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

1.1. Product identifier

VAMAT KS

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)
Professional use of dishwash products
Process categories [PROC]: 1, 2, 8, 9

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
Internet: www.buzil.com

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

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

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]			
77-92-9	citric acid			5 - < 10 %
	201-069-1		01-2119457026-42	
	Eye Irrit. 2; H319			
79-33-4	lactic acid			1 - < 5 %
	201-196-2		01-2119474164-39	
	Skin Irrit. 2, Eye Dam. 1; H315 H318			
15763-76-5	sodium cumene sulfonate			1 - < 5 %
	239-854-6		01-2119489411-37	
	Eye Irrit. 2; H319			
168255-97-8	fatty alcohol polyalkoxylate			1 - < 5 %
	Eye Dam. 1, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 2; H318 H400 H411			

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 % phosphonates.

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.
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

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.

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

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
15763-76-5	sodium cumene sulfonate			
Worker DNEL, long-term		dermal	systemic	7,6 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	53,6 mg/m³
Consumer DNEL, long-term		dermal	systemic	3,8 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	13,2 mg/m³
Consumer DNEL, long-term		oral	systemic	3,8 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
77-92-9	citric acid	
15763-76-5	sodium cumene sulfonate	
Micro-organisms in sewage treatment plants (STP)		100 mg/l

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

Usually no personal respirative protection necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	
Odour:	characteristic
pH-Value (at 20 °C):	approx. 2

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):	1,05 g/cm³
Water solubility:	completely miscible

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

Exothermic reaction with: Alkali (lye)

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Alkali (lye)

10.4. Conditions to avoid

The product is stable under storage at normal ambient temperatures.

10.5. Incompatible materials

Alkali (lye)

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
77-92-9	citric acid				
	oral	LD50 3000 mg/kg	Rat	GESTIS	
	dermal	LD50 >2000 mg/kg	Rat		
	inhalative aerosol	LC50 >5 mg/l	Rat	ATE	
79-33-4	lactic acid				
	oral	LD50 3540 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		
	inhalative aerosol	LC50 >5 mg/l	Rat	ATE	
15763-76-5	sodium cumene sulfonate				
	oral	LD50 >7000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		
	inhalative vapour	LC50 >20 mg/l	Rat	ATE	
	inhalative aerosol	LC50 >5 mg/l	Rat	ATE	
168255-97-8	fatty alcohol polyalkoxylate				
	oral	LD50 3,180 mg/kg	Rat		

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/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

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
77-92-9	citric acid						
	Acute crustacea toxicity	EC50	160 mg/l	48 h		GESTIS	
	Algea toxicity	NOEC	425 mg/l	7 d	Scenedesmus quadricauda		
79-33-4	lactic acid						
	Acute fish toxicity	LC50	320 mg/l	96 h	Brachydanio rerio (zebra-fish)		
	Acute algae toxicity	ErC50	3500 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	240 mg/l	48 h	Daphnia magna (Big water flea)		
15763-76-5	sodium cumene sulfonate						
	Acute fish toxicity	LC50	>1000 mg/l	96 h			
	Acute crustacea toxicity	EC50	>1000 mg/l	48 h	Daphnia magna (Big water flea)		
	Algea toxicity	NOEC	31 mg/l	4 d			
168255-97-8	fatty alcohol polyalkoxylate						
	Acute fish toxicity	LC50	0,1 - 1 mg/l	96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50	0,1 - 1 mg/l	72 h	Scenedesmus subspicatus	OECD 201	
	Acute crustacea toxicity	EC50	0,1 - 1 mg/l	48 h			
	Crustacea toxicity	NOEC	0,1 - 1 mg/l	21 d	Daphnia magna (Big water flea)		

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			
77-92-9	citric acid			
	OECD 301	98%	2	
	Readily biodegradable (according to OECD criteria).			
79-33-4	lactic acid			
	OECD 301	>60%	28	
	Readily biodegradable (according to OECD criteria).			
15763-76-5	sodium cumene sulfonate			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	>60%	28	
	Readily biodegradable (according to OECD criteria).			
168255-97-8	fatty alcohol polyalkoxylate			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	>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
77-92-9	citric acid	-1,57
79-33-4	lactic acid	-0,62
15763-76-5	sodium cumene sulfonate	-1,1

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

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

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.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No special measures are necessary.

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 - clearly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

SECTION 3: Composition / information on ingredients

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%

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 preparation 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)

H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

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.)