

Safety Data Sheet

according to UK REACH Regulation

INOBOND 605

Revision date: 18.05.2022

Product code: PP-00120

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

1.1. Product identifier

INOBOND 605

UFI: A4KU-AMTW-N00C-5KA2

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

Use of the substance/mixture

Welding and soldering products

Uses advised against

none

1.3. Details of the supplier of the safety data sheet

Company name:	vanBaerle AG	
Street:	Schützenmattstrasse 21	
Place:	CH-4142 Münchenstein	
Telephone:	0041 61 415 91 11	Telefax: 0041 61 415 92 22
e-mail (Contact person):	silikat@vanbaerle.ch	
Responsible Department:	Gefahrgutbeauftragter / 0041 61 415 91 11	

1.4. Emergency telephone number:

Swiss Toxicological Information Centre 145 (international 0041 44 251 51 51)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

The classification was carried out according to the calculation method of EU regulation 1272/2008.

2.2. Label elements

GB CLP Regulation

Signal word: Warning

Pictograms:



Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements

P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.

2.3. Other hazards

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

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Silicic acid, alkali metal salt (Me₂O : SiO₂ = 1 : > 2.60 - < 3.20) in aqueous solution

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7732-18-5	Water			50 - < 100 %
	231-791-2			
1312-76-1	Silicic acid, potassium salt (Molar ratio K ₂ O : SiO ₂ = 1 : > 2.6 - <= 3.2)			25 - < 50 %
	215-199-1		01-2119456888-17	
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
1310-65-2	Lithium hydroxide			1 - < 5 %
	215-183-4		01-2119560576-31	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H302 H314 H318			

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		
1312-76-1	215-199-1	Silicic acid, potassium salt (Molar ratio K ₂ O : SiO ₂ = 1 : > 2.6 - <= 3.2)	25 - < 50 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg		
1310-65-2	215-183-4	Lithium hydroxide	1 - < 5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 368 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No special measures are necessary. When in doubt or if symptoms are observed, get medical advice. First aider:
Pay attention to self-protection!

After inhalation

Provide fresh air. In the event of symptoms take medical treatment.

After contact with skin

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. In the event of symptoms take medical treatment.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

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

No known symptoms to date.

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

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In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.
Water spray jet, Carbon dioxide (CO₂), Extinguishing powder, Foam

Unsuitable extinguishing media

Full water jet

5.3. Advice for firefighters

Use suitable breathing apparatus. Do not inhale explosion and combustion gases.

Additional information

Heating causes rise in pressure with risk of bursting. Cool endangered containers with water spray jet. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Avoid contact with skin, eyes and clothes. Use personal protection equipment. Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Rinse away rest with plenty of water. Dispose according to legislation.

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**

Observe the usual precautions for handling chemicals. Do not mix with other chemicals. Avoid contact with skin, eyes and clothes. Do not breathe aerosol. Use personal protection equipment.

Advice on protection against fire and explosion

The product is not: Combustible, Explosive.
Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

Avoid contact with eyes and skin. Avoid breathing spray. When using do not eat, drink or smoke. Take off immediately all contaminated clothing and wash it before reuse. Wash hands and face before breaks and after work and take a shower if necessary. Apply skin care products after work.

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Provide solvent-resistant and impermeable floor.
storage stability 12 months.
storage temperature: +5 °C - +45 °C

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.
Do not store together with: Acids

7.3. Specific end use(s)

Restricted to professional users.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1310-65-2	Lithium hydroxide	-	1		STEL (15 min)	WEL

Additional advice on limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection (DIN EN 166)

Hand protection

Tested protective gloves must be worn (EN ISO 374)
Suitable material: NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)
Thickness of the glove material \geq 0,4 mm
Breakthrough time (maximum wearing time) \geq 480 min
Observe the wear time limits as specified by the manufacturer.

Skin protection

Clothing as usual in the chemical industry

Respiratory protection

Usually no personal respirative protection necessary.
Respiratory protection necessary at: exceeding exposure limit values, aerosol or mist formation. Suitable respiratory protection apparatus: P2 Particle filter device (DIN EN 143)

Environmental exposure controls

See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid, clear
Colour: colourless
Odour: odourless

Changes in the physical state

Boiling point or initial boiling point and boiling range: > 100 °C

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Flash point: not applicable

Explosive properties

Not explosive.

Auto-ignition temperature: not applicable

pH-Value: 12 - 13

Viscosity / dynamic:
(at 20 °C) ca. 300 mPa·s

Water solubility: completely miscible

Solubility in other solvents

Immiscible

Partition coefficient n-octanol/water: not applicable

Vapour pressure: not determined

Density (at 20 °C): ca. 1,37 g/cm³

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties

Not oxidising.

Other safety characteristics

Solid content: ca. 38 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Protect against: Frost.

10.5. Incompatible materials

Exothermic reaction with aluminum, tin, zinc and alloys of these metals generating hydrogen gas.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

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
1312-76-1	Sillicic acid, potassium salt (Molar ratio K ₂ O : SiO ₂ = 1 : > 2.6 - <= 3.2)				
	oral	LD50 > 5000 mg/kg	Rat	IUCLID	
	dermal	LD50 > 5000 mg/kg	Rat	IUCLID	
1310-65-2	Lithium hydroxide				
	oral	LD50 368 mg/kg	Rat	GESTIS	
	dermal	LD50 > 2000 mg/kg	Rat	IUCLID	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

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**

The product has not been tested.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
1312-76-1	Sillicic acid, potassium salt (Molar ratio K ₂ O : SiO ₂ = 1 : > 2.6 - <= 3.2)					
	Acute fish toxicity	LC50 > 146 mg/l	96 h	Leuciscus idus (golden orfe)	IUCLID	
	Acute algae toxicity	ErC50 207 mg/l	72 h	Scenedesmus subspicatus	IUCLID	
	Acute crustacea toxicity	EC50 > 146 mg/l	48 h	Daphnia magna (Big water flea)	IUCLID	
1310-65-2	Lithium hydroxide					
	Acute fish toxicity	LC50 62.2 mg/l	96 h	Brachydanio rerio (zebra-fish)	IUCLID	
	Acute algae toxicity	ErC50 23.75 mg/l	72 h	Pseudokirchneriella subcapitata	IUCLID	
	Acute crustacea toxicity	EC50 34.3 mg/l	48 h	Daphnia magna (Big water flea)	IUCLID	
	Fish toxicity	NOEC 9.9 mg/l	34 d	Brachydanio rerio (zebra-fish)	IUCLID	
	Crustacea toxicity	NOEC 2.3 mg/l	21 d	Daphnia magna (Big water flea)	IUCLID	
	Acute bacteria toxicity	(EC50 180.8 mg/l)	3 h	Activated sludge	IUCLID	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

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 UK REACH.

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

The product is an alkali. Before discharge into sewage plants the product normally needs to be neutralised.

Further information

Do not allow uncontrolled discharge of product into the environment. Do not allow to enter soil, waterways or waste water canal.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

List of Wastes Code - residues/unused products

060205 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of bases; other bases; hazardous waste

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Contaminated packaging

Handle contaminated packages in the same way as the substance itself. Packing which cannot be properly cleaned must be disposed of. Non-contaminated packages may be recycled. Do not mix with other wastes.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:	No
Danger releasing substance:	No dangerous good in sense of this transport regulation.

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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

2010/75/EU (VOC): 0 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

The product does not contain substances of very high concern (SVHC).

National regulatory information

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

SECTION 16: Other information

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Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

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.

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 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.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Welding and soldering products	F, IS	13, 15, 17, 19	38	2, 4, 5, 13, 14, 25	1, 2, 3, 4, 5, 6b, 6c, 8a, 8b, 8c, 8d, 8e, 8f	-	-	

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

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