

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 1/12

E-Solder 3021 B

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

1.1. Product identifier

Trade name/designation:

E-Solder 3021 B

UFI:

Q300-P0H0-7003-GGQD

Additional information:

Manufacturer

Von Roll USA, Inc.

200 Von Roll Drive

SCHENECTADY, NY 12306

USA

Emergency telephone number +1 800-262-8200

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

Use of the substance/mixture:

Adhesives, sealants

Epoxy resin

Hardener

For use in industrial installations and professional treatment only.

Relevant identified uses:

Life cycle stage [LCS]

IS: Use at industrial sites

PW: Widespread use by professional workers

Product Categories [PC]

PC 1: Adhesives, sealants

Uses advised against:

Life cycle stage [LCS]

C: Consumer use

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Epoxy Produkte GmbH

Am Walde 24

29323 Wietze

Germany

Telephone: +49 (0)5146 9879965

Telefax: +49 (0)5146 9879964

E-mail: hs@epoxy-produkte.de

Website: www.epoxy-produkte.de

E-mail (competent person): hs@epoxy-produkte.de

1.4. Emergency telephone number

+49 (0)5146 9879965 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (oral) (<i>Acute Tox. 4</i>)	H302: Harmful if swallowed.	Calculation method.
Skin corrosion/irritation (<i>Skin Corr. 1B</i>)	H314: Causes severe skin burns and eye damage.	Calculation method.
Respiratory or skin sensitisation (<i>Skin Sens. 1</i>)	H317: May cause an allergic skin reaction.	Calculation method.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 2/12

E-Solder 3021 B

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (<i>Eye Dam. 1</i>)	H318: Causes serious eye damage.	Calculation method.
Reproductive toxicity (<i>Repr. 1B</i>)	H360Fd: May damage fertility. Suspected of damaging the unborn child.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Acute 1</i>)	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Chronic 1</i>)	H410: Very toxic to aquatic life with long lasting effects.	Calculation method.

2.2. Label elements

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

Hazard pictograms:



GHS05
Corrosion



GHS07
Exclamation mark



GHS08
Health hazard



GHS09
Environment

Signal word: Danger

Hazard components for labelling:

Phenol, 4-nonyl-, branched; 4,4'-isopropylidenediphenol; 2-piperazin-1-ylethylamine; Polyaminoamid

Hazard statements for health hazards	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
Hazard statements for environmental hazards	
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements Prevention	
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
Precautionary statements Response	
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
Precautionary statements Storage	
P405	Store locked up.
Precautionary statements Disposal	
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards

Adverse physicochemical effects:

No information available.

Adverse human health effects and symptoms:

No information available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 3/12

E-Solder 3021 B

Adverse environmental effects:

The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

Other adverse effects:

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 7440-22-4 EC No.: 231-131-3	silver Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410)  Warning M-factor (acute): 10	≥ 50 - ≤ 100 weight-%
CAS No.: 84852-15-3 EC No.: 284-325-5	Phenol, 4-nonyl-, branched Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Repr. 2 (H361fd), Skin Corr. 1B (H314)  Danger	> 10 - ≤ 25 weight-%
CAS No.: 140-31-8 EC No.: 205-411-0	2-piperazin-1-ylethylamine Acute Tox. 4 (H312, H302), Aquatic Chronic 3 (H412), Skin Corr. 1B (H314), Skin Sens. 1 (H317)  Danger	≥ 2.5 - ≤ 10 weight-%
CAS No.: 68410-23-1	Polyaminoamid Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Irrit. 2 (H315), Skin Sens. 1 (H317)  Danger	≥ 2.5 - ≤ 10 weight-%
CAS No.: 80-05-7 EC No.: 201-245-8	4,4'-isopropylidenediphenol <i>Candidate List of Substances of Very High Concern for Authorisation!</i> Eye Dam. 1 (H318), Repr. 1B (H360F), STOT SE 3 (H335), Skin Sens. 1 (H317)  Danger	≥ 0 - ≤ 2.5 weight-%
CAS No.: 111-40-0 EC No.: 203-865-4	2,2'-iminodi(ethylamine) Acute Tox. 4 (H312, H302), Skin Corr. 1B (H314), Skin Sens. 1 (H317)  Danger	≥ 0 - ≤ 2.5 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

When in doubt or if symptoms are observed, get medical advice.

Never give anything by mouth to an unconscious person or a person with cramps.

Following inhalation:

Provide fresh air.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap.

Do not wash with: Solvents/Thinner

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

In case of eye irritation consult an ophthalmologist.

Following ingestion:

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

If swallowed, seek medical advice immediately and show this container or label.

Self-protection of the first aider:

Use personal protection equipment. No direct artificial respiration to be given by first aider.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 4/12

E-Solder 3021 B

4.2. Most important symptoms and effects, both acute and delayed

Skin corrosion/irritation
Allergic reactions

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Foam
ABC-powder
Water mist

5.2. Special hazards arising from the substance or mixture

No known hazardous reactions.

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.

5.4. Additional information

Fire fighting water forms corrosive acid solutions.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Use personal protection equipment. Remove persons to safety.

Protective equipment:

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

6.1.2. For emergency responders

Personal protection equipment:

Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:

Suitable material for taking up:
Sand, Universal binder, Earth

For cleaning up:

Clean with detergents. Avoid solvent cleaners.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8).
Avoid contact during pregnancy/while nursing.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 5/12

E-Solder 3021 B

Fire prevent measures:

Usual measures for fire prevention.

Measures to prevent aerosol and dust generation:

Devices with local exhaust

Advices on general occupational hygiene

Thorough skin-cleansing after handling the product.

Immediately remove any contaminated clothing, shoes or stockings.

When using do not eat, drink, smoke, sniff. When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Keep container tightly closed in a cool, well-ventilated place.

Requirements for storage rooms and vessels:

Keep/Store only in original container.

Hints on storage assembly:

Do not store together with:

Food/feedstuff additives

Storage class (TRGS 510, Germany): 8B – Non-combustible corrosive substances

7.3. Specific end use(s)

Recommendation:

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE)	silver CAS No.: 7440-22-4 EC No.: 231-131-3	① 0.01 mg/m ³ ② 0.02 mg/m ³ ⑤ (Silber, Verbindungen, anorganisch, berechnet als Ag); (eintembare Fraktion)
IOELV (EU)	silver CAS No.: 7440-22-4 EC No.: 231-131-3	① 0.01 mg/m ³ ⑤ (silver compounds, soluble, calculated as Ag)
TRGS 900 (DE)	silver CAS No.: 7440-22-4 EC No.: 231-131-3	① 0.1 mg/m ³ ② 0.8 mg/m ³ ⑤ (Metall, eintembare Fraktion)
IOELV (EU)	silver CAS No.: 7440-22-4 EC No.: 231-131-3	① 0.1 mg/m ³ ⑤ (metal)
IOELV (EU)	4,4'-isopropylidenediphenol CAS No.: 80-05-7 EC No.: 201-245-8	① 2 mg/m ³ ⑤ (inhalable fraction)
TRGS 900 (DE)	4,4'-isopropylidenediphenol CAS No.: 80-05-7 EC No.: 201-245-8	① 5 mg/m ³ ② 5 mg/m ³ ⑤ (eintembare Fraktion)

8.1.2. Biological limit values

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 6/12

E-Solder 3021 B

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection EN 166

Skin protection:

Gloves with long cuffs

Suitable material:

CR (polychloroprene, chloroprene rubber)

Butyl caoutchouc (butyl rubber)

Breakthrough time: 2-4 h

Thickness of the glove material 0,5 mm Tested protective gloves must be worn EN ISO 374 min In the case of wanting to use the gloves again, clean them before taking off and air them well.

Respiratory protection:

Respiratory protection necessary at:
insufficient exhaust

8.2.3. Environmental exposure controls

Preventive industrial medical examinations are to be offered.

8.3. Additional information

Preventive industrial medical examinations are to be offered.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: not determined

Odour: not determined

Odour threshold: not determined

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	not determined		
Melting point	not determined		
Freezing point	not applicable		
Initial boiling point and boiling range	not determined		
Decomposition temperature	not determined		
Flash point	not determined		
Evaporation rate	not determined		
Auto-ignition temperature	not determined		
Upper/lower flammability or explosive limits	not determined		
Vapour pressure	not determined		
Vapour density	not determined		
Density	not determined		
Relative density	not determined		
Bulk density	not determined		
Water solubility	not determined		
Partition coefficient: n-octanol/water	not determined		
Dynamic viscosity	not determined		
Kinematic viscosity	not determined	40 °C	

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 7/12

E-Solder 3021 B

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

no restriction

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Substance name	Toxicological information
2-piperazin-1-ylethylamine CAS No.: 140-31-8 EC No.: 205-411-0	LD₅₀ oral: 2,140 mg/kg (Rat) LD₅₀ dermal: 866 mg/kg LC₅₀ Acute inhalation toxicity (vapour): 2,000 mg/l
4,4'-isopropylidenediphenol CAS No.: 80-05-7 EC No.: 201-245-8	LD₅₀ oral: 4,100 mg/kg LD₅₀ dermal: 3,000 mg/kg
2,2'-iminodi(ethylamine) CAS No.: 111-40-0 EC No.: 203-865-4	LD₅₀ dermal: =1,045 mg/kg

Acute oral toxicity:

Harmful if swallowed.

Acute dermal toxicity:

Direct derivation of an ATE because of robust data.

Acute inhalation toxicity:

There are no data available on the mixture itself.

Skin corrosion/irritation:

Causes severe burns.

Serious eye damage/irritation:

Causes serious eye damage.

Respiratory or skin sensitisation:

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity:

No experimental indications of in vitro mutagenicity exist.

Carcinogenicity:

No indication of human carcinogenicity.

Reproductive toxicity:

May damage fertility. Suspected of damaging the unborn child.

STOT-single exposure:

No information available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 8/12

E-Solder 3021 B

STOT-repeated exposure:

No information available.

Aspiration hazard:

No information available.

Additional information:

No data available

11.2. Information on other hazards

Endocrine disrupting properties:

The product contains a substance that is identified as having endocrine disrupting properties.
4,4'-isopropylidenediphenol

SECTION 12: Ecological information

12.1. Toxicity

Substance name	Toxicological information
silver CAS No.: 7440-22-4 EC No.: 231-131-3	NOEC: =0.13 mg/l 28 d (fish) EC ₅₀ : =0.002 mg/l (crustaceans) EC10/7d
2-piperazin-1-ylethylamine CAS No.: 140-31-8 EC No.: 205-411-0	LC ₅₀ : 2,190 mg/l 4 d (fish)

Assessment/classification:

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Additional ecotoxicological information:

Do not allow uncontrolled discharge of product into the environment.

12.2. Persistence and degradability

Substance name	Biodegradation	Remark
silver CAS No.: 7440-22-4 EC No.: 231-131-3	Yes, slowly	
2-piperazin-1-ylethylamine CAS No.: 140-31-8 EC No.: 205-411-0	Yes, slowly	
4,4'-isopropylidenediphenol CAS No.: 80-05-7 EC No.: 201-245-8	Yes, rapidly	

Additional information:

No information available.

12.3. Bioaccumulative potential

Substance name	Log K _{ow}	Bioconcentration factor (BCF)
2-piperazin-1-ylethylamine CAS No.: 140-31-8 EC No.: 205-411-0	-1.48	
4,4'-isopropylidenediphenol CAS No.: 80-05-7 EC No.: 201-245-8	3.4	73

Bioconcentration factor (BCF):

No information available.

12.4. Mobility in soil

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 9/12

E-Solder 3021 B

12.5. Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
silver CAS No.: 7440-22-4 EC No.: 231-131-3	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Phenol, 4-nonyl-, branched CAS No.: 84852-15-3 EC No.: 284-325-5	—
2-piperazin-1-ylethylamine CAS No.: 140-31-8 EC No.: 205-411-0	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Polyaminoamid CAS No.: 68410-23-1	—
4,4'-isopropylidenediphenol CAS No.: 80-05-7 EC No.: 201-245-8	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
2,2'-iminodi(ethylamine) CAS No.: 111-40-0 EC No.: 203-865-4	—

The mixture contains the following substances fulfilling the PBT-/vPvB criteria according to REACH Annex XIII

4-Nonylphenol, branched

12.6. Endocrine disrupting properties

The product contains a substance that is identified as having endocrine disrupting properties.

4,4'-isopropylidenediphenol

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation.

List of proposed waste codes/waste designations in accordance with EWC

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

08 04 09 *	Waste adhesives and sealants containing organic solvents or other dangerous substances
------------	--

*: Evidence for disposal must be provided.

Waste code packaging

08 04 09 *	Waste adhesives and sealants containing organic solvents or other dangerous substances
------------	--

*: Evidence for disposal must be provided.

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1760	UN 1760	UN 1760	UN 1760
14.2. UN proper shipping name			
CORROSIVE LIQUID, N.O.S. (Phenol, 4-nonyl-, branched, 2-piperazin-1-ylethylamine)	CORROSIVE LIQUID, N.O.S. (Phenol, 4-nonyl-, branched, 2-piperazin-1-ylethylamine)	CORROSIVE LIQUID, N.O.S. (Phenol, 4-nonyl-, branched, 2-piperazin-1-ylethylamine)	CORROSIVE LIQUID, N.O.S. (Phenol, 4-nonyl-, branched, 2-piperazin-1-ylethylamine)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 10/12

E-Solder 3021 B

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.3. Transport hazard class(es)			
 8	 8	 8	 8
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
		 MARINE POLLUTANT	No
14.6. Special precautions for user			
Special provisions: 274 Limited quantity (LQ): 1 L Excepted Quantities (EQ): E2 Hazard identification number (Kemler No.): 80 Classification code: C9 Tunnel restriction code: (E)	Special provisions: 274 Limited quantity (LQ): 1 L Excepted Quantities (EQ): E2 Classification code: C9	Special provisions: 274 Limited quantity (LQ): 1 L Excepted Quantities (EQ): E2 EmS-No.: F-A, S-B	Special provisions: A3 Limited quantity (LQ): Y840 Excepted Quantities (EQ): E2 Remark: A3

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Authorisations:

not applicable

Restrictions on use:

Use restriction according to REACH annex XVII, no.: 46 - Nonylphenol (CAS 84852-15-3) (not applicable)

Use restriction according to REACH annex XVII, no.: 66 4,4'-isopropylidenediphenol; Bisphenol A; BPA (CAS 80-05-7) (not applicable)

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:

- E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH:

Nonylphenol (CAS 84852-15-3)

4,4'-isopropylidenediphenol; Bisphenol A; BPA (CAS 80-05-7)

Version: Candidate List on 17 January 2022

RoHS - Directive 2011/65/EU This product is compatible with the current ROHS-Directive. (2011/65/EU, 2015/863/EU)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 11/12

E-Solder 3021 B

15.1.2. National regulations

 [DE] National regulations

Störfallverordnung

for substances contained in the product:

Hazard categories:

- E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Water hazard class

WGK:

3 - stark wassergefährdend

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1. Indication of changes

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

16.2. Abbreviations and acronyms

For abbreviations and acronyms, see table on the eSDScom website

-ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route)

-CAS: Chemical Abstract Service

-CLP: Classification, labelling and Packaging

-DNEL: Derived No Effect Level

-EC₅₀: Effective Concentration 50%

-ECHA: European Chemical Agency

-LC₅₀: Lethal Concentration 50%

-LD₅₀: Lethal Dose 50%

-PBT: persistent, bioaccumulative, toxic

-PNEC: Predicted No Effect Concentration

-REACH: Registration, Evaluation and Authorization of Chemicals

-SVHC: Substance of Very High Concern

-VOC: Volatile organic compounds

-vPvB: very persistent, very bioaccumulative

16.3. Key literature references and sources for data

REACH Dissemination Portal

<https://echa.europa.eu/de/information-on-chemicals/registered-substances>

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (oral) (<i>Acute Tox. 4</i>)	H302: Harmful if swallowed.	Calculation method.
Skin corrosion/irritation (<i>Skin Corr. 1B</i>)	H314: Causes severe skin burns and eye damage.	Calculation method.
Respiratory or skin sensitisation (<i>Skin Sens. 1</i>)	H317: May cause an allergic skin reaction.	Calculation method.
Serious eye damage/eye irritation (<i>Eye Dam. 1</i>)	H318: Causes serious eye damage.	Calculation method.
Reproductive toxicity (<i>Repr. 1B</i>)	H360Fd: May damage fertility. Suspected of damaging the unborn child.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Acute 1</i>)	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Chronic 1</i>)	H410: Very toxic to aquatic life with long lasting effects.	Calculation method.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Jan 2022

Print date: 28 Jan 2022

Version: 8

Page 12/12

E-Solder 3021 B

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
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.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H360F	May damage fertility.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

This Safety Data Sheet was drawn up by TÜV SÜD Industrie Service GmbH (see below), based on data from the supplier, who is named in section 1 and who is responsible for this document.

TÜV SÜD Industrie Service GmbH
Department Environmental Service
Westendstraße 199
80686 Munich - Germany

* Data changed compared with the previous version