

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 1 of 12

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

1.1. Product identifier

RADANA

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

Use of the substance/mixture

Washing and cleaning products (including solvent based products)
Stripper, irritant, containing solvents with skin absorptive substances
Process categories [PROC]: 8, 10

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
e-mail: info@buzil.de
Internet: www.buzil.com
Telefax: +49 (0) 8331 930-880

1.4. Emergency telephone number: +49 (0) 8331 / 930-730

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
Harmful if swallowed.
Causes serious eye damage.
Causes skin irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

2-phenoxyethanol, fatty alcohol polyethoxylate

Signal word: Danger

Pictograms:



Hazard statements

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H315 Causes skin irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 2 of 12

P310

present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
122-99-6	2-phenoxyethanol			20 - < 25 %
	204-589-7	603-098-00-9	01-2119488943-21	
	Acute Tox. 4, Eye Irrit. 2; H302 H319			
69011-36-5	fatty alcohol polyethoxylate			5 - < 10 %
	Acute Tox. 4, Eye Dam. 1; H302 H318			
100-51-6	benzyl alcohol			1 - < 5 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4; H302 H332			
68783-56-2	ethanolamine soap			1 - < 5 %
	Eye Dam. 1; H318			
126-92-1	sodium ethylhexyl sulfate			1 - < 5 %
	204-812-8		01-2119971586-23	
	Skin Irrit. 2, Eye Dam. 1; H315 H318			
141-43-5	2-aminoethanol, ethanolamine			1 - < 5 %
	205-483-3	603-030-00-8	01-2119486455-28	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, STOT SE 3; H302 H312 H332 H314 H335			
5131-66-8	3-butoxypropan-2-ol, propylene glycol monobutyl ether			1 - < 5 %
	225-878-4	603-052-00-8	01-2119475527-28	
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			

Full text of H and EUH statements: see section 16.

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

5 % - < 15 % non-ionic surfactants, < 5 % soap, < 5 % anionic surfactants, perfumes (Benzyl alcohol, Limonene, Hexyl cinnamal).

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

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

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 3 of 12

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

High power 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

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

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

Absorb with liquid-binding material (e.g. 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

Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 4 of 12

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.
Use only in well-ventilated areas.
Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Advice on storage compatibility

No special measures are necessary.

7.3. Specific end use(s)

There are no data available on the mixture itself.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	WEL
		3	7.6		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
126-92-1	sodium ethylhexyl sulfate			
Worker DNEL, long-term		inhalation	systemic	285 mg/m ³
Worker DNEL, long-term		dermal	systemic	4060 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	24 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	85 mg/m ³

PNEC values

CAS No	Substance	Value
126-92-1	sodium ethylhexyl sulfate	
Environmental compartment		
Freshwater		0,1357 mg/l
Marine water		0,0136 mg/l
Freshwater sediment		1,5 mg/kg
Marine sediment		0,15 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,35 mg/l
Soil		0,22 mg/kg

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 5 of 12

8.2. Exposure controls

Protective and hygiene measures

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

Eye/face protection

Wear eye protection/face protection. (EN 166)

Hand protection

- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
- Suitable material: NBR (Nitrile rubber).
- Breakthrough time (maximum wearing time) >480 min.
- A survey of suitable brands with detailed information on breakthrough times is available upon request.

Skin protection

Wear suitable work clothing.

Respiratory protection

- Use only in well-ventilated areas.
- In case of inadequate ventilation wear respiratory protection. (EN 14387, A1)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	
Odour:	Perfumes, fragrances

pH-Value (at 20 °C): 10,2 - 10,8

Changes in the physical state

Melting point:	approx. 0 °C
Initial boiling point and boiling range:	approx. 100 °C
Flash point:	not applicable

Flammability

Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.	
Vapour pressure:	not determined
Density (at 25 °C):	1,02 g/cm ³
Water solubility:	completely miscible

Test method

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 6 of 12

Solubility in other solvents

not determined

Partition coefficient:

not determined

Viscosity / dynamic:
(at 25 °C)

< 10 mPa·s

Vapour density:

not determined

Evaporation rate:

not determined

9.2. Other information

Solid content:

not determined

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 hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

The product is stable under storage at normal ambient temperatures.

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 toxicological effects

Acute toxicity

Harmful if swallowed.

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 7 of 12

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
122-99-6	2-phenoxyethanol					
	oral	LD50 mg/kg	1850	Rat		
	dermal	LD50 mg/kg	>2000	Rabbit		
69011-36-5	fatty alcohol polyethoxylate					
	oral	LD50 mg/kg	500-2000	Rat		
	dermal	LD50 mg/kg	>2000	Rat	ATE	
	inhalative aerosol	LC50	>5 mg/l	Rat	ATE	
100-51-6	benzyl alcohol					
	oral	LD50 mg/kg	1230	Rat		
	dermal	LD50 mg/kg	2000	Rabbit		
	inhalative vapour	ATE	11 mg/l			
	inhalative aerosol	ATE	1,5 mg/l			
68783-56-2	ethanolamine soap					
	oral	LD50 mg/kg	>2000	Rat	ATE	
	dermal	LD50 mg/kg	>2000	Rat	ATE	
	inhalative aerosol	LC50	>5 mg/l	Rat		
126-92-1	sodium ethylhexyl sulfate					
	oral	LD50 mg/kg	>2000	Rat	ATE	
	dermal	LD50 mg/kg	>2000	Rat	ATE	
	inhalative aerosol	LC50	>5 mg/l	Rat	ATE	
141-43-5	2-aminoethanol, ethanolamine					
	oral	LD50 mg/kg	1089	Rat	OECD 401	
	dermal	LD50 mg/kg	1025	Rabbit	IUCLID	
	inhalative (4 h) vapour	LC50	1487 mg/l	Rat		
	inhalative aerosol	ATE	1,5 mg/l			
5131-66-8	3-butoxypropan-2-ol, propylene glycol monobutyl ether					
	oral	LD50 mg/kg	>2000	Rat	ATE	
	dermal	LD50 mg/kg	>2000	Rat	ATE	
	inhalative vapour	LC50	>20 mg/l	Rat	ATE	

Irritation and corrosivity

Causes serious eye damage.

Causes skin irritation.

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 8 of 12

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.

SECTION 12: Ecological information

12.1. Toxicity

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 9 of 12

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
122-99-6	2-phenoxyethanol					
	Acute fish toxicity	LC50 220 - 460 mg/l	96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50 > 500 mg/l	72 h	Scenedesmus subspicatus		
	Acute crustacea toxicity	EC50 > 500 mg/l	48 h	Daphnia magna (Big water flea)		
69011-36-5	fatty alcohol polyethoxylate					
	Acute fish toxicity	LC50 1,3 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute crustacea toxicity	EC50 0,7 mg/l	48 h	Daphnia magna (Big water flea)		
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50 460 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 640 mg/l	96 h	Scenedesmus quadricauda		
68783-56-2	ethanolamine soap					
	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			
126-92-1	sodium ethylhexyl sulfate					
	Acute fish toxicity	LC50 >100 mg/l	96 h	Brachydanio rerio (zebra-fish)	ATE	
	Acute algae toxicity	ErC50 >100 mg/l	72 h	Desmodesmus subspicatus	ATE	
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna (Big water flea)	ATE	
	Acute bacteria toxicity	(>100 mg/l)	3 h	Activated sludge		
141-43-5	2-aminoethanol, ethanolamine					
	Acute fish toxicity	LC50 170 mg/l	96 h	Carassius auratus (goldfish)	APHA 1971	
	Acute algae toxicity	ErC50 22 mg/l	72 h	Scenedesmus subspicatus	EG 92/69	
	Acute crustacea toxicity	EC50 65 mg/l	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC 1,2 mg/l	30 d	Oryzias latipes (Ricefish)		
	Crustacea toxicity	NOEC 0,85 mg/l	21 d	Daphnia magna (Big water flea)	OECD 211	
5131-66-8	3-butoxypropan-2-ol, propylene glycol monobutyl ether					
	Acute fish toxicity	LC50 560 - 1000 mg/l	96 h	Poecilia reticulata (Guppy)		
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

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

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 10 of 12

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
122-99-6	2-phenoxyethanol			
	OECD 301	>60%	28	
	Readily biodegradable (according to OECD criteria).			
69011-36-5	fatty alcohol polyethoxylate			
	OECD 301D/ EEC 92/69/V, C.4-E	85,6%	28	
	Readily biodegradable (according to OECD criteria).			
100-51-6	benzyl alcohol			
	OECD 301	>60%	28	
	Readily biodegradable (according to OECD criteria).			
68783-56-2	ethanolamine soap			
	OECD 301	>60%	28	
	Readily biodegradable (according to OECD criteria).			
126-92-1	sodium ethylhexyl sulfate			
	OECD 301D/ EEC 92/69/V, C.4-E	>60%	14	
	Readily biodegradable (according to OECD criteria).			
141-43-5	2-aminoethanol, ethanolamine			
	OECD 302A/ ISO 9887/ EEC 92/69/V, C.12	>90%	21	
	Readily biodegradable (according to OECD criteria).			
5131-66-8	3-butoxypropan-2-ol, propylene glycol monobutyl ether			
	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
122-99-6	2-phenoxyethanol	1,16
100-51-6	benzyl alcohol	1,05
126-92-1	sodium ethylhexyl sulfate	-0,25
141-43-5	2-aminoethanol, ethanolamine	-1,91

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. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

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

Waste disposal number of waste from residues/unused products

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 11 of 12

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

Waste disposal number of 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: No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): < 30%

Additional information

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

National regulatory information

Water contaminating class (D): 2 - water contaminating

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

Safety Data Sheet



according to Regulation (EC) No 1907/2006

RADANA

Revision date: 04.08.2017

HC42

Page 12 of 12

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 4: Chemical production where opportunity for exposure arises

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

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)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Further Information

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.)