



Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 2/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341  
=====

*	30.0- 60.0	1569-02-4	1-ethoxypropan-2-ol
*			10
*	10.0- 30.0	64-17-5	ethanol
*		F	11
	40.0- 70.0	7440-22-4	silver

-----  
3. Hazards identification

Highly flammable.

\* Irritating to eyes.

\* -----

4. First aid measures

4.1 General remarks :

Bring affected persons out of danger area.

\* In case of accident or if you feel unwell, seek medical advice  
\* immediately (show the label where possible).

4.2 Inhalation :

Take affected persons out into the fresh air.

4.3 Skin contact :

\* Upon skin contact, wash with soap and plenty of water. Remove  
\* contaminated or saturated clothing.

4.4 Eye contact :

Rinse thoroughly immediately with plenty of water for at least  
\* 10 minutes keeping eyelid open. Consult an ophthalmologist.  
\*

4.5 Ingestion :

Have patient drink plenty of water in small sips. Do not force  
patient to vomit. Aspiration hazard! Supply with medical care.

4.6 Instructions for physician:

No own experience available.

-----  
5. Fire-fighting measures

5.1 Suitable extinguishing media :

Usual measures for chemical fires.

Water (spray jet), mist, special quenching powder, quenching  
foam (use large amount of foam as it will be partially  
destroyed), carbon dioxide.

=====  
Places marked by \* have been amended from the last version.

Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 3/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341  
=====

5.2 Extinguishing media which must not be used for safety reasons  
\* Water, full jet.

5.3 Special exposure hazards arising from the substances or  
preparation itself, combustion products, resulting gases :  
Formation of flammable or explosive vapour/air mixtures  
possible. Danger of explosion with fire.  
Do not inhale explosive gases or smoke fumes.

5.4 Special protective equipment for firefighters :  
-----

## 6. Accidental release measures

6.1 Personal precautions :  
\* Keep persons at a distance and stay on the weather side.  
\* Wear personal protective equipment; see section 8.

6.2 Environmental precautions :  
Dispose of waste in accordance with the legal regulations  
issued by the appropriate local and national authorities  
(see section 13).  
\* Prevent penetration into soil, stretches of water and  
\* drainage systems.  
\*

6.3 Methods of cleaning up :  
Absorb with liquid-binding material (e.g. sand, infusorial  
earth, inert absorbent).

6.4 Further information :  
Remove all sources of ignition.  
Keep away from sources of ignition - No smoking.  
\* In case of accident or if you feel unwell, seek medical advice  
\* immediately (show the label where possible).  
-----

## 7. Handling and storage

7.1 Handling :  
\* The product should only be handled by trained personnel.  
\* Ensure suitable suction/aeration at the work place and with  
\* operational machinery.  
\* Highly volatile substances may be released during processing;  
\* therefore avoid sources of ignition. Do not empty into drains.  
\* Keep away from sources of ignition - No smoking.  
\* Avoid exposure - obtain special instructions before use.

=====  
Places marked by \* have been amended from the last version.

Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 4/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341

7.2 Storage :

- \* Keep container tightly closed and store in a dry, well-ventilated place.
- \* If there is danger of exceeding the explosion limits, explosion proofness is recommended.
- \* Keep container tightly closed and in a well-ventilated place.
- \* Take precautionary measures against static discharges. Product is slightly water-pollutive. Observe the national and local regulations concerning handling and storage.

8. Exposure controls / personals protection

8.1 Additional instructions for technical installation.

- \* When processing the product, the air in the workplace should be monitored and employees exposed to the product should be given a medical check-up.
- \* Take precautionary measures against static discharges.

8.2 Ingredients with threshold limit values:

Specific information referring to acetone:  
Look for the value of substance in blood and urine (80 mg/l in urine).

Values of maximum admissible concentration (MAK):

	ml/m3		mg/m3	referring to
	0.1000			silver (G)
200.0000	ml/m3	860.0000		mg/m3 referring to 1-ethoxypropan-2-ol
500.0000	ml/m3	1200.0000		mg/m3 referring to acetone
* 400.0000	ml/m3	1500.0000		mg/m3 referring to ethyl acetate
1000.0000	ml/m3	1900.0000		mg/m3 referring to ethanol

8.3 Personal protection

8.3.1 General protection :

- Wash face/hands before break and end of work.
- \* Avoid exposure - obtain special instructions before use.

8.3.2 Respiratory protection:

If maximum admissible concentration value at the workplace is exceeded or you feel troubled, apply respirator with brown

Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 5/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341  
=====

A-type or AX-type (if working with halogenated substances)  
filter in Germany - use respirators for protection recommended  
in your country.

8.3.3 Eye protection :  
Wear safety goggles with side-shields  
(if handling large amounts).

8.3.4 Skin protection :  
Preventive skin protection recommended.

8.3.5 Hand protection :  
Wear protective gloves made of solvent-resistant material  
(if handling large amounts).

-----  
9. Physical and chemical properties

9.1 Appearance

9.1.1 Physical state: Fluid

9.1.2 Colour: GREY

9.1.3 Odour : Characteristic

9.2 Data relevant to safety

9.2.2 Boiling temperature : from 56 °C

9.2.3 Density : ( 20°C ) 1.700 g/cm<sup>3</sup>

9.2.9 Flash point : 12.0 °C DIN 51755, Part 1

9.2.10 Ignition temperature: 255.0 °C DIN 51794

9.2.11 Lower Explosion limits: 1.3 Vol.-%

9.2.12 Upper Explosion limits: 19.0 Vol.-%

9.2.13 Boiling range : from 56 °C

9.2.14 Boiling range to : 132 °C

9.3 Other data  
-----

10. Stability and reactivity

10.1 Conditions to avoid :  
When heated above flashpoint and/or with spraying or  
atomization, a flammable mixture may form with air.

10.2 Materials to avoid :

=====  
Places marked by \* have been amended from the last version.

Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 6/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341

(If applicable, information referring to individual components of the product is given below).

10.3 Hazardous decomposition products:  
The product is supplied in a stable form, but if container left open at room temperature or above, it will lose solvents by evaporation.

10.4 Further information :

## 11. Toxicological information

11.1 Immediate effects, Data for substance  
(or effects of certain components in preparations):

Specific information for this product is not available  
(if applicable, information for components is given below).

Informations referring to ethanol

*	LD50,oral, rat	6200.00 mg/kg
*	LC50,inhale, rat	> 8000.00 mg/l, 4 h
*	LD50,dermal, rabbit	> 20000.00 mg/kg

Informations referring to acetone

*	LD50,oral, rat	5800.00 mg/kg
*	LD50,dermal, rabbit	20000.00 mg/kg
*	LC50,inhale, rat	76.00 mg/l, 4 h

Informations referring to dibutyl phthalate

*	LD50,oral, rat	8000.00 mg/kg
---	----------------	---------------

Informations referring to ethyl acetate

*	LD50,oral, rat	5620.00 mg/kg
*	LD50,dermal, rabbit	> 18000.00 mg/kg
*	LC50,inhale, rat	1600.00 mg/l, 8 h

11.2 Chronic effects from short- and long-time exposure:

Specific information for this product is not available  
(if applicable, information for components is given below).

11.3 Human :

To date handling this product has not been known to cause any detrimental effects.

Specific information referring to silver powder:

After long-term effect due to inhalation or swallowing appearance of a pigmentation (Argyrosis) of skin and mucous membrane (eyes, respiratory system) is possible. This alteration of the skin is

Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 7/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341  
=====

permanent, but it's no toxic damage in the sense of contamination.

11.4 Further information :

-----  
12. Ecological information

12.1 Data for elimination (persistence and degradability)  
No ecotoxicological studies are available.

12.2 Behaviour in environmental compartments  
Product is slightly water-pollutive.

12.3 Ecological effects  
Product not investigated.  
(if applicable, information for components is given below).  
Informations referring to ethanol

*	LC50, fish	8140.00 mg/l, 48 h
*	EC50, daphnia	> 9268.00 mg/l, 48 h
*	Informations referring to acetone	
*	LC50, fish	8300.00 mg/l, 96 h
*	EC50, daphnia	12600.00 mg/l, 48 h
*	Informations referring to dibutyl phthalate	
*	LC50, fish	0.85 mg/l, 96 h
*	EC50, daphnia	3.40 mg/l, 48 h
*	Informations referring to ethyl acetate	
*	LC50, fish	270.00 mg/l
*	EC50, daphnia	2306.00 mg/l, 24 h

12.4 Further information

-----  
13. Disposal considerations

Look for Community provisions relating to waste. National or regional provisions may be in force.

- \* No waste code number in accordance with the European Waste Catalogue can be specified for this product since it can only be categorised on the basis of its use by the consumer.
- \* The waste code number is to be put on by arrangement with the disposal contractor, manufacturer or authority.
- \* Product contains precious metals. For proper recovery, return to supplier.

=====  
Places marked by \* have been amended from the last version.

=====  
Material safety data sheet (91/155/EEC) DOK

Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 8/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341  
=====

14. Transport information  
Dangerous goods regulations  
RID/ADR/IMDG-Code/ICAO-TI.

14.1 Land transport ADR / RID  
(interstate / intrastate)

\* Class 3 Packaging group II  
Name of product (proper shipping name for surface transport):  
\* 1263 PAINT  
In accordance with the law on the transport of hazardous  
goods see national regulations on land transport for given  
description of the good.

GGVS-listed good: no  
Hazardous substances :  
1-ethoxypropan-2-ol  
ethanol

14.2 Inland navigation ADN  
For inland navigation consultation necessary !

14.3 Sea transport IMDG

\* IMDG : Class 3 UN-No. 1263 PG II  
Marine Pollutant : No  
EMS: 3-05 MFAG: 310,313  
Technical name refer to UN-No. :  
\* PAINT  
Hazardous substances :  
1-ethoxypropan-2-ol  
ethanol

14.4 Air transport ICAO-TI and IATA-DGR

Class 3 UN-No. 1263 PG II  
Technical name refer to UN No. :  
\* PAINT  
Hazardous substances :  
1-ethoxypropan-2-ol  
ethanol

14.5 Transport / further instructions

Water endangering class (Germany): 1  
RQ (Reportable Quantity - USA) : dibutyl phthalate  
from 1135.000 kg/per transport unit.

-----  
=====  
Places marked by \* have been amended from the last version.

Valid from : 19.03.2002 / 5  
Replaces edition dated: 15.06.1999  
Print date : 19.03.2002 Page : 9/10  
Trade name [0215] : see next line

Conduction silver 620 0007, 629 0341  
=====

15. Regulatory information

15.1 Information on the label according to the Directives of EEC

15.1.1 Symbol(s) and indication(s) of danger:

- \* Xi Irritating
- \* F Highly flammable

15.1.2 Hazardous ingredient(s) for labelling, containing:

- \* Irritant substances
- \* Highly flammable substances

15.1.3 R-phrases:

- 11 Highly flammable.
- \* 36 Irritating to eyes.

15.1.4 S-phrases:

- 7/ 9 Keep container tightly closed and in a well-ventilated place.
- 16 Keep away from sources of ignition - No smoking.
- \* 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- \* 33 Take precautionary measures against static discharges.
- \* 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- \* 53 Avoid exposure - obtain special instructions before use.

15.2 Any other national measures that may be relevant (ref. Annex II Directive 88/379/EEC)

- The safety data sheet is produced considering new directives of EEC. Missing or differing labelling may occur during transitional stage until all countries take over these regulations in their national jurisdiction.  
The product is subject to the regulation concerning malfunctions (list no. 7b).
- \* Water pollution class 1 (according VwVwS, annex 4).

-----  
16. Other information

- \*  
\*  
\*

=====  
Places marked by \* have been amended from the last version.

