 °C boiling range

· Flammability Highly flammable.

· Lower and upper explosion limit

2 Vol % (67-63-0 propan-2-ol) · Lower: 12 Vol % (67-63-0 propan-2-ol) Upper: *12* ℃ (67-63-0 propan-2-ol) · Flash point: 425 °C (67-63-0 propan-2-ol) · Auto-ignition temperature:

Not determined. Decomposition temperature: · pH Not determined.

· Viscosity:

· Kinematic viscosity Not determined. · Dynamic at 20 °C: 2.43 mPas

Solubility

· water at 20 °C: 1 g/l

· Partition coefficient n-octanol/water (log

value)

Not determined. Vapour pressure at 20 ℃: 43 hPa (67-63-0 propan-2-ol)

· Density and/or relative density

· Density at 20 °C: 0.785 g/cm<sup>3</sup> · Relative density Not determined. · Vapour density Not determined.

· 9.2 Other information

· Appearance:

· Form: Fluid Important information on protection of

health and environment, and on safety.

Ignition temperature: Not determined.

· Explosive properties: Product is not explosive. However, formation

of explosive air/vapour mixtures are possible.

Solvent content:

Organic solvents: 99.7% · VOC (EC) 99.70 % · Solids content: 0.3 % Molecular weight 60 g/mol

· Change in condition

 Evaporation rate Not determined.

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Information with regard to physical hazard classes

Explosives
Flammable gases
Aerosols
Oxidising gases
Gases under pressure

Void
Void

· Flammable liquids Highly flammable liquid and vapour.

Flammable solids
 Self-reactive substances and mixtures
 Pyrophoric liquids
 Pyrophoric solids
 Self-heating substances and mixtures

· Substances and mixtures, which emit

flammable gases in contact with water

Oxidising liquids
Oxidising solids
Organic peroxides
Corrosive to metals
Desensitised explosives
Void
Void
Void

### 10 Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

#### 67-63-0 propan-2-ol

Oral LD50 5,045 mg/kg (rat)

Dermal LD50 12,800 mg/kg (rabbit)

Inhalative LC50/4 h 30 mg/l (rat)

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye irritation.
- · Respiratory or skin sensitisation

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

- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure May cause drowsiness or dizziness.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

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- · 11.2 Information on other hazards
- · Endocrine disrupting properties

Substance is not listed.

# 12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

# 13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

HP3 Flammable

HP4 Irritant - skin irritation and eye damage

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

### 14 Transport information

· 14.1 UN number or ID number

· ADR, IMDG, IATA

14.2 UN proper shipping name

· ADR

· IMDG

·IATA

UN1219

1219 ISOPROPANOL (ISOPROPYL

ALCOHOL)

ISOPROPANOL (ISOPROPYL ALCOHOL)

Isopropanol (isopropyl alcohol)

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· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class 3 Flammable liquids.

· Label 3

· 14.4 Packing group

· ADR, IMDG, IATA

**14.5 Environmental hazards:** Not applicable.

• 14.6 Special precautions for user Warning: Flammable liquids.

Hazard identification number (Kemler

code): 33
• EMS Number: F-E,S-D
• Stowage Category B

· 14.7 Maritime transport in bulk according

to IMO instruments Not applicable.

· Transport/Additional information:

· ADR

Limited quantities (LQ)
 Excepted quantities (EQ)
 Code: E2

Maximum net quantity per inner packaging: 30

ml

Maximum net quantity per outer packaging: 500

ml 2 D/E

·IMDG

· Transport category

· Tunnel restriction code

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 1219 ISOPROPANOL (ISOPROPYL

ALCOHOL), 3, II

#### 15 Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act
- Regulated explosives precursors

Substance is not listed.

Regulated poisons

Substance is not listed.

· Reportable explosives precursors

Substance is not listed.

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· Reportable poisons

Substance is not listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

Substance is not listed.

- · REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

Substance is not listed.

· Regulation (EC) No 273/2004 on drug precursors

Substance is not listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Substance is not listed.

· 15.2 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.

- · Department issuing SDS: Product safety department.
- · Contact: sds@mgchemicals.com
- · Date of previous version: 17.05.2024
- · Version number of previous version: 6
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

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

· \* Data compared to the previous version altered.