

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

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

· **1.1 Product identifier**

· **Trade name:** Silver salt SCANDIA 360 without KCN + without Ag

Silbersalz SCANDIA 360 ohne KCN + ohne Ag

· **Article number:** 86909160

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Not approved for private consumers.

· **Application of the substance / the mixture**

Electroplating auxiliary

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Heimerle + Meule GmbH
Dennigstrasse 16
D-75179 Pforzheim

Telefon +49 (0) 7231 940-0
Telefax +49 (0) 7231 940-2199

www.heimerle-meule.com

· **Further information obtainable from:**

Abteilung BASU - Bau/Arbeitssicherheit/Umwelt
sds@heimerle-meule.com

IATA - 24h Emergency Contact -
(Gefahrgut-Notrufnummer)
+49 172 739 6970

· **1.4 Emergency telephone number:**

Vergiftungs-Informations-Zentrale Freiburg, ++49 761 19240 (24 h)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS03 flame over circle

Ox. Sol. 2 H272 May intensify fire; oxidiser.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

(Contd. on page 2)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 1)

Eye Irrit. 2 H319 Causes serious eye irritation.

· **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**



GHS03

GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**

potassium carbonate

· **Hazard statements**

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

· **Precautionary statements**

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

P220 Keep away from clothing and other combustible materials.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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.

· **Labelling of packages where the contents do not exceed 125 ml**

· **Hazard pictograms**



GHS03

GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**

potassium carbonate

· **Hazard statements** Void

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 3)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 2)

Dangerous components / Information on ingredients:

CAS: 584-08-7 EINECS: 209-529-3 RTECS: TS 7750000	potassium carbonate	⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	50-100%
CAS: 7757-79-1 EINECS: 231-818-8 RTECS: TT 3700000	potassium nitrate	⚠ Ox. Sol. 2, H272	25-50%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures****General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Personal protection for the First Aider.

Take affected persons out of danger area and lay down.

Involve doctor immediately after an accident or unwell

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

A person vomiting while laying on their back should be turned onto their side.

Rinse out mouth and then drink plenty of water.

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.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Nitrogen oxides (NO_x)

5.3 Advice for firefighters**Protective equipment:**

Mount respiratory protective device.



Wear self-contained respiratory protective device.

(Contd. on page 4)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 3)

- **Additional information**
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.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Only handle and refill product in closed systems.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
The usual precautionary measures are to be adhered to when handling chemicals.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings .
Observe official regulations on storing packagings .
Prevent any seepage into the ground.
- **Information about storage in one common storage facility:**
Store away from flammable substances.
Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** 5.1 B
- **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.

(Contd. on page 5)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 4)

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.

Avoid contact with the eyes and skin.

According to EC Directive 89/686/EEC

· **Respiratory protection:**

Beware: Filter masks provide protection for a short period of time only. They should only be used in exceptional cases, that is if a small amount of the substance has spilled out or in order to fight spillages and fire.

according EN 14387

according to EN 143

· **Recommended filter device for short term use: Filter P2**

· **Protection of hands:**



Protective gloves

according to EN 374

To avoid skin problems reduce the wearing of gloves to the required minimum.

Only use chemical-protective gloves with CE-labelling of category III.

Sensibilisation by the components in the glove materials is possible.

Check the permeability prior to each anewed use of the glove.

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

Prior to working with gloves the rubbing in with tanniferous skin-protecting agents for the avoidance of skin softening due to perspiration is recommended.

· **Material of gloves**

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**

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

The determined penetration times according to EN 374 part III are not performed under practical conditions.

Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 3).

Value for the permeation: Level \leq 3

· **Not suitable are gloves made of the following materials:**

Leather gloves

Strong material gloves

· **Eye protection:**



Tightly sealed goggles

according to EN 166

(Contd. on page 6)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 5)

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Powder
· Colour:	White
· Odour:	Odourless
· Odour threshold:	Not determined.

· pH-value:	Not applicable.
--------------------	-----------------

· Change in condition

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	Undetermined.

· Flash point:	Not applicable.
-----------------------	-----------------

· Flammability (solid, gas):	Not determined.
-------------------------------------	-----------------

· Decomposition temperature:	Not determined.
-------------------------------------	-----------------

· Auto-ignition temperature:	Product is not selfigniting.
-------------------------------------	------------------------------

· Explosive properties:	Product does not present an explosion hazard.
--------------------------------	---

· Explosion limits:

· Lower:	Not determined.
· Upper:	Not determined.

· Vapour pressure:	Not applicable.
---------------------------	-----------------

· Density at 20°C (68°F):	2.33 g/cm ³ (19.44 lbs/gal)
----------------------------------	--

· Relative density	Not determined.
---------------------------	-----------------

· Vapour density	Not applicable.
-------------------------	-----------------

· Evaporation rate	Not applicable.
---------------------------	-----------------

· Solubility in / Miscibility with water:

Soluble.

· Partition coefficient: n-octanol/water:	Not determined.
--	-----------------

· Viscosity:

· Dynamic:	Not applicable.
· Kinematic:	Not applicable.

· Solvent content:

· Solids content:	100.0 %
--------------------------	---------

· 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:	No decomposition if used according to specifications.
--	---

· 10.3 Possibility of hazardous reactions

· Reacts with flammable substances.	
--	--

(Contd. on page 7)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 6)

- *Reacts with acids, alkalis and oxidising agents.*
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Nitrogen oxides

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**
Harmful if swallowed.

- **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Oral	LD50	714 mg/kg
------	------	-----------

CAS: 584-08-7 potassium carbonate

Oral	LD50	500 mg/kg (ATE)
------	------	-----------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **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.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

GB

(Contd. on page 8)

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

Printing date: 28.02.2019

Version number 6

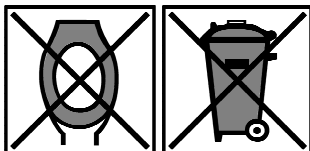
Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 7)

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

- **Waste disposal key:**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

- **European waste catalogue**

There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste

11 00 00	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY
11 01 00	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 98*	other wastes containing hazardous substances
HP 2	Oxidising
HP 4	Irritant - skin irritation and eye damage
HP 6	Acute Toxicity

- **Uncleaned packaging:**

- **Recommendation:**

Disposal must be made according to official regulations.

Packaging which is uncleaned or soiled with product remains is to be treated like the product itself

Packaging free of product remains is to be supplied refuse for recycling. Only if no adequate collecting system is available, they may be disposed of through the domestic rubbish

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- 14.1 UN-Number

- ADR, IMDG, IATA

UN1486

- 14.2 UN proper shipping name

- ADR

- IMDG, IATA

UN1486 POTASSIUM NITRATE

POTASSIUM NITRATE

(Contd. on page 9)

GB

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 8)

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class 5.1 Oxidising substances.
· Label 5.1

· 14.4 Packing group

· ADR, IMDG, IATA III

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Warning: Oxidising substances.
· Danger code (Kemler): 50
· EMS Number: F-A,S-Q
· Stowage Category A
· Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ) 5 kg
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g
· Transport category 3
· Tunnel restriction code E

· IMDG

· Limited quantities (LQ) 5 kg
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g

· IATA

· Remarks:

24h Emergency Contact -
(Gefahrgut-Notrufnummer)

+49 172 739 6970

· UN "Model Regulation":

UN 1486 POTASSIUM NITRATE, 5.1, III

SECTION 15: Regulatory information

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

COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article

(Contd. on page 10)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 9)

16(1) of Directive 89/391/EEC)

DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P8** OXIDISING LIQUIDS AND SOLIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations -**
- **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.

- **Reasons for revise**
If necessary, this safety data sheet can be revised according to legal guidelines.

*Our current version for your reference is available on our website
www.heimerle-meule.com*

- **Date from last issue :** 06.03.2018

- **Relevant phrases**
H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

- **Department issuing SDS:**
Department BASU - Bau/Arbeitssicherheit/Umwelt

sds@heimerle-meule.com

- **Contact:**
Herr Thomas Knuth
Knuth@heimerle-meule.com
sds@heimerle-meule.com

- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic

(Contd. on page 11)

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

Printing date: 28.02.2019

Version number 6

Revision: _____ 28.02.2019

Trade name: Silver salt SCANDIA 360 without KCN + without Ag
Silbersalz SCANDIA 360 ohne KCN + ohne Ag

(Contd. of page 10)

vPvB: very Persistent and very Bioaccumulative
Ox. Sol. 2: Oxidizing solids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
· * **Data compared to the previous version altered.**

-GB-