

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 15.09.2015

Version number 1

Revision: 15.09.2015

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

- 1.1 Product identifier

- Trade name: ergo 3025

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

No further relevant information available.

- Application of the substance / the mixture Silicate sealing

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

Kisling AG

Motorenstrasse 102

CH-8620 Wetzikon

Telefon: +41-(0) 58-272 0 272

Telefax: +41-(0) 58-272 0 273

- Further information obtainable from: Safety Department

- Department issuing MSDS: ergo@kisling.com

- 1.4 Emergency telephone number: Swiss Toxicological Information Centre: +41-(0) 44-2 51 51 51

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008

Aerosol 3 H229 Pressurised container: May burst if heated.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Carc. 2 H351 Suspected of causing cancer.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not applicable

Xn; Harmful

R40: Limited evidence of a carcinogenic effect.

Xi; Irritant

R36: Irritating to eyes.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

- Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurised container.

- Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- 2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- Hazard pictograms



GHS05



GHS07



GHS08

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- **Signal word** Danger- **Hazard-determining components of labelling:**

Butan-2-one O,O',O''-(vinylsilylidyne)trioxime

2-butanone oxime

3-aminopropyltriethoxysilane

- **Hazard statements**

H229 Pressurised container: May burst if heated.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

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.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

8,2 % by mass of the contents are flammable

- **2.3 Other hazards**- **Results of PBT and vPvB assessment**- **PBT:** Not applicable.- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**- **Description:** Silicate sealing- **Dangerous components:**

CAS: 2224-33-1 EINECS: 218-747-8	Butan-2-one O,O',O''-(vinylsilylidyne)trioxime Xi R38-41; Xi R43 Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317	1-<5%
CAS: 96-29-7 EINECS: 202-496-6 Index number: 616-014-00-0	2-butanone oxime Xn R21-40; Xi R41; Xi R43 Carc. Cat. 3 Carc. 2, H351; Eye Dam. 1, H318; Acute Tox. 4, H312; Skin Sens. 1, H317	1-<5%
CAS: 919-30-2 EINECS: 213-048-4 Index number: 612-108-00-0 Reg.nr.: 01-2119480479-24-xxxx	3-aminopropyltriethoxysilane C R34; Xn R22 Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1, H317	0,1-<1%
In the propellant-mixture:		
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	propane F+ R12 Flam. Gas 1, H220; Press. Gas C, H280	
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0	butane F+ R12 Flam. Gas 1, H220; Press. Gas C, H280	

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
After contact with skin, wash immediately with plenty of soap and water.
If skin irritation continues, consult a doctor.
- **After eye contact:**
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures.
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
- **Additional information**
Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb liquid components with liquid-binding material.
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
Fumes can combine with air to form an explosive mixture.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 10 for information on "stability and reactivity".
See Section 13 for disposal information.

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SECTION 7: Handling and storage

- 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

- Information about fire - and explosion protection:

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage:

- Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

- Information about storage in one common storage facility: Store away from foodstuffs.

- Further information about storage conditions:

Protect from heat and direct sunlight.

Store under lock and key and with access restricted to technical experts or their assistants only.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

- Maximum storage temperature: 30 °C

- Minimum storage temperature: 5 °C

- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

96-29-7 2-butanone oxime

- (Switzerland)	Long-term value: 1 mg/m ³ , 0,3 ppm 8(I);AGS, Y, H, Sh
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74-98-6 propane

MAK (Switzerland)	Short-term value: 7200 mg/m ³ , 4000 ppm Long-term value: 1800 mg/m ³ , 1000 ppm
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106-97-8 butane

MAK (Switzerland)	Short-term value: 7200 mg/m ³ , 3200 ppm Long-term value: 1900 mg/m ³ , 800 ppm
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- DNELs

919-30-2 3-aminopropyltriethoxysilane

Oral	Akut, Systemische Effekte	5 mg/kg (all)
	Langzeit, Systemische Effekte	5 mg/kg bw/day (all)
Dermal	Akut, Systemische Effekte	5 mg/kg bw (all) 8,3 mg/kg bw (ber)
	Langzeit, Systemische Effekte	5 mg/kg bw/day (all) 8,3 mg/kg bw/day (ber)
Inhalative	Akut, Systemische Effekte	17,4 mg/m ³ (all) 59 mg/m ³ (ber)
	Langzeit, Systemische Effekte	17 mg/m ³ (all) 59 mg/m ³ (ber)

- PNECs

919-30-2 3-aminopropyltriethoxysilane

PNEC Süßwasser	0,33 mg/l (-)
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PNEC Meerwasser	0,033 mg/l (-)
PNEC Boden	0,04 mg/kg Boden (-)
- CAS No. Designation of material % Type Value Unit	
- Additional Occupational Exposure Limit Values for possible hazards during processing:	
96-29-7 2-butanone oxime	
- (Switzerland)	Long-term value: 1 mg/m ³ , 0,3 ppm 8(I);AGS, Y, H, Sh
67-56-1 methanol	
MAK (Switzerland)	Short-term value: 1040 mg/m ³ , 800 ppm Long-term value: 260 mg/m ³ , 200 ppm H B SSc;

- Additional information:

If used according to specifications the propellant (contains propane/butane) is not liberated.
The lists valid during the making were used as basis.

- 8.2 Exposure controls**- Personal protective equipment:****- General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

- Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A/P2

- Protection of hands:

Protective gloves (EN 374)

Check protective gloves prior to each use for their proper condition.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

Find below a list of appropriate protective gloves for chemical surrounding:

Permeation time / penetration time: = 480 minutes(DIN EN 374):

Naturlatex I , Nr. 0395 oder 0403

Naturlatex II , Nr. 0706 oder 0708

Chloropren Nitril II, Nr. 0717

Chloropren Nitril I, Nr. 0727

Chloropren, Nr. 0720, 0722, 0723, 0725 oder 0726

Nitril I, Nr. 0730, 0732, 0733, 0736, 0737, 0738, 0739 oder 0836

Nitril II, Nr. 0740, 0741, 0742 oder 0759

Nitril III, Nr. 0743

Nitril VI, Nr. 0754

Nitril V, Nr. 0764

Viton, Nr. 0890

Butyl II, Nr. 0897

Butyl, Nr. 0898

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of KCL company (e-mail: vertrieb@kcl.de).

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The recommendation is based exclusively on the chemical compatibility and the test according to EN374 under laboratory conditions.

Requirements can vary according to the use. Therefore, please always take into account the glove supplier's recommendations.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material

Permeation time / penetration time: see above (material of gloves)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Safety glasses

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form: Pasty

Colour: Red

- Odour: Characteristic

- Odour threshold: Not determined.

- pH-value: Not determined.

- Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

- Flash point: undetermined

- Ignition temperature:

Decomposition temperature: Not determined.

- Self-igniting: Product is not self-igniting.

- Danger of explosion:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Buildup of explosive mixtures possible without sufficient ventilation.

- Explosion limits:

Lower: Not determined.

Upper: Not determined.

- Vapour pressure: Not determined.

- Density at 20 °C: 1,28 g/cm³

- Relative density Not determined.

- Vapour density Not determined.

- Evaporation rate Not applicable.

- Solubility in / Miscibility with water:

Hydrolised.

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:

Dynamic: Not determined.

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Kinematic:	Not determined.
- 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Protect from heat and direct sunlight.
- **10.3 Possibility of hazardous reactions** Danger of bursting.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
No dangerous products of decomposition if used and stored according to specifications.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**

- LD/LC50 values relevant for classification:

96-29-7 2-butanone oxime

Oral	LD50	930 mg/kg (rat)
Dermal	LD50	>1000 mg/kg (rab)
Inhalative	LC50/4 h	> 4,83 mg/l (rat)

106-97-8 butane

Inhalative	LC50/4 h	658 mg/l (rat)
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919-30-2 3-aminopropyltriethoxysilane

Oral	LD50	1490 - 2690 mg/kg (rat)
Dermal	LD50	4076 mg/kg (rab) (EPA)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Additional toxicological information:**
No experimentally found toxicological data are available for this preparation.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Limited evidence of a carcinogenic effect.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity**
Suspected of causing cancer.
- **Reproductive toxicity** 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.

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SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

919-30-2 3-aminopropyltriethoxysilane

EC50/48 h	331 mg/l (DA) (OECD TG 202)
EC50/72 h	>1000 mg/l (Algae) (OECD TG 201)
LC0/96 h	>934 mg/l (Danio rerio) (OECD TG 203)
NOEC	1,3 mg/l (Algae) (OECD TG 201)

- **12.2 Persistence and degradability** No further relevant information available.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- Additional ecological information:

- General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Danger to drinking water if even small quantities leak into the ground.

Do not allow product to reach ground water, water course or undiluted sewage system.

Water hazard class (German Regulation) is valid for the active agent.

- 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

- **Recommendation** Disposal must be made according to official regulations.

- Uncleaned packaging:

- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number

- **ADR, IMDG, IATA** UN1950

- 14.2 UN proper shipping name

- **ADR** 1950 AEROSOLS
 - **IMDG** AEROSOLS
 - **IATA** AEROSOLS, flammable

- 14.3 Transport hazard class(es)

- ADR



- **Class** 2 5F Gases.

- **Label** 2.1

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- IMDG, IATA

- Class 2.1
- Label 2.1

- 14.4 Packing group
- ADR, IMDG, IATA Void

- 14.5 Environmental hazards: Not applicable.

- 14.6 Special precautions for user Warning: Gases.
- Danger code (Kemler): -
- EMS Number: F-D,S-U

- 14.7 Transport in bulk according to Annex II of
Marpol and the IBC Code Not applicable.

- Transport/Additional information:

- ADR
- Limited quantities (LQ) 1L
- Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity
- Transport category 2
- Tunnel restriction code D

- IMDG
- Limited quantities (LQ) 1L
- Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

- UN "Model Regulation": UN 1950 AEROSOLS, 2.1

SECTION 15: Regulatory information

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

- National regulations:

- Waterhazard class:

Water hazard class 2 (Self-assessment): hazardous for water.

Water hazard class (German Regulation) is valid for the active agent.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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H318 Causes serious eye damage.

H351 Suspected of causing cancer.

R12 Extremely flammable.

R21 Harmful in contact with skin.

R22 Harmful if swallowed.

R34 Causes burns.

R38 Irritating to skin.

R40 Limited evidence of a carcinogenic effect.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

- 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 Harmonised 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 (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases, Hazard Category 1

Aerosol 3: Flammable aerosols, Hazard Category 3

Press. Gas C: Gases under pressure: Compressed gas

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

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