

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Beizsprühgel Safe Stain

Print date: 31.08.2018

Product code: C2856

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

1.1. Product identifier

Beizsprühgel Safe Stain

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

Use of the substance/mixture

Metal surface treatment products, including galvanic and electroplating products

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name: - CANTESCO - KEMPER SYSTEM GmbH & Co. KG
Street: Boschstr. 14 - 16
Place: D-48653 Coesfeld
Telephone: +49 (0) 02541/920-0 Telefax: +49 (0) 02541/920-285
e-mail: MSDS@KEMPER-SYSTEM.COM
Responsible Department: Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
Langenbeckstraße 1; Gebäude 601; 55131 Mainz

1.4. Emergency telephone number:

+49 (0)6131 / 19 24 0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

May be corrosive to metals.

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

Causes severe skin burns and eye damage.

Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Nitric acid

Fluoroboric acid

Hydrofluoric acid

Signal word:

Danger

Pictograms:



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Hazard statements

- H290 May be corrosive to metals.
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.

Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
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/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.
P390 Absorb spillage to prevent material damage.

Special labelling of certain mixtures

- EUH071 Corrosive to the respiratory tract.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

inorganic acids

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7697-37-2	Nitric acid			15 - < 20 %
	231-714-2	007-004-00-1	01-2119487297-23	
	Ox. Liq. 2, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A; H272 H290 H331 H314			
16872-11-0	Fluoroboric acid			5 - < 10 %
	240-898-3	009-010-00-X	01-2119979570-28	
	Met. Corr. 1, Skin Corr. 1B; H290 H314			
7664-39-3	Hydrofluoric acid			< 1 %
	231-634-8		01-2119458860-33	
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, Skin Corr. 1A; H310 H300 H330 H314			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.
Avoid contact with skin, eyes and clothes. Wear suitable protective clothing, gloves and eye/face protection.
Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Call a physician immediately.

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In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.
Take off immediately all contaminated clothing and wash it before reuse.
Call a physician immediately.
Apply calcium gluconate gel and massage into the skin until the pain subsides, in between rinse with water and apply fresh gel.

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. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately.

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

Skin corrosion/irritation
Spasms
Vomiting

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

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Water mist, Foam, Dry extinguishing powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.
In case of fire may be liberated: Nitrogen oxides (NO_x), Hydrogen fluoride, Boron oxides

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. 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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Use appropriate respiratory protection.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Before discharge into sewage plants the product normally needs to be neutralised.

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

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed and in a well-ventilated place. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin, eyes and clothes. Wear suitable protective clothing, gloves and eye/face protection.
When using do not eat, drink or smoke. Wash hands before breaks and after work.

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. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Unsuitable container/equipment material: Metal.

Advice on storage compatibility

Do not store together with: alkali

Further information on storage conditions

storage temperature 5 - 35 °C

7.3. Specific end use(s)

Metal surface treatment products, including galvanic and electroplating products

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
16984-48-8	Fluoride (inorganic as F)	-	2.5		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
7664-39-3	Hydrogen fluoride (as F)	1.8	1.5		TWA (8 h)	WEL
		3	2.5		STEL (15 min)	WEL
7697-37-2	Nitric acid	-	-		TWA (8 h)	WEL
		1	2.6		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
7697-37-2	Nitric acid			
Worker DNEL, long-term		inhalation	local	2,6 mg/m³
Worker DNEL, acute		inhalation	local	2,6 mg/m³
Consumer DNEL, long-term		inhalation	local	1,3 mg/m³
Consumer DNEL, acute		inhalation	local	1,3 mg/m³

8.2. Exposure controls

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Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: Eye glasses with side protection (DIN EN 166)

Face protection umbrella

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.

Wear protective gloves. (DIN EN 374)

Suitable material: Butyl caoutchouc (butyl rubber)/PVC (Polyvinyl chloride) 0,5mm >480min

Skin protection

Wear suitable protective clothing. Protective apron.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. gas filtering equipment (EN 141): B-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid - viscous
Colour:	colourless
Odour:	stinging

Test method

pH-Value (at 20 °C):	0 - 1
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Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
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

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Decomposition temperature:

not determined

Oxidizing properties

Not oxidizing.

Density (at 20 °C):

1,18 +/- 0,03 g/cm³

Water solubility:

easily soluble

Solubility in other solvents

not determined

Partition coefficient:

not determined

Viscosity / dynamic:

6000-9000 mPa·s

Vapour density:

not determined

Evaporation rate:

not determined

9.2. Other information

Solid content:

< 15 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals. Possibility of hazardous reactions.

Reacts with : alkali, Reducing agent.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

The product develops hydrogen in an aqueous solution in contact with metals.

Exothermic reaction with: Base

10.4. Conditions to avoid

Frost, storage temperature 5-35°C

10.5. Incompatible materials

Aluminium, Steel, Zinc Glass

Keep away from: Base

10.6. Hazardous decomposition products

Boric acid

In case of fire may be liberated: Nitrogen oxides (NOx), Hydrogen fluoride, Boron oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed, in contact with skin or if inhaled.

ATEmix calculated

ATE (oral) 1700,0 mg/kg; ATE (dermal) 1700,0 mg/kg; ATE (inhalative vapour) 12,53 mg/l; ATE (inhalative aerosol) 2,191 mg/l

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CAS No	Chemical name				
	Exposure route	Dose		Species	Source
7697-37-2	Nitric acid				
	inhalative (4 h) vapour	LC50	2,65 mg/l	Rat	OECD 403
	inhalative aerosol	ATE	0,5 mg/l		
7664-39-3	Hydrofluoric acid				
	oral	LD50	5,1 mg/kg		estimated
	dermal	LD50	5,1 mg/kg		estimated
	inhalative (4 h) vapour	LC50	0,6 mg/l		estimated
	inhalative aerosol	ATE	0,05 mg/l		
	inhalative (1 h) gas	LC50	1610 ppm	Rat	

Irritation and corrosivity

Causes severe skin burns and 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.

Additional information on tests

The mixture is classified as 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
7697-37-2	Nitric acid				
	Acute fish toxicity	LC50 12,5 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute crustacea toxicity	EC50 4,6 mg/l	48 h	Ceriodaphnia dubia	US-EPA

12.2. Persistence and degradability

Product/Substance is inorganic.

12.3. Bioaccumulative potential

Product/Substance is inorganic.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

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Further information

Avoid release to the environment. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

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

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances
Classified as hazardous waste.

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself. Contaminated packages must be completely emptied and can be re-used following proper cleaning.
Wash with plenty of water.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN 3264

14.2. UN proper shipping name:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Fluoroboric acid)

14.3. Transport hazard class(es):

8

14.4. Packing group:

II

Hazard label:

8



Classification code:

C1

Special Provisions:

274

Limited quantity:

1 L

Excepted quantity:

E2

Transport category:

2

Hazard No:

80

Tunnel restriction code:

E

Inland waterways transport (ADN)**14.1. UN number:**

UN 3264

14.2. UN proper shipping name:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Fluoroboric acid)

14.3. Transport hazard class(es):

8

14.4. Packing group:

II

Hazard label:

8



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Classification code: C1
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 3264
14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Tetrafluoroboric acid)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-A, S-B

Air transport (ICAO)

14.1. UN number: UN 3264
14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Tetrafluoroboric acid)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Special Provisions: A3 A803
Limited quantity Passenger: 0.5 L
Passenger LQ: Y840
Excepted quantity: E2
IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 855
IATA-max. quantity - Cargo: 30 L

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

2004/42/EC (VOC): 0 %

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Additional information

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
[Seveso-III-Directive]

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D):

1 - slightly 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
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%

Relevant H and EUH statements (number and full text)

H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
EUH071	Corrosive to the respiratory tract.

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.)