

# Safety Data Sheet

according to Regulation (EC) No 1907/2006



## Indumaster® Radical

Revision date: 27.04.2023

IR40

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

#### 1.1. Product identifier

Indumaster® Radical

UFI: UQ60-N0NJ-K00V-ECJE

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

##### Use of the substance/mixture

EuPCS: PC-CLN-2 All-purpose (or multi-purpose) non-abrasive cleaners

Process categories [PROC]: 8, 10, 11

Restricted to professional users.

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

Company name: BUZIL-WERK Wagner GmbH & Co. KG  
Street: Fraunhofer Str. 17  
Place: D-87700 Memmingen  
Telephone: +49 (0) 8331 930-6  
Telefax: +49 (0) 8331 930-880  
e-mail: info@buzil.de  
Contact person: info@buzil.de  
Internet: www.buzil.com

**1.4. Emergency telephone number:** +49 (0) 8331 930-6 (08:00 - 16:00 h)

### SECTION 2: Hazards identification

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

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

Met. Corr. 1; H290

Skin Corr. 1; H314

Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

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

##### Hazard components for labelling

Sodium hydroxide

**Signal word:** Danger

**Pictograms:**



##### Hazard statements

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

##### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.

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### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
The inhalation of dust/mist or aerosols causes irritation of the respiratory tract.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether			5 - < 10 %
	203-961-6	603-096-00-8	01-2119475104-44	
	Eye Irrit. 2; H319			
6834-92-0	Disodium metasilicate			1 - < 5 %
	229-912-9	014-010-00-8	01-2119449811-37	
	Met. Corr. 1, Skin Corr. 1B, STOT SE 3; H290 H314 H335			
68411-30-3	Sodium dodecyl benzene sulfonate			1 - < 5 %
	270-115-0		01-2119489428-22	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3; H302 H315 H318 H412			
1310-73-2	Sodium hydroxide			< 1 %
	215-185-5	011-002-00-6	01-2119457892-27	
	Met. Corr. 1, Skin Corr. 1A; H290 H314			

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			
112-34-5	203-961-6	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether	5 - < 10 %	
	inhalation: LC50 = >20 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg			
6834-92-0	229-912-9	Disodium metasilicate	1 - < 5 %	
	inhalation: LC50 = >5 mg/l (dusts or mists); dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg			
68411-30-3	270-115-0	Sodium dodecyl benzene sulfonate	1 - < 5 %	
	inhalation: LC50 = >5 mg/l (dusts or mists); dermal: LD50 = >2000 mg/kg; oral: LD50 = 500 mg/kg			
1310-73-2	215-185-5	Sodium hydroxide	< 1 %	
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2			

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

< 5 % anionic surfactants, < 5 % non-ionic surfactants, perfumes (Linalool).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately.

#### After inhalation

Provide fresh air.

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### After contact with skin

After contact with skin, wash immediately with plenty of water and soap.  
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

Rinse mouth immediately and drink plenty of water.  
Do NOT induce vomiting.

### 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

Water spray jet  
alcohol resistant foam  
Carbon dioxide  
Extinguishing powder

#### Unsuitable extinguishing media

Full water jet

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

Hazardous combustion products:  
Carbon dioxide  
Carbon monoxide

### 5.3. Advice for firefighters

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

### 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

Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.

#### For non-emergency personnel

Ventilate affected area.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.  
Do not allow to enter into soil/subsoil.

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

#### For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### For cleaning up

Treat the recovered material as prescribed in the section on waste disposal.

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### Other information

Collect in closed and suitable containers for disposal.  
Ventilate affected area.

### 6.4. Reference to other sections

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

Avoid contact with skin, eyes and clothes.  
Do not mix with other chemicals.  
Use personal protection equipment.  
When using do not eat, drink or smoke.  
Do not breathe gas/fumes/vapour/spray.  
Use only in well-ventilated areas.

#### 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 or smoke.

#### Further information on handling

No further relevant information available.

### 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.

#### Further information on storage conditions

No further relevant information available.

### 7.3. Specific end use(s)

Cleaning agent

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limit values

CAS No	Name of agent	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	
		15	101.2		STEL (15 min)	

#### Additional advice on limit values

No information available.

### 8.2. Exposure controls

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### Appropriate engineering controls

No information available.

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

#### Eye/face protection

Wear eye/face protection. (EN 166)

#### Hand protection

Wear suitable gloves. (EN 374, Breakthrough time: >10 min.)

Suitable material: NBR (Nitrile rubber).

Thickness of the glove material  $\geq 0,1$  mm

A survey of suitable brands with detailed information on breakthrough times is available upon request.

Diluted ready-to-use solutions  $\leq 1\%$ :

Protective gloves may be waived, if equivalent measures allowing for an increased skin stress because of wet work are implemented (e. g. application of suitable skin protecting creams).

#### Skin protection

Wear suitable work clothing.

#### Respiratory protection

If extensively sprayed or used with high pressure equipment: combination filter A1/P2 (EN 143, EN 14387).

Use only in well-ventilated areas.

#### Thermal hazards

No further relevant information available.

#### Environmental exposure controls

Section 6: Accidental Release Measures

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	yellow
Odour:	Perfumes, fragrances

	Test method
Melting point/freezing point:	approx. 0 °C
Boiling point or initial boiling point and boiling range:	approx. 100 °C
Flammability:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	> 60 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not applicable
pH-Value (at 20 °C):	12,5 - 13,5
Viscosity / kinematic: (at 40 °C)	not determined
Water solubility: (at 20 °C)	completely miscible
Solubility in other solvents	
not determined	

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Partition coefficient n-octanol/water:	not applicable
Vapour pressure:	not determined
Density (at 20 °C):	1,04 g/cm <sup>3</sup>
Relative density:	not determined
Relative vapour density:	not determined
Particle characteristics:	not relevant

### **9.2. Other information**

#### **Other safety characteristics**

Viscosity / dynamic:  
(at 25 °C) < 10 mPa·s (50 1/s)

No information available.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Corrosive to metals.  
Exothermic reaction with: Acid

### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

### **10.3. Possibility of hazardous reactions**

Corrosive to metals.  
Exothermic reaction with: Acid

### **10.4. Conditions to avoid**

The product is stable under storage at normal ambient temperatures.

### **10.5. Incompatible materials**

Corrosive to metals.  
Acid

### **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.

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether				
	oral	LD50 >2000 mg/kg	Rat	ATE	
	dermal	LD50 >2000 mg/kg	Rat	ATE	
	inhalation vapour	LC50 >20 mg/l	Rat	ATE	
6834-92-0	Disodium metasilicate				
	oral	LD50 >2000 mg/kg	Rat	ATE	
	dermal	LD50 >2000 mg/kg	Rat	ATE	
	inhalation dust/mist	LC50 >5 mg/l	Rat	ATE	
68411-30-3	Sodium dodecyl benzene sulfonate				
	oral	LD50 500 mg/kg	Rat	ATE	
	dermal	LD50 >2000 mg/kg	Rat	ATE	
	inhalation dust/mist	LC50 >5 mg/l	Rat	ATE	
1310-73-2	Sodium hydroxide				
	oral	LD50 > 2000 mg/kg	Rat	ATE	
	dermal	LD50 > 2000 mg/kg	Rat	ATE	

### Irritation and corrosivity

Causes severe skin burns and eye damage.  
Causes serious eye damage.

### 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.

## 11.2. Information on other hazards

### Other information

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether					
	Acute fish toxicity	LC50 mg/l	2780	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50 mg/l	> 100		Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50 mg/l	4950	48 h	Daphnia magna (Big water flea)	
6834-92-0	Disodium metasilicate					
	Acute fish toxicity	LC50	210 mg/l	96 h	Danio rerio (zebrafish)	
	Acute crustacea toxicity	EC50 mg/l	1700	48 h	Daphnia magna (Big water flea)	
68411-30-3	Sodium dodecyl benzene sulfonate					
	Acute fish toxicity	LC50	>1 mg/l	96 h		
	Acute algae toxicity	ErC50	>1 mg/l			
	Acute crustacea toxicity	EC50	>1 mg/l	48 h		
1310-73-2	Sodium hydroxide					
	Acute fish toxicity	LC50	125 mg/l	96 h	Gambusia affinis (Mosquito fish)	
	Acute crustacea toxicity	EC50 mg/l	40,4	48 h	Ceriodaphnia spec	

### 12.2. Persistence and degradability

The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether			
	OECD 301	>60%	28	
	Readily biodegradable (according to OECD criteria).			
68411-30-3	Sodium dodecyl benzene sulfonate			
	OECD 301	>60%	28	
	Readily biodegradable (according to OECD criteria).			

### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether	0,56

### 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.

### 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.



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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Dispose of waste according to applicable legislation.  
Delivery to an approved waste disposal company.

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

070601 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; aqueous washing liquids and mother liquors; hazardous waste

##### List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

##### Contaminated packaging

Non-contaminated packages may be recycled.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

**14.1. UN number or ID number:** UN 1824  
**14.2. UN proper shipping name:** SODIUM HYDROXIDE SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8



Classification code: C5  
Limited quantity: 5 L  
Transport category: 3  
Hazard No: 80  
Tunnel restriction code: E

#### Inland waterways transport (ADN)

**14.1. UN number or ID number:** UN 1824  
**14.2. UN proper shipping name:** SODIUM HYDROXIDE SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8



Classification code: C5  
Limited quantity: 5 L

#### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 1824  
**14.2. UN proper shipping name:** SODIUM HYDROXIDE, SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8

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Marine pollutant: no  
Special Provisions: 223  
Limited quantity: 5 L  
EmS: F-A, S-B

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

**14.1. UN number or ID number:** UN 1824  
**14.2. UN proper shipping name:** SODIUM HYDROXIDE, SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8



Special Provisions: A3 A803  
Limited quantity Passenger: 1 L  
IATA-packing instructions - Passenger: 852  
IATA-max. quantity - Passenger: 5 L  
IATA-packing instructions - Cargo: 856  
IATA-max. quantity - Cargo: 60 L

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

No special measures are necessary.

### 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 3, Entry 55, Entry 75

2010/75/EU (VOC): < 0,5 %

#### Additional information

Regulation (EC) No. 648/2004 [Detergents regulation]

#### 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

### Changes

This data sheet contains changes from the previous version in section(s): 1,2,7,9,10,15.

### 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)

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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%

Process categories according to ECHA guidance on information requirements and chemical safety assessment, chapter R.12:

PROC 1: Use in closed processes.

PROC 2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC 4: Chemical production where opportunity for exposure arises

PROC 7: Industrial spraying

PROC 8 (Transfer): Dilution of concentrated products, application of drain cleaners, dosage of textile washing agents.

PROC 9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC 10 (Roller application or brushing): Processing without large-scale spraying.

PROC 11 (Spraying outside industrial settings): Processing with large-scale spraying (e. g. high pressure cleaning, foam gun).

PROC 13: Treatment of articles by dipping and pouring

PROC 19 (Hand-mixing with intimate contact): Hand cleaning and disinfection

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

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

### Further Information

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]: 9 (1)

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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