

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (2020/878)

**MultiEx NAO**

Revision date: 04.01.2024

Product code: 090689-RM

Page 1 of 9

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

MultiEx NAO

Product group: Zulieferprodukt  
UFI: Y0W2-M04C-V00N-28VA

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

Electronics cleaner for spray and immersion plants

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

Company name: kolb Cleaning Technology GmbH  
Street: Karl-Arnold-Str. 12  
Place: D-47877 Willich  
Telephone: +49-2154-947938 Telefax: +49-2154-947947  
e-mail: info@kolb-ct.com  
Contact person: Christian Linker Telephone: +49-2324-97980  
e-mail: christian.linker@kolb-ct.com  
Internet: www.kolb-ct.com  
Responsible Department: Labor/ QS

**1.4. Emergency telephone number:**

+49/ (0) 23 24/ 979817 (EU)  
+61 4 19 809 805 (Australia)  
+1 970 443 9233 (USA)  
Schweiz: 145

**Further Information**

Australia:	USA:
kolb Cleaning Technology AP PTY LTD	kolb USA LLC
6/150 Canterbury Road	410 Sunset, Unit C
NSW 2200 Bankstown	80501 Longmont – CO
Phone: +61 2 97900273	Phone 001- 970-532-5100
Mobile +61 4 19 809 805	Mobile: 001- 970-443-9233

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

**2.2. Label elements****Regulation (EC) No 1272/2008****Special labelling of certain mixtures**

EUH210 Safety data sheet available on request.

**2.3. Other hazards**

No information available.

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

Cleaner on the basis of (according to EC Detergents Regulation 648/2004): glycols, Alkyle propylene glycole, polyhydric alcohols, builders

CLEANING TECHNOLOGY  
Made in Germany

kolb Cleaning Technology GmbH

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (2020/878)

**MultiEx NAO**

Revision date: 04.01.2024

Product code: 090689-RM

Page 2 of 9

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			1 - < 5 %
	200-661-7	603-117-00-0		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem			1 - < 5 %
	252-104-2		01-2119450011-60	

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	1 - < 5 %
	dermal: LD50 = 12800 mg/kg; oral: LD50 = 5050 mg/kg		
34590-94-8	252-104-2	Dipropylene glycol monomethyl ether, Isomerengem	1 - < 5 %
	dermal: LD50 = 19020 mg/kg; oral: LD50 = 5130 mg/kg		

**Labelling for contents according to Regulation (EC) No 648/2004**

preservation agents.

**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water.

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

No information 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**

Co-ordinate fire-fighting measures to the fire surroundings.

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

Non-flammable.

**5.3. Advice for firefighters**

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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

### MultiEx NAO

Revision date: 04.01.2024

Product code: 090689-RM

Page 3 of 9

## SECTION 6: Accidental release measures

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

#### General advice

Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

#### For cleaning up

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.

#### 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

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

No special measures are necessary.

#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

#### Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed.

#### Hints on joint storage

No special measures are necessary.

### 7.3. Specific end use(s)

Electronics cleaner for spray and immersion plants

## 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
34590-94-8	(2-Methoxymethylethoxy)-l-propanol	50	308		TWA (8 h)	
67-63-0	Isopropyl alcohol	200	-		TWA (8 h)	
		400	-		STEL (15 min)	

# Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

## MultiEx NAO

Revision date: 04.01.2024

Product code: 090689-RM

Page 4 of 9

### 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

### 8.2. Exposure controls

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

##### Eye/face protection

Wear eye/face protection.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

##### Skin protection

Use of protective clothing.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	blue
Odour:	neutral
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	> 100 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	> 100 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	7
Water solubility: (at 20 °C)	full soluble in water.
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	0,977 g/cm <sup>3</sup>
Relative vapour density:	not determined

### 9.2. Other information

#### Information with regard to physical hazard classes

##### Explosive properties

The product is not: Explosive.

##### Oxidizing properties

The product is not: oxidising.

#### Other safety characteristics

# Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

## MultiEx NAO

Revision date: 04.01.2024

Product code: 090689-RM

Page 5 of 9

Evaporation rate:	not determined
Solid content:	not determined
Viscosity / dynamic: (at 20 °C)	6,8 mPa·s

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

none

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 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.

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	
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem				
	oral	LD50 mg/kg	5130	Ratte	AMA
	dermal	LD50 mg/kg	19020	Ratte	

#### Irritation and corrosivity

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

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

#### 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.

CLEANING TECHNOLOGY  
Made in Germany

kolb Cleaning Technology GmbH

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (2020/878)

**MultiEx NAO**

Revision date: 04.01.2024

Product code: 090689-RM

Page 6 of 9

**11.2. Information on other hazards****Other information**

There are no other hazards that require special attention.

**Further information**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

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

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
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		
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem					
	Acute fish toxicity	LC50 mg/l	>10000	96 h	Pimephales promelas (Amerikan. Elritze)	
	Acute algae toxicity	ErC50 mg/l	>969	96 h	Alge	
	Acute crustacea toxicity	EC50 mg/l	1919	48 h	Daphnia magna (Wasserfloh)	
	Crustacea toxicity	NOEC	12 mg/l		Daphnia magna (Wasserfloh)	

**12.2. Persistence and degradability**

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem			
	OECD 301E	>70%	28	
	biologisch abbaubar			

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
34590-94-8	Dipropylene glycol monomethyl ether, Isomerengem	-0,6

**12.4. Mobility in soil**

The product has not been tested.

**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.

The product has not been tested.

**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.

**12.7. Other adverse effects**

No information available.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (2020/878)

**MultiEx NAO**

Revision date: 04.01.2024

Product code: 090689-RM

Page 7 of 9

**Further information**

Avoid release to the environment.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

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

070104 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; other organic solvents, washing liquids and mother liquors; hazardous waste

**Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

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

- 14.1. UN number or ID number:**  
**14.2. UN proper shipping name:**  
**14.3. Transport hazard class(es):**  
**14.4. Packing group:**

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

- 14.1. UN number or ID number:**  
**14.2. UN proper shipping name:**  
**14.3. Transport hazard class(es):**  
**14.4. Packing group:**

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

- 14.1. UN number or ID number:**  
**14.2. UN proper shipping name:**  
**14.3. Transport hazard class(es):**  
**14.4. Packing group:**

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.

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

- 14.1. UN number or ID number:**  
**14.2. UN proper shipping name:**  
**14.3. Transport hazard class(es):**  
**14.4. Packing group:**

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No information available.

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

not applicable

**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 40, Entry 75

2010/75/EU (VOC): 19,6 % (191,492 g/l)

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (2020/878)

**MultiEx NAO**

Revision date: 04.01.2024

Product code: 090689-RM

Page 8 of 9

2004/42/EC (VOC): 19,6 % (191,492 g/l)  
Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**Additional information**

Regulation (EC) No. 648/2004 [Detergents regulation]. To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****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  
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  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
VOC: Volatile Organic Compounds  
SVHC: Substance of Very High Concern  
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).





kolb in Germany

kolb Cleaning Technology GmbH

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (2020/878)

### MultiEx NAO

Revision date: 04.01.2024

Product code: 090689-RM

Page 9 of 9

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

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH210	Safety data sheet available on request.

#### Further Information

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. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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