

Product no.: 44915, 44916, 44917

Current version: 1.0.0, issued: 06.09.2019 Replaced version: -, issued: - Region: GB

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

1.1 Product identifier

Trade name

ROLOT S34U, per DIN 1044, flux coated, 2mm,round

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

Relevant identified uses of the substance or mixture

Solder alloy

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

ROTHENBERGER Werkzeuge GmbH

Industriestraße 7 65779 Kelkheim

Telephone no. +49 (0) 61 95 / 800 - 1 Fax no. +49 (0) 6195 / 800 - 3500 e-mail info@rothenberger.com

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Eye Irrit. 2; H319 Skin Irrit. 2: H315

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) no 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms



Signal word

Warning

Hazard statement(s)

H315 Causes skin irritation. H319 Causes serious eye irritation.

Precautionary statement(s)

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.



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P103 Read label before use.

P264 Wash thoroughly after handling.

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

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

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

| No | Substance name | | Additional information | | | |
|----|---------------------|-------------------------------------|------------------------|-----------|-------|--------|
| | CAS / EC / Index / | Classification (EC) 1272/2008 (CLP) | Conce | entration | | % |
| | REACH no | | | | | |
| 1 | potassium-tetrafluo | proborate | | | | |
| | 14075-53-7 | - | >= | 25.00 - < | 50.00 | %-b.w. |
| | 237-928-2 | | | | | |
| | - | | | | | |
| | 01-2119968922-24 | | | | | |
| 2 | silver | | | | | |
| | 7440-22-4 | - | >= | 10.00 - < | 25.00 | %-b.w. |
| | 231-131-3 | | | | | |
| | - | | | | | |
| | 01-2119555669-21 | | | | | |
| 3 | potassium hydroxi | de | | | | |
| | 1310-58-3 | Acute Tox. 4; H302 | < | 2.50 | | %-b.w. |
| | 215-181-3 | Skin Corr. 1A; H314 | | | | |
| | 019-002-00-8 | Met. Corr. 1; H290 | | | | |
| | 01-2119487136-33 | | | | | |
| 4 | copper massive | | | | | |
| | 7440-50-8 | - | >= | 25.00 - < | 50.00 | %-b.w. |
| | 231-159-6 | | | | | |
| | - | | | | | |
| | 01-2119480154- | | | | | |
| | 42-0027 | | | | | |

Full Text for all H-phrases and EUH-phrases: pls. see section 16

| No | Note | Specific concentration limits | M-factor (acute) | M-factor (chronic) |
|----|------|---|------------------|-----------------------|
| 3 | - | Eye Irrit. 2; H319: C >= 0.5% Skin Irrit. 2; H315: C >= 0.5% Skin Corr. 1B; H314: C >= 2% Skin Corr. 1A; H314: C >= 5% | - | - |

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

After inhalation

Remove to fresh air, keep patient warm and at rest. In case of persisting adverse effects consult a physician.

After skin contact

When in contact with the skin, clean with soap and water. After contact with molten product, cool quickly with cold water. Consult a doctor if skin irritation persists.

After eye contact



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Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get immediate ophthalmic treatment.

After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Toxic gases/vapours

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8.

For emergency responders

Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

Information regarding safe handling, see chapter 7. Information regarding personal protective measures, see chapter 8. Information regarding waste disposal, see chapter 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art. Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid contact with skin and eyes. Do not breathe steams or mist of the product.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not inhale dust.

Advice on protection against fire and explosion

Keep away from ignition sources and provide for good ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.



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Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Incompatible products

Substances to be avoided, pls. See chapter 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

| No | Substance name | CAS no. | | EC no. |
|----|--|------------|-------|-----------|
| 1 | potassium-tetrafluoroborate | 14075-53-7 | | 237-928-2 |
| | 2000/39/EC | | | |
| | Fluorides, inorganic | | | |
| | WEL long-term (8-hr TWA reference period) | 2.5 | mg/m³ | |
| | List of approved workplace exposure limits (WELs) / I | EH40 | | |
| | Fluoride (inorganic, as F) | | | |
| | WEL long-term (8-hr TWA reference period) | 2.5 | mg/m³ | |
| 2 | copper massive | 7440-50-8 | | 231-159-6 |
| | List of approved workplace exposure limits (WELs) / I | EH40 | | |
| | Copper (as Cu) fume | | | |
| | WEL long-term (8-hr TWA reference period) | 0.2 | mg/m³ | |
| | List of approved workplace exposure limits (WELs) / I | EH40 | | |
| | Copper and compounds (as Cu) dusts and mists | | | |
| | WEL short-term (15 min reference period) | 2 | mg/m³ | |
| | WEL long-term (8-hr TWA reference period) | 1 | mg/m³ | |
| 3 | silver | 7440-22-4 | | 231-131-3 |
| | List of approved workplace exposure limits (WELs) / EH40 | | | |
| | Silver (metallic) | Ī | | |
| | WEL long-term (8-hr TWA reference period) | 0.1 | mg/m³ | |
| | 2000/39/EC | | | |
| | Silver, metallic | Ī | | |
| _ | WEL long-term (8-hr TWA reference period) | 0.1 | mg/m³ | |
| 4 | potassium hydroxide | 1310-58-3 | | 215-181-3 |
| | List of approved workplace exposure limits (WELs) / I | EH40 | | |
| | Potassium hydroxide (as Cyanide) | T = | | |
| | WEL short-term (15 min reference period) | 5 | mg/m³ | |
| | WEL long-term (8-hr TWA reference period) | 1 | mg/m³ | |

DNEL, DMEL and PNEC values

DNEL values (worker)

| | BITLE Talado (Worker) | | | | | |
|----|-----------------------|---------------------|--------|-------------|--|--|
| No | Substance name | | | CAS / EC no | | |
| | Route of exposure | | Effect | Value | | |
| 1 | potassium hydroxide | | | 1310-58-3 | | |
| | | | | 215-181-3 | | |
| | inhalative | Long term (chronic) | local | 1 mg/m³ | | |

DNEL value (consumer)

| No | o Substance name | | | CAS / EC no | |
|----|-----------------------|---------------------|--------|-------------|-------|
| | Route of exposure | Exposure time | Effect | Value | |
| 1 | 1 potassium hydroxide | | | 1310-58-3 | |
| | | | | 215-181-3 | |
| | inhalative | Long term (chronic) | local | 1 | mg/m³ |

8.2 Exposure controls

Appropriate engineering controls



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Ensure adequate ventilation, local exhaust at the work station if necessary.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves. insulated gloves

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Form/Colour | |
|-------------|--|
| solid | |
| metallic | |

| Odour | |
|-----------|--|
| odourless | |

| Odour threshold | |
|-------------------|--|
| No data available | |

| pH value | |
|-------------------|--|
| No data available | |

| Boiling point / boiling range | |
|-------------------------------|--|
| No data available | |

| Melting point / melting range | | | |
|-------------------------------|--------------|--|--|
| Value | 630 - 760 °C | | |
| Source | supplier | | |

| Decomposition point / decomposition range | |
|---|--|
| No data available | |

| Flash point | |
|-------------------|--|
| No data available | |

| Auto-ignition temp | rature | |
|---------------------------|--------|--|
| No data available | | |

| Oxidising properties |
|----------------------|
| Oxidising properties |
| No data available |
| 140 data available |

| Explosive properties | |
|---|--|
| Explosive properties | |
| The product does not have explosive properties. | |
| The product does not have explosive properties. | |

| Flammability (solid, gas) |
|---------------------------|
| Flammability (solid, gas) |
| No data available |
| INU data available |

| Lower flammability or explosive limits | |
|--|--|
| No data available | |

Upper flammability or explosive limits



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No data available

Vapour pressure

No data available

Vapour density

No data available

Evaporation rate

No data available

Relative density

No data available

Density

No data available

Solubility in water

No data available

Solubility(ies)

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

9.2 Other information

Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable at ambient temperature.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

None, if handled according to intended use.

10.5 Incompatible materials

strong acids; strong bases; Oxidizing agents

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

| Acu | ute oral toxicity (result of the ATE calculation for the mixture) | | | |
|-----|--|---|--|--|
| No | Product Name | | | |
| 1 | ROLOT S34U, per DIN 1044, flux coated, 2mm,round | | | |
| Con | mments The result of the applied calculation method according to the | | | |
| | | European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, | | |
| | | Part 3 of Annex I is outside the values that imply a classification / | | |
| | | labelling of this mixture according to table 3.1.1 defining the | | |
| | | respective categories (ATE oral > 2000 mg/kg). | | |

| Acu | Acute oral toxicity | | | |
|-----|---------------------|---------|--------|--|
| No | Substance name | CAS no. | EC no. | |



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| 1 | potassium hydroxide | | 1310-58-3 | | 215-181-3 |
|------|---------------------|----------|-----------|-----|------------------|
| LD50 | | | | 333 | mg/kg bodyweight |
| Spec | ties | rat | | | |
| Meth | od | OECD 425 | | | |
| Sour | ce | ECHA | | | |

| Acute dermal toxicity | |
|-----------------------|--|
| No data available | |

Acute inhalational toxicity

No data available

| Skir | Skin corrosion/irritation | | | | |
|------------|---------------------------|-----------|-----------|--|--|
| No | Substance name | CAS no. | EC no. | | |
| 1 | potassium hydroxide | 1310-58-3 | 215-181-3 | | |
| Spe | cies | rabbit | | | |
| Meth | nod | OECD 404 | | | |
| Sou | rce | ECHA | | | |
| Evaluation | | corrosive | | | |

| Seri | Serious eye damage/irritation | | | | |
|------|-------------------------------|-----------|-----------|--|--|
| No | Substance name | CAS no. | EC no. | | |
| 1 | potassium hydroxide | 1310-58-3 | 215-181-3 | | |
| Spec | cies | rabbit | | | |
| Meth | nod | OECD 405 | | | |
| Soul | rce | ECHA | | | |
| Eval | uation | corrosive | | | |

| Respiratory or skin sensitisation | | | |
|-----------------------------------|---------------------|-----------------|-----------|
| No | Substance name | CAS no. | EC no. |
| 1 | potassium hydroxide | 1310-58-3 | 215-181-3 |
| Rout | te of exposure | Skin | |
| Species | | guinea pig | |
| Source | | ECHA | |
| Evaluation | | non-sensitizing | |

| Gerr | Germ cell mutagenicity | | | |
|---------------------------|------------------------|---|-------------------------|--|
| No | Substance name | CAS no. | EC no. | |
| 1 | potassium hydroxide | 1310-58-3 | 215-181-3 | |
| Type of examination | | Ames-Test | | |
| Species | | Bacteria - Salmonella typhimurium | | |
| Source | | ECHA | | |
| Evaluation/classification | | Based on available data, the classification | n criteria are not met. | |

Reproduction toxicity No data available

Carcinogenicity No data available

| STOT - single exposure | |
|------------------------|--|
| No data available | |

| STOT - repeated exposure | |
|--------------------------|--|
| No data available | |

| Aspiration hazard | |
|-------------------|--|
| No data available | |

SECTION 12: Ecological information

12.1 Toxicity

| Toxicity to fish (acute) | | | |
|--------------------------|---------------------|-----------|-----------|
| No | Substance name | CAS no. | EC no. |
| 1 | potassium hydroxide | 1310-58-3 | 215-181-3 |



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| LC50 Duration of exposure | 80 96 | mg/l h | |
|---------------------------|---|-----------|--|
| Species | Gambusia affinis | | |
| Source | ECHA | | |
| Evaluation/classification | Based on available data, the classification criteria are not met. | | |

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Dispose of according to all applicable regulations upon consultation of the local competent authorities and the disposer in a suitable and authorised disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.



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14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

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

Not relevant

SECTION 15: Regulatory information

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

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XVII of the REACH regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H290 May be corrosive to metals. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Department issuing safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.



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