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

- **1.1 Product identifier**
  - **BTC-20 NF**

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - Identified use: intended for professional use only!
  - Coolant/ Cutting solution

- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - Alexander BINZEL
    - Schweißtechnik GmbH & Co.KG
    - Postfach 10 01 53 / D-35331 Giessen
    - Tel.: +49 (0) 6408 / 59-0
    - Fax: +49 (0) 6408 / 59-191
    - Mail: technischdedokumentation@binzel-abicor.com

- **1.4 Emergency telephone number:**
  - Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
    - Langenbeckstraße 1; Gebäude 601; 55131 Mainz
    - Tel. Nr.: +49 (0)6131 / 19 24 0
  - Universitätsmedizin der Johannes Gutenberg-Universität Mainz

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
  - Classification according to Regulation (EC) No 1272/2008
    - STOT RE 2, H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

- **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**
    - GHS08

  - **Signal word**
    - Warning

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

  - **Hazard statements**
    - H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

  - **Precautionary statements**
    - P260 Do not breathe dust/fume/gas/mist/vapours/spray.
    - P314 Get medical advice/attention if you feel unwell.
    - 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 Chemical characterisation: Mixtures**
  - **Description:** Mixture: consisting of the following components.

  - **Chemical Names:**
    - ethanediol

  - **CAS:** 107-21-1
  - **EINECS:** 203-473-3
  - **Index number:** 603-027-00-1
  - **Reg.nr.:** 01-2119456816-28

  - **STOT RE 2, H373; Acute Tox. 4, H302**
  - **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:**
    - Immediately remove any clothing soiled by the product.
    - Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
    - Do not leave affected persons unattended.
    - Personal protection for the First Aider.
    - Take affected persons out of danger area and lay down.

  - **After inhalation:**
    - In case of unconsciousness place patient stably in side position for transportation.
    - Supply fresh air; consult doctor in case of complaints.
    - Seek medical treatment.

  - **After skin contact:**
    - Immediately wash with water and soap and rinse thoroughly.
    - Seek medical treatment in case of complaints.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: BTC-20 NF

- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing: Protect unharmed eye.

- 4.2 Most important symptoms and effects, both acute and delayed
  - 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. Use fire extinguishing methods suitable to surrounding conditions.

- 5.2 Special hazards arising from the substance or mixture
  - Protection: Do not inhale explosion gases or combustion gases.

- 5.3 Advice for firefighters
  - 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. Ensure adequate ventilation. Wear protective clothing. Avoid contact with skin and eyes.

- 6.2 Environmental precautions:
  - Inform respective authorities in case of seepage into water course or sewage system. Prevent from spreading (e.g. by damming-in or oil barriers). Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

- 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
  - Store in cool, dry place in tightly closed receptacles. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
    - Information about storage in one common storage facility: Store away from foodstuffs.
    - Further information about storage conditions:
      - Store in dry conditions. Keep container tightly sealed. Recommended storage temperature: 5-30 °C
  - Storage class: 10

- 7.3 Specific end use(s)
  - No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
  - No further data; see item 7.

- 8.2 Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.
- Respiratory protection:
  When used properly and under normal conditions, breathing protection is not required.
  Use suitable respiratory protective device in case of insufficient ventilation.
  Filter A/P2
  Respiratory protection - Gas filters and combination filters according to (DIN EN 141)

- Protection of hands:
  Protective gloves
  Check protective gloves prior to each use for their proper condition.
  Only use chemical-protective gloves with CE-labelling of category III.
  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
  After use of gloves apply skin-cleaning agents and skin cosmetics.

- Material of gloves
  Recommended materials:
  Butyl rubber, BR
  Recommended thickness of the material: ≥ 0.5 mm
  Penetration time (min.): < 480
  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.

- Penetration time of glove material
  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.

- As protection from splashes gloves made of
  the following materials are suitable:
  Nitrile rubber, NBR
  Recommended thickness of the material: ≥ 0.1 mm
  Penetration time (min.): < 10

- Eye protection:
  Tightly sealed goggles

- Body protection:
  Protective goggles and facial protection - Classification according to EN 166
  Protective clothing (EN 13034)

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 at 20 °C: 6
- Change in condition
  - Melting point/freezing point: Undetermined.
  - Initial boiling point and boiling range: Undetermined.
- Flash point: 111 °C
- Flammability (solid, gas): Not applicable.
- 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.
- Density at 20 °C: 1.04 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
Trade name: BTC-20 NF

- 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.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- 10.3 Possibility of hazardous reactions No decomposition if used according to specifications.
- 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 decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity Based on available data, the classification criteria are not met.
  - LD/LC50 values relevant for classification:
    107-21-1 ethanediol
    Oral LD50 7,712 mg/kg (rat)
    LDLo ~1,600 mg/kg (human) ((EU))
    Dermal LD50 >9,530 mg/kg (rabbit)
    LC50 >2.5 mg/l (rat) (6h; as aerosol)
  - Primary irritant effect:
    - Skin corrosion/irritation Based on available data, the classification criteria are not met.
    - Serious eye damage/irritation Based on available data, the classification criteria are not met.
    - Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
    - CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
      - Germ cell mutagenicity 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 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
      - Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity:
    107-21-1 ethanediol
    EC20 >1,995 mg/l (Belebtschlamm) (0.5h; ISO 8192)
    EC50 >10,000 mg/l (ALGAE)
    >100 mg/l (Daphnia magna) (48h; OECD 202)
    6,500-13,000 mg/l (Selenastrium capricornutum) (96h)
    NOEC 8,590 mg/l (Ceriodaphnia dubia) (7d)
    LC50 18,000 mg/l (Onchorynchus mykiss (Regenbogenforelle)) (96h)
    72,860 mg/l (Pimephales promelas) (96h; static test)
    NOEC 15,380 mg/l (Pimephales promelas) (7d)
  - 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: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
      Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  - 12.5 Results of PBT and vPvB assessment
    - PBT: Not applicable.
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. Disposal according to official regulations.

European waste catalogue
- 14 06 03* other solvents and solvent mixtures
- 15 01 10* packaging containing residues of or contaminated by hazardous substances
- 15 01 02 plastic packaging

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA: Void

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA: Void

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA: Void

14.4 Packing group
ADR, IMDG, IATA: Void

14.5 Environmental hazards:
- Marine pollutant: No

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

UN "Model Regulation": Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
None of the ingredients is listed.

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
H302 Harmful if swallowed.
H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

Department issuing SDS: Technical Documentation
Contact: Technical Documentation

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

Trade name: BTC-20 NF

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

- Sources

Internet:
- www.echa.europa.eu
- www.baua.de
IFA: Institute für Occupational Safety and Health of the German Social Accident Insurance:
- www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index.jsp
- www.dguv.de/ifa/gestis/gestis-dnel-liste

- * Data compared to the previous version altered.