Material Safety Data Sheet

Completed **12-02-2025**
Revision: (date) **-**
SDS version **1.0**

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

1.1. Product Identifier

Trade Name: Trisani CIP Ops
Product- no.: -
UFI: 9NGA-QVPW-J20D-EQD1

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

Recommended uses:
Cleaning agent.

Uses advised against:
This product must not be used for purposes other than those recommended without first seeking the advice of the supplier.

1.3. Details of the supplier of the safety data sheet

Company and address:
Brewolution ApS
Industrivej 4
DK-8653 Them
+45 53 60 09 50

www.brewolution.com

Contact person and E-mail:
mail@brewolution.com

The Safety data sheet is completed and validated by:
Mediator ApS, Centervej 2, DK-6000 Kolding. Consultant: TSN

1.4. Emergency telephone number

Use your national or local emergency number - For “First aid measures” see section 4.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP (1272/2008):
Skin Corr. 1;H314
Eye Dam. 1;H318

See full text of H-phrases in section 16.

2.2. Label elements

Signal word:
Danger

Causes severe skin burns and eye damage. (H314)

If medical advice is needed, have product container or label at hand. (P101)
Keep out of reach of children. (P102)
Wear protective gloves/protective clothing/eyeprotection/face protection. (P280)
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301 + P330 + P331)
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER/doctor. (P303 + P361 + P353 + P310)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338)
Dispose of contents/container in accordance with local regulation. (P501)

2.3. Other hazards

The product contains organic solvents. Repeated exposure to organic solvents may cause damage to the central nervous system and internal organs fx. liver and kidney.

Additional labelling:
-

Additional warnings
Tactile warning. If this product is sold retail, it has to be delivered in a child proved container.

SECTION 3: Composition/information on ingredients

3.1./3.2. Substances/Mixtures

Substance	EU-Index no. / REACH-Reg. no.	CAS-no.	EINECS-no.	CLP-classification	Wt/Wt %	Note
Sulphamic acid	016-026-00-0 / 02-2119675334-35-XXXX	5329-14-6	226-218-8	Skin Irrit. 2;H315, Eye Irrit. 2;H319, Aquatic Chronic 3;H412	5 - 15	-
Formic Acid	607-001-00-0 / 01-2119491174-37-xxxx	64-18-6	200-579-1	Flam. Liq. 3;H226, Acute Tox. 4;H302, Skin Corr. 1A;H314; Eye Dam. 1;H318, Acute Tox. 3;H331, EUH071 Skin Corr. 1B;H314: 10 % ≤ C < 90 % Skin Corr. 1A;H314: C ≥ 90 % Skin Irrit. 2;H315. 2: 2 % ≤ C < 10 % Eye Irrit. 2;H319: 2 % ≤ C < 10 %	1 - 5	1, 2
Sulphuric acid	016-020-00-8 / 01-2119458838-20-xxxx	7664-93-9	231-639-5	Skin Corr. 1A;H314 Eye Irrit. 2; H319: 5 % ≤ C < 15 % Skin Corr. 1A; H314: C ≥ 15 % Skin Irrit. 2; H315: 5 % ≤ C < 15 %	1 - 5	1

1) The substance is included in the EU list of limit values for occupational exposure.
2) The substance is an organic solvent.

See full text of H-phrases in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures
Inhalation:
Seek fresh air.
Keep victim under observation.
Seek medical advice in case of discomfort.

Ingestion:
Wash out mouth thoroughly and drink 1-2 glasses of water in small sips.
Do not induce vomiting.
If vomiting occurs, keep head low so that stomach contents do not enter lungs.
Seek medical advice immediately.

Skin contact:
Immediately remove contaminated clothing.
Wash the skin thoroughly with water and continue washing for a long time.
Immediately call a POISON CENTER or doctor/physician.

Eye contact:
Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice

Additional information:
When obtaining medical advice, show the safety data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed
Tissue damaging effects: This product contains substances which are corrosive. If vapour or aerosols are in haled, it can result in damage to lungs, irritation and burns in the respiratory organs as well as coughing. Corrosive substances cause irreversible damage to eyes and acid burns to skin.

4.3. Indication of any immediate medical attention and special treatment needed
Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Extinguish with powder, foam, carbon dioxide or water mist.
Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture
Avoid inhalation of vapour and fumes – seek fresh air.
Fire will produce dense black smoke.
Exposure to decomposition products may cause a health hazard.

5.3. Advice for firefighters
Extinguishing water which has been in contact with the product may be corrosive.
If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn.
Fire fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
See section 8 for type of protective equipment.
Avoid breathing and contact with skin and eyes.

6.2. Environmental precautions
Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up
Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers.
Caution! Causes burns.
Rinse with water.

6.4. Reference to other sections
See section 8 for type of protective equipment.
See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
See section 8 for information about precautions for use and personal protective equipment.
Use the product under well-ventilated conditions.
Running water and eye wash equipment must be available.
A safety shower should be available.

7.2. Conditions for safe storage, including any incompatibilities
The product must be stored safely and away from food, animal feeding stuffs, medicines, etc.
Keep in tightly closed original packaging.
Store in a dry, cool, well-ventilated area.
Avoid direct sunlight.
Storage temperature: -5°C - 35°C

7.3. Specific end use(s)
See application section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Indicative occupational exposure limit value (IOELV)

Substance	**exposure limit mg/m³ / ppm**	**exposure limit mg/m³ / ppm**	**Note**
Formic Acid	9 / 5	- / -	-
Sulphuric acid (mist)	0,05 / -	- / -	-

DNEL/PNEC-values:
DNEL Sulphamic acid

	Workers	**Consumers**
Inhalation - Chronic Systemic	70,5 mg/m³	17,4 mg/m³
Dermal - Chronic Systemic	10 mg/kg bw/day	5 mg/kg bw/day
Oral - Chronic Systemic	-	5 mg/kg bw/day

DNEL Formic Acid

	Workers	Consumers
Inhalation - Chronic Systemic	9,5 mg/m³	6 mg/m³
Inhalation - Chronic Local	9,5 mg/m³	6 mg/m³
Dermal - Chronic Systemic	-	3 mg/kg bw/day
Oral - Chronic Systemic	-	3 mg/kg bw/day

DNEL Sulphuric acid

	Workers	Consumers
Inhalation - Chronic Local	0,05 mg/m³	-
Inhalation - Acute Local	0,1 mg/m³	-

PNEC Sulphamic acid

Fresh water	1,8 mg/L
Intermittent releases (Fresh water)	0,48 mg/L
Marine water	0,18 mg/L
Soil	5 mg/kg soil dw

PNEC Sulphuric acid

Fresh water	0,003 mg/L

8.2. Exposure controls
There are no exposure scenarios for this product.

Appropriate engineering controls:
Wear the personal protective equipment specified below.
Wash hands before breaks, before using restroom facilities, and at the end of work.
Do not eat, drink or smoke when using this product.

Personal protective equipment:

Respiratory protection:
Generally not required.

Hand protection:
Wear protective gloves made of nitrile rubber (≥ 0,7 mm), neoprene rubber (≥ 0,5 mm) or butyl rubber (≥ 0,4 mm). Protective gloves conforming to EN 374.
Penetration time: ≥ 480 min.

Eye/face protection:
Wear safety goggles/face protection.
Eye protection conforming to EN 166.

Skin protection:
Special work clothing should be used.

Environmental exposure controls:
Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Sharp/pungent
Melting point/ Freezing Point (°C):	-
Boiling point or initial boiling point and boiling range (°C):	-
Flammability:	-
Lower and upper explosion limit (vol-%):	-
Flash point (°C):	-
Auto-ignition temperature (°C):	-
Decomposition temperature (°C):	-
pH:	< 1 (~ 1,5 @ 3%)
Kinematic viscosity (mm2/s):	< 50 mPa.s
Solubility:	Soluble in water
Partition coefficient n-octanol/water (log value)	-
Vapour pressure:	-
Density and/or relative density:	~ 1,10 g/cm³
Relative vapour density:	-
Particle characteristics:	-

9.2. Other information

VOC (Volatile organic compounds):	41 g/L

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability
The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
Avoid contact with strong bases.
Avoid contact with strong oxidising agents.
Avoid contact with strong reducing agents.
Avoid contact with strong acids.

10.6. Hazardous decomposition products
Thermal decomposition may produce corrosive fumes.

SECTION 11: Toxicological information

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

Acute toxicity:
Based on the existing data, the classification is not met.

Substance	exposure	Species	Test	Result
Sulphamic acid	Oral	Rat	LD50	2065 mg/kg bw
Sulphamic acid	Dermal	Rat	LD50	> 2000 mg/kg bw
Formic Acid	Oral	Rat	LD50	730 mg/kg bw
Formic Acid	Inhalation	Rat	LC50/ 4 Hours	7,85 mg/L air
Sulphuric acid	Inhalation	Rat	LC50/ 4 Hours	375 mg/m³ air

Skin corrosion/irritation:
Has a corrosive effect and causes burning pain, reddening, blisters and burns.
May cause burns to mouth, gullet and stomach. Pains in mouth, throat and stomach. Difficulty in swallowing, indisposition and bloody vomit. Brown spots and burns may appear in and around the mouth.

Serious eye damage/irritation:
May cause severe burns, pain, tearing and cramp of the eyelids. Risk of serious damage to eyes and loss of vision.

Respiratory or skin sensitisation:
Based on the existing data, the classification is not met.

Germ cell mutagenicity:
Based on the existing data, the classification is not met.

Carcinogenicity:
Based on the existing data, the classification is not met.

Reproductive toxicity:
Based on the existing data, the classification is not met.

STOT-single exposure:
The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication.

STOT-repeated exposure:
Prolonged or repeated inhalation of vapours may cause damage to the central nervous system.

Aspiration hazard:
Based on the existing data, the classification is not met.

11.2. Information on other hazards
Test data are not available.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Test duration	Species	Test	Result
Sulphamic acid	96 Hours	Fish	LC50	70,3 mg/L
Sulphamic acid	48 Hours	Daphnia	EC50	71,6 mg/L
Sulphamic acid	72 Hours	Algae	EC50	48 mg/L
Formic Acid	96 Hours	Fish	LC50	130 mg/L
Formic Acid	48 Hours	Daphnia	EC50	365 mg/L
Formic Acid	72 Hours	Algae	EC50	1240 mg/L
Sulphuric acid	96 Hours	Fish	LC50	> 16 - < 28 mg/L
Sulphuric acid	48 Hours	Daphnia	EC50	> 100 mg/L
Sulphuric acid	72 Hours	Algae	EC50	> 100 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Formic Acid	Yes	OECD Guideline 301 D	28 Days 92%

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow
Sulphamic acid	No	-4,34
Formic Acid	No	-2,1

12.4. Mobility in soil
Test data are not available.

12.5. Results of PBT and vPvB assessment
The product does not meet the criteria for PBT or vPvB.

12.6. Endocrine disrupting properties
Test data are not available.

12.7. Other adverse effects
May affect acidity in the aquatic environment, potentially causing harmful effects to aquatic organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
The product is covered by the regulations on dangerous waste.
Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

EWC-Code	Description
20 01 29	Detergents containing hazardous substances

Specific labelling:
-

Contaminated packaging:
Empty packaging and residues must be disposed of through the municipal waste collection service for hazardous waste.

SECTION 14: Transport information

The product is covered by the rules for transport of dangerous goods.

14.1 -14.4.
ADR

14.1. UN number or ID number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Sulphamic acid, Sulphuric acid)	8	III

IMDG/IATA

14.1. UN number or ID number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Sulphamic acid, Sulphuric acid)	8	III

14.5. Environmental hazards
-

14.6. Special precautions for user
-

14.7. Maritime transport in bulk according to IMO instruments
Not relevant.

SECTION 15: Regulatory information

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

Sources:
Commission Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, EU 2017/164 and EU 2019/1831 (the first, second, third, fourth and fifth IOELV Directives).

Additional labelling:
INGEN DATA
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Declaration in accordance to the EU regulation no. 648/2004:
Less than 5%:
Amphoteric surfactants
Non-ionic surfactants

Restrictions for application:
Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. Young people above 15 years are exempted this rule, if the product is a part of an education/training.
Special care should be applied for pregnant and lactating women.

Demands for specific education:
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15.2. Chemical safety assessment
None.

SECTION 16: Other information

According to EU regulation 1907/2006 (REACH)

Other information:
Sources:
EC regulation 1907/2006 (REACH), with amendments.
EC Regulation 1272/2008 (CLP), with amendments.
Directive 2008/98/EC
ECHA - The European Chemicals Agency

Material Safety Data Sheet

Full text of H-phrases as mentioned in section 2+3:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H412	Harmful to aquatic life with long lasting effects.
EUH 071	Corrosive to the respiratory tract.

Classification according to Regulation (EC) Nr. 1272/2008:

Skin Corr. 1;H314	On basis of test data
Eye Dam. 1;H318	Calculation method

Abbreviations and acronyms used in the safety data sheet:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. Regulation (EC) No 1907/2006.
CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.
CAS-Number.: Chemical Abstracts Service number.
EC-Number.: EINECS and ELINCS Number (see also EINECS and ELINCS).
DNEL: Derived No Effect Level.
PNEC(s): Predicted No Effect Concentration(s).
STOT: Specific Target Organ Toxicity.
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
LC50: Lethal Concentration to 50 % of a test population.
EC50: The effective concentration of substance that causes 50% of the maximum response.
PBT: Persistent, Bioaccumulative and Toxic.
vPvB: Very Persistent and Very Bioaccumulative.
NOEC: The highest tested concentration at which, in a study, no statistically significant effect is observed in the exposed population compared with an appropriate control group.
NOAEL: The highest tested dose or exposure level at which there are no statistically significant increases in the frequency or severity of adverse effects between the exposed population and an appropriate control group; some effects may be produced at this level, but they are not considered adverse or precursors of adverse effects.

Other:

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

Minor changes have been made in following sections:

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This material safety data sheet replaces version:

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