

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 276(E) Electronic Component Cleaner (Bulk)

Revision date: 22.07.2021

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

##### 1.1. Product identifier

276(E) Electronic Component Cleaner (Bulk)

UFI: QC9P-S1FS-J173-DF3R

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

###### Uses advised against

No information available.

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

Company name:	Chesterton International GmbH	
Street:	Am Lenzenfleck 23	
Place:	D-85737 Ismaning GERMANY	
Telephone:	+49 89 99 65 46 - 0	Telefax: +49 89 99 65 46 - 50
e-mail:	eu-sds@chesterton.com	
e-mail (Contact person):	eu-sds@chesterton.com	
Internet:	www.chesterton.com	
Responsible Department:	eu-sds@chesterton.com	

**1.4. Emergency telephone number:** +49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 2

Aspiration hazard: Asp. Tox. 1

Skin corrosion/irritation: Skin Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

##### 2.2. Label elements

###### Regulation (EC) No. 1272/2008

###### Hazard components for labelling

Hydrocarbons, C7-C9, isoalkanes

propan-2-ol; isopropyl alcohol; isopropanol

**Signal word:** Danger

###### Pictograms:



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#### Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P210	Keep away from heat. No Smoking.
P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	GHS Classification	
	Hydrocarbons, C7-C9, isoalkanes	85-95 %
	921-728-3	01-2119471305-42
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	5-9 %
	200-661-7	603-117-00-0
	01-2119457558-25	
	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	
	921-728-3	Hydrocarbons, C7-C9, isoalkanes	85-95 %
		inhalation: LC50 = > 21 mg/l (vapours); dermal: LD50 = > 2200 - 2500 mg/kg; oral: LD50 = > 7100 - 7800 mg/kg	
67-63-0	200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	5-9 %
		inhalation: LC50 = 30 mg/l (vapours); dermal: LD50 = 12800-13400 mg/kg; oral: LD50 = 5045 mg/kg	

#### Further Information

No information available.

### SECTION 4: First aid measures

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#### **4.1. Description of first aid measures**

##### **General information**

Change contaminated, saturated clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### **After inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a doctor.

##### **After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

##### **After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

##### **After ingestion**

Do NOT induce vomiting.  
Immediately call a doctor.

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

Causes eye irritation. Causes skin irritation. Repeated exposure may cause skin dryness or cracking.  
Most important symptoms and effects, both acute and delayed: Headache, Dizziness, Pulmonary oedema  
Vapours may cause drowsiness and dizziness.

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

First Aid, decontamination, treatment of symptoms.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>). alcohol resistant foam. Water spray jet

##### **Unsuitable extinguishing media**

Full water jet

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

Heating causes rise in pressure with risk of bursting.  
Vapours can form explosive mixtures with air.

#### **5.3. Advice for firefighters**

Special protective equipment for firefighters Protective clothing.  
In case of fire: Wear self-contained breathing apparatus.

##### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

##### **General advice**

See protective measures under point 7 and 8.  
Provide adequate ventilation.

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Personal protection equipment: see section 8

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Cover drains.

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

##### **Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### **6.4. Reference to other sections**

See protective measures under point 7 and 8.

Disposal: see section 13

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

See section 8. Wear personal protection equipment (refer to section 8).

#### **Advice on protection against fire and explosion**

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Take precautionary measures against static discharges.

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

#### **Advice on general occupational hygiene**

Wear protective gloves/protective clothing.

### **7.2. Conditions for safe storage, including any incompatibilities**

#### **Requirements for storage rooms and vessels**

Keep cool. Protect from sunlight.

#### **Hints on joint storage**

Keep away from:

Food and feedingstuffs

#### **Further information on storage conditions**

Keep away from:

Frost

Heat

Humidity

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

No information available.

## SECTION 8: Exposure controls/personal protection

### **8.1. Control parameters**

#### **Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
67-63-0	Propan-2-ol	200	-		TWA (8 h)	
		400	-		STEL (15 min)	

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#### Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
67-63-0	2-Propanol	Acetone	40 mg/L	Urine	End of shift at end of workweek

#### DNEL/DMEL values

CAS No	Substance			
DNEL type	Exposure route	Effect	Value	
	Hydrocarbons, C7-C9, isoalkanes			
Worker DNEL, long-term	inhalation	systemic	2035 mg/m <sup>3</sup>	
Worker DNEL, long-term	dermal	systemic	773 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	608 mg/m <sup>3</sup>	
Consumer DNEL, long-term	dermal	systemic	699 mg/kg bw/day	
Consumer DNEL, long-term	oral	systemic	699 mg/kg bw/day	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
Worker DNEL, long-term	inhalation	systemic	500 mg/m <sup>3</sup>	
Worker DNEL, long-term	dermal	systemic	888 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	89 mg/m <sup>3</sup>	
Consumer DNEL, long-term	dermal	systemic	319 mg/kg bw/day	
Consumer DNEL, long-term	oral	systemic	26 mg/kg bw/day	

#### PNEC values

CAS No	Substance	
Environmental compartment	Value	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	
Freshwater	140,9 mg/l	
Freshwater (intermittent releases)	140,9 mg/l	
Marine water	140,9 mg/l	
Freshwater sediment	552 mg/kg	
Marine sediment	552 mg/kg	
Secondary poisoning	160 mg/kg	
Micro-organisms in sewage treatment plants (STP)	2251 mg/l	
Soil	28 mg/kg	

#### 8.2. Exposure controls

##### Appropriate engineering controls

- Provide adequate ventilation as well as local exhaust at critical locations.
- Take action to prevent static discharges.

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

##### Eye/face protection

Suitable eye protection:

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Eye glasses with side protection  
goggles

#### Hand protection

Tested protective gloves must be worn: EN ISO 374  
NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)  
Thickness of the glove material  $\geq 0,4$  mm  
Breakthrough times and swelling properties of the material must be taken into consideration.  
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.  
Wearing time with occasional contact (splashes): max. 480 min. (NBR (Nitrile rubber))  
Wearing time with permanent contact 240 - 480 min (NBR (Nitrile rubber))  
Observe the wear time limits as specified by the manufacturer.

#### Skin protection

Protective clothing

#### Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.  
Filtering device (full mask or mouthpiece) with filter: A-P2

#### Environmental exposure controls

No special measures are necessary.

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	clear
Odour:	like: Petroleum

#### Test method

#### Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	98 °C
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	-6,1 °C

#### Flammability

Solid/liquid:	not determined
Gas:	not determined

#### Explosive properties

Vapours can form explosive mixtures with air.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	~382 °C ASTM D 1929

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#### Self-ignition temperature

Solid: not determined

Gas: not determined

Decomposition temperature: not determined

#### Oxidizing properties

No information available.

pH-Value: not applicable

Viscosity / kinematic:  
(at 25 °C) 1 mm<sup>2</sup>/s

Water solubility: slightly soluble

#### Solubility in other solvents

No information available.

Partition coefficient n-octanol/water: <1

Vapour pressure:  
(at 20 °C) ~80 hPa

Density (at 20 °C): 0,7 g/cm<sup>3</sup>

Relative vapour density: not determined

#### 9.2. Other information

Sustaining combustion: Not sustaining combustion

Evaporation rate: not determined

#### Further Information

No information available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

#### 10.2. Chemical stability

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

#### 10.3. Possibility of hazardous reactions

This material is considered to be non-reactive under normal use conditions.

#### 10.4. Conditions to avoid

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

#### 10.5. Incompatible materials

Strong acid, Strong alkali, Oxidising agent

#### 10.6. Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>), Carbon dioxide (CO<sub>2</sub>), Carbon monoxide

### SECTION 11: Toxicological information

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#### 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.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	Hydrocarbons, C7-C9, isoalkanes				
	oral	LD50 > 7100 - 7800 mg/kg	Rat	Study report (1961)	OECD Guideline 401
	dermal	LD50 > 2200 - 2500 mg/kg	Rabbit	Study report (1961)	Standard acute method, applying 4 differ
	inhalation (4 h) vapour	LC50 > 21 mg/l	Rat	Study report (1985)	OECD Guideline 403
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 5045 mg/kg	Rat		
	dermal	LD50 12800-13400 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 30 mg/l	Rat		

##### Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

##### Sensitising effects

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

##### Carcinogenic/mutagenic/toxic effects for reproduction

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

##### STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C7-C9, isoalkanes)

##### STOT-repeated exposure

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

##### Aspiration hazard

May be fatal if swallowed and enters airways.

#### 11.2. Information on other hazards

##### Endocrine disrupting properties

No data available

### SECTION 12: Ecological information

#### 12.1. Toxicity



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
	Hydrocarbons, C7-C9, isoalkanes					
	Acute fish toxicity	LL50 mg/l	18,4	96 h	Oncorhynchus mykiss	REACH Registration Dossier
	Acute algae toxicity	ErC50	12 mg/l	72 h	Pseudokirchneriella subcapitata	SIDS Initial Assessment Report For SIAM
	Acute crustacea toxicity	EL50 mg/l	ca. 2,4	48 h	Daphnia magna	REACH Registration Dossier
	Fish toxicity	NOEC mg/l	0,778	28 d	Oncorhynchus mykiss	REACH Registration Dossier
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	REACH Registration Dossier
						other: As described in: The evaluation o
						The aquatic toxicity was estimated by a
						OECD Guideline 211
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50 mg/l	10000	96 h	Pimephales promelas	Publication (1983)
	Acute algae toxicity	ErC50 mg/l	>100	72 h	Desmodesmus subspicatus	
	Acute crustacea toxicity	EC50 mg/l	13299	48 h	Daphnia magna (Big water flea)	

#### 12.2. Persistence and degradability

No information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
	OECD 301E	95%	21	

#### 12.3. Bioaccumulative potential

No information available.

#### **Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
	Hydrocarbons, C7-C9, isoalkanes	ca. 3,52
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05

#### **BCF**

CAS No	Chemical name	BCF	Species	Source
	Hydrocarbons, C7-C9, isoalkanes	ca. 105		REACH Registration D
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	<100		

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#### **12.4. Mobility in soil**

No information available.

#### **12.5. Results of PBT and vPvB assessment**

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

#### **12.6. Endocrine disrupting properties**

No data available

#### **12.7. Other adverse effects**

No information available.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Disposal recommendations**

Dispose of waste according to applicable legislation.

##### **Contaminated packaging**

Dispose of waste according to applicable legislation.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number:</u></b>	UN 1993
<b><u>14.2. UN proper shipping name:</u></b>	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, isoalkanes)
<b><u>14.3. Transport hazard class(es):</u></b>	3
<b><u>14.4. Packing group:</u></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><u>14.1. UN number:</u></b>	UN 1993
<b><u>14.2. UN proper shipping name:</u></b>	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, isoalkanes)
<b><u>14.3. Transport hazard class(es):</u></b>	3
<b><u>14.4. Packing group:</u></b>	II
Hazard label:	3
Classification code:	F1
Special Provisions:	274 601 640D
Limited quantity:	1 L
Excepted quantity:	E2

#### **Marine transport (IMDG)**

<b><u>14.1. UN number:</u></b>	UN 1993
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<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, isoalkanes)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
Marine pollutant:	P
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:</b>	UN 1993
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, isoalkanes)
<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
Danger releasing substance:	Hydrocarbons, C7-C9, isoalkanes

#### 14.6. Special precautions for user

No information available.

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

No information available.

### 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

2010/75/EU (VOC): 700 g/l

##### National regulatory information

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

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Hydrocarbons, C7-C9, isoalkanes

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propan-2-ol; isopropyl alcohol; isopropanol

#### SECTION 16: Other information

##### Changes

This data sheet contains changes from the previous version in section(s): 12.

##### 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)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
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)  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
EC50: Effectice concentration, 50 percent  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

##### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 2; H411	Calculation method

##### 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.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

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