

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

Printing date 05.06.2015

Version number 1

Revision: 05.06.2015

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

- 1.1 Product identifier

- Trade name: ergo 6950

- 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 adhesion promoter

- 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

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

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

Not applicable

F; Highly flammable

R11: Highly flammable.

- 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.

- 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



GHS02 GHS07

- Signal word Danger

- Hazard-determining components of labelling:

3-aminopropyltriethoxysilane

- Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

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H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

- Precautionary statements

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

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing mist/vapours/spray.

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.

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

- 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:** Mixture of substances listed below with nonhazardous additions.**- Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 Reg.nr.: 01-2119457610-43-xxxx	ethanol F R11 ----- Flam. Liq. 2, H225; Eye Irrit. 2, H319	50-<100%
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	1-<3%

- Additional information: For the wording of the listed risk phrases refer to section 16.**SECTION 4: First aid measures****- 4.1 Description of first aid measures****- After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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.

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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:**
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
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:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.

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- 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:

64-17-5 ethanol

MAK (Switzerland)	Short-term value: 1920 mg/m ³ , 1000 ppm
	Long-term value: 960 mg/m ³ , 500 ppm SSc;

- 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 Boden	0,04 mg/kg Boden (-)
PNEC Meerwasser	0,033 mg/l (-)
PNEC Süßwasser	0,33 mg/l (-)

- Additional information: 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 eat, drink, smoke or sniff while working.

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

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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.

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Recommended thickness of the material: $\geq 0,4$ mm**- Penetration time of glove material**

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

- Eye protection: Tightly sealed goggles**SECTION 9: Physical and chemical properties****- 9.1 Information on basic physical and chemical properties****- General Information****- Appearance:****Form:** Fluid**Colour:** Colourless**- 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:** < 20 °C**- Flammability (solid, gaseous):** Not applicable.**- Ignition temperature:****Decomposition temperature:** Not determined.**- Self-igniting:** Product is not self-igniting.**- Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.**- Explosion limits:****Lower:** Not determined.**Upper:** Not determined.**- Vapour pressure:** Not determined.**- Density at 20 °C:** 0,8 g/cm³**- Relative density** Not determined.**- Vapour density** Not determined.**- Evaporation rate** Not determined.**- Solubility in / Miscibility with water:**

Fully miscible.

- Partition coefficient (n-octanol/water): Not determined.**- Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**- 9.2 Other information** No further relevant information available.

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SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Forms explosive gas mixture with air.
- **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:

64-17-5 ethanol

Oral LD50 7060 mg/kg (rat)

Inhalative LC50/4 h 20000 mg/l (rat)

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** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
No experimentally found toxicological data are available for this preparation.

SECTION 12: Ecological information

- **12.1 Toxicity**

- Aquatic toxicity:

64-17-5 ethanol

LC50/96 h 42 - 14 200 mg/l (Fi)

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 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- 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** UN1170**- 14.2 UN proper shipping name**- **ADR** 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)- **IMDG** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)- **IATA** ETHANOL SOLUTION**- 14.3 Transport hazard class(es)****- ADR**- **Class** 3 (F1) Flammable liquids.- **Label** 3**- IMDG, IATA**- **Class** 3 Flammable liquids.- **Label** 3**- 14.4 Packing group**- **ADR, IMDG, IATA** II- **14.5 Environmental hazards:** Not applicable.- **14.6 Special precautions for user** Warning: Flammable liquids.- **Danger code (Kemler):** 33- **EMS Number:** F-E,S-D- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.**- Transport/Additional information:****- ADR**- **Limited quantities (LQ)** 1L- **Excepted quantities (EQ)** Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

- **Transport category** 2

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- Tunnel restriction code	D/E
- IMDG	
- Limited quantities (LQ)	1L
- Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- UN "Model Regulation":	UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II

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 1 (Self-assessment): slightly hazardous for water.
- **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**

- H225 Highly flammable liquid and vapour.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.

- R11 Highly flammable.
- R22 Harmful if swallowed.
- R34 Causes burns.

- **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
- Flam. Liq. 2: Flammable liquids, Hazard Category 2
- 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 Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

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