MATERIAL SAFETY DATA SHEET
CHROMOCLEAN

Update date: 05/08/2024

[Prepared in accordance with Regulation (EC) No 1907/2006(REACH) and EU 2015/830]

Section 1: Identification of the substance/mixture and of the company.

1.1. Product ID.

CHROMOCLEAN

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

Identified uses: Detergent, a product for the care of bathroom fittings and ceramics. Recommended for cleaning PVD coatings and chrome surfaces.

Uses advised against: all except those mentioned above.

1.3. Card provider details characteristics .

Produced by owner of the IGOCHEM™ trademark IGOSA Sp. z o. o.,

Address: Gliwicka 3, 40-079 Katowice, Poland

Phone: +48 (32) 131 48 93

E-mail: info@igochem.com

1.4 . Emergency telephone number.

112 (general emergency number), 998 (fire brigade), 999 (medical emergency)

Section 2: Hazard Identification.

2.1. Classification of the substance or mixture.

Skin Irrit. 2H315, Eye Dam. 1 H318 .

Irritates skin. Causes serious eye damage.

2.2. Signage elements.

EUH210 Safety data sheet available upon request.

EUH208 Contains: 2-bromo-2-nitropropane-1,3-diol, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Pictograms indicating the type of hazard and signal word

DANGER

Precautionary statements

P102 Keep out of reach of children.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. This product contains a mixture of surfactants and excipients: anionic surfactants

less than 5%, fragrances, preservatives

2.3. Other threats.

Based on the available data, it is concluded that the mixture does not meet the PBT or vPvB criteria and does not contain any substances with endocrine disrupting properties.

Section 3: Composition/information on ingredients.

3.1. Mixtures.

The product is a mixture of the substances listed below and others which, in accordance with European Union law and national requirements, do not require listing in this section of the safety data sheet.

	Citric acid monohydrate	Sulfonic acids, C14-17-secalkane, sodium salts*	Reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)*
Content %(m/m):	Max 1.6	Max 1.1	<0.0015
Classification (Regulation No. 1272/2008)	Eye Irrit. 2, H319 STOT SE 3, H335	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318 Aquatic Chronic 3, H412	Acute Tox. 3, H301 Acute Tox. 2, H330 Acute Tox. 2, H310 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400(M factor 100) Aquatic Chronic 1, H410(M factor 100) EUH071
Name and registration number:	01-2119457026-42-xxxx	01-2119489924-20-xxxx	Excluded from the regulation REACH
EC No.:	201-069-1	307-055-2	No data available
CAS No.:	5949-29-1	97489-15-1	55965-84-9
Index number	607-750-00-3	No data available	613-167-00-5
INCI name:	Citric Acid	No data available	No data available
Other ways of identification:	No data available	No data available	No data available
Product definition:	No data available	No data available	No data available

*Critical concentration limits and estimated acute toxicity were determined:

- Sulfonic acids, C14-17-sec-alkane, sodium salts

Skin Irrit. 2; H315: C ≥ 10%
Eye Dam. 1, H318 C ≥ 15%
Eye Irrit. 2; H319: 10% ≤ C < 15%

- Reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Skin Sens. 1A; H317 C ≥ 0.0015%
Eye Irrit. 2; H319: 0.06% ≤ C < 0.6%

Skin Irrit. 2; H315: 0.06% ≤ C < 0.6%
Skin Corr. 1C; H314: C ≥ 0.6%
Eye Dam. 1, H318 C ≥ 0.6%
Acute toxicity estimate: Acute inhalation toxicity (dust/mist):
0.31 mg/l. The meaning of H phrases is given in section 16 of the safety data sheet.

Section 4: First aid measures.

4.1. Description of first aid measures.

Inhalation: Under normal conditions of storage and use, this product poses no hazard. If you feel unwell, remove the person to fresh air and keep them at rest in a position comfortable for breathing. If symptoms persist, consult a physician.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. If symptoms occur, seek medical advice. Wash clothing before reuse.

Eye contact: Rinse immediately with plenty of water, occasionally lifting the upper or lower eyelid. Remove contact lenses, if present. Continue rinsing for at least 15 minutes. Seek medical attention immediately.

Consumption: Rinse mouth with water. Remove the affected person to fresh air and keep them at rest in a position comfortable for breathing. If the material has been swallowed and the exposed person is conscious, give them plenty of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If symptoms occur, seek medical attention.

Protection of first aid providers: You should not take any action that would pose any risk to anyone unless you are appropriately trained.

4.2. Most important acute and delayed symptoms and effects of exposure.

Inhalation: No data available.
Skin contact: No data available.
Eye contact: No data available.
Consumption: No data available.

4.3. Indications for any immediate medical attention and special treatment of the injured person.

The decision on emergency procedures is made by the physician after a thorough assessment of the injured person's condition. Treatment is symptomatic.

Section 5: Firefighting measures.

5.1. Fire extinguishing agents.

Suitable extinguishing media: Fire extinguishing foam, extinguishing powder, CO2, water spray. Adjust the extinguishing agent to the materials present in the surrounding area.
Inappropriate extinguishing media: a dense stream of water – danger of fire spreading.

5.2. Special hazards arising from the substance or mixture.

Combustion may produce harmful gases, including carbon oxides, nitrogen oxides, sulfur oxides, and other unidentified pyrolysis products. Avoid inhaling combustion products, as they may pose a health hazard.

5.3. Information for fire brigades.

General protective measures typical in the event of a fire. Do not enter a fire-endangered area without appropriate chemical-resistant clothing and self-contained breathing apparatus. Cool fire-endangered containers from a safe distance with a water spray. Collect used extinguishing media.

Section 6: Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Restrict access by unauthorized persons to the affected area until appropriate cleanup operations are completed. Ensure that only trained personnel remove the affected area and its effects.

In case of large spills, isolate the affected area. Avoid contact with skin and eyes. Wear personal protective equipment. Ensure adequate ventilation. Do not inhale vapors. Do not walk on spilled product – risk of slipping.

6.2. Safety precautions environments .

If large quantities of the product are released, take steps to prevent it from spreading into the environment. Secure sewer outlets, water systems, and entrances to basements and confined spaces. Notify the appropriate emergency services.

6.3.Methods and materials to prevent the spread of contamination and to remove contamination.

Stop the leak, place the damaged packaging in a sealed replacement container. Then, collect the spill using absorbent materials (e.g., sand, earth, universal binders, etc.) and place it in labeled containers. Treat the collected material as waste. Clean the contaminated area with water and ventilate thoroughly.

6.4.References to others section .

Personal protective equipment – see section 8.

For product waste disposal, see section 13.

Section 7: Handling and storage of substances and mixtures.

7.1. Precautions for safe handling.

Follow general health and safety regulations. Do not eat, drink, or smoke while working. Avoid contact with eyes and skin. Use personal protective equipment. Wash hands before breaks and after finishing work. Ensure adequate ventilation. Do not inhale product vapors. Seal the container after opening and store it upright to prevent leakage. Keep unused containers tightly closed. Use as directed.

7.2. Conditions for safe storage, including information on any incompatibilities.

Store only in original, tightly closed containers in a dry, cool, and well-ventilated area. Keep away from food, animal feed, and incompatible materials (see subsection 10.5). Protect from direct sunlight and frost. Do not store in unlabeled containers.

7.3. Specific end use(s) .

No uses other than those mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection.

8.1 Control parameters.

Maximum permissible concentrations:

NDS and NDSCh: no data

(according to the Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018, Journal of Laws of 2018, item 1286, as amended) Recommendations regarding the procedure for monitoring the content of hazardous components in the air:

Regulation of the Minister of Health of 2 February 2011 on tests and measurements of factors harmful to health in the work environment (Journal of Laws 2011, No. 33, item 166)

PN-89/Z-01001/06 Air purity protection. Names, terms, and units. Terminology for air quality testing at workplaces.

PN Z-04008-7:2002 Air purity protection. Sampling. Principles of air sampling in the workplace and interpretation of results.

PN-EN-689: 2002 Air at workplaces – guidelines for the assessment of inhalation exposure to chemical agents by comparison with limit values and measurement strategy.

Attention: Once the substance concentration is determined and known, personal protective equipment (PPE) should be selected taking into account the substance concentration present at the workplace, the exposure time, and the employee's activities. In an emergency, if the substance concentration at the workplace is unknown, PPE of the highest recommended protection class should be used.

The employer is obligated to ensure that appropriate personal protective equipment, clothing, and footwear have protective and functional properties, and to ensure their proper washing, maintenance, repair, and disinfection. Recommended initial and periodic employee examinations must be conducted in accordance with the Regulation of the Minister of Health and Social Welfare of 30 May 1996 on the conduct of medical examinations of employees, the scope of preventive healthcare for employees, and medical certificates issued for the purposes specified in the Labor Code (Journal of Laws No. 69/1996, item 332, as amended by Journal of Laws No. 37/2001, item 451).

Secondary impact levels:

No data available

Levels at which impacts are expected:
No data available

Recommended monitoring procedures:
If the product contains ingredients to which exposure is limited, personal monitoring, occupational environment monitoring, or biological monitoring may be necessary to determine the effectiveness of ventilation or other means of determining the need for respiratory protection. Refer to European Standard EN 689 for methods for determining inhalation exposure to chemicals and to national documentation providing guidance on methods for determining hazardous substances.

8.2. Exposure control.

Individual protective measures, such as personal protective equipment:

Eye or face protection: Eye protection complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection:

Hand protection: Chemical-resistant gloves should be worn whenever handling chemical products when a risk assessment indicates this is necessary. Wear appropriate gloves in accordance with EN374.
Other protective equipment: Depending on the task being performed, protective clothing appropriate to the potential risks should be worn and approved by a competent person before commencing work. Before working with this product, select appropriate footwear and additional skin protection based on the risk involved in the task being performed.
Respiratory protection: A properly fitted, air-purifying or air-fed respirator complying with an approved standard should be worn when a risk assessment indicates this is necessary. Respirator selection should be based on the known or expected exposure level, the hazards of the product, and the operating hazard limits of the selected respirator.
Technical protective measures: Where the user generates dust, gas, fumes or mist, process barriers, local fume extraction or other engineering controls should be used to keep exposure levels below recommended statutory limits.

General recommendations: Wash hands, forearms, and face thoroughly after handling chemicals, before eating, smoking, or using the toilet, and at the end of the workday. Proper techniques should be used to remove potentially contaminated clothing. Contaminated clothing should be laundered before reuse. Ensure that eyewash stations and safety showers are located near the work area.

Environmental exposure control:

Emissions from ventilation systems and process equipment should be monitored to ensure compliance with environmental regulations. In some cases, fume scrubbers, filters, or design modifications to process equipment may be necessary to reduce emissions to acceptable levels.

Section 9: Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

State of matter:	Liquid
Color:	Yellow
Smell:	Characteristic of the fragrance composition
Melting/freezing point (°C):	No data available
Initial boiling point and boiling range (°C):	No data available
Flammability of materials:	No data available
Lower and upper explosive limits:	Not applicable
Flash point (°C):	No data available
Autoignition temperature (°C):	No data available

Decomposition temperature:	No data available
pH (23°C):	approx. 3.5
Kinematic viscosity:	No data available
Solubility in water:	Unlimited
Solubility in other solvents:	No data available
Partition coefficient – n-octanol / water:	No data available
Vapor pressure:	No data available
Relative density (g/cm3, 23°C):	approx. 1.01
Relative vapor density:	No data available
Particle characteristics	Not applicable

9.2. Other information.

No additional test results.

Section 10: Stability and reactivity.

10.1. Reactivity.

Reactive product. Does not undergo hazardous polymerization. See also subsections 10.4-10.5.

10.2. Stability chemical .

When used and stored properly, the product is stable.

10.3. Possibility of occurrence of dangerous reaction . No dangerous reactions known.

10.4.Conditions to be met to avoid .

Avoid direct sunlight and heat sources.

10.5.Materials incompatible .

Strong oxidizing agents.

10.6.Hazardous decomposition products.

Under recommended storage and operating conditions, there are no hazardous decomposition products.

Section 11: Toxicological information.

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

Mixtures:

	Citric acid (CAS: 5949-29-1, EC: 201-069-1)	Sulfonic acids, C14-17sec-alkane, sodium salts CAS: 97489-15-1 EC: 307-055-2	Reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: (55965-84-9)
Acute toxicity			
- alimentary tract:	LD_{50}– (mouse) 5400 mg/kg	LD_{50}(rat) >500-2000 mg/kg	No data available
- respiratory tract:	No data available	No data available	LC_{50}(Rat): > 0.31 mg/l Exposure time: 4h Test atmosphere: dust/mist
- acute toxicity after skin application:	LD_{50}– (rat) > 2000 mg/kg	LD_{50}(mouse) > 2000 mg/kg	No data available
Skin corrosion/irritation:	Based on available data, the classification criteria were not met.	Causes skin irritation.	Causes burns
Serious eye damage/eye irritation:	Irritating to eyes	Causes serious eye damage	Causes serious eye damage.
Respiratory and skin sensitisation:	Based on the available data, the classification criteria for the mixture are not met.		
Mutagenic effect on germ cells:	Based on the available data, the classification criteria for the mixture are not met.		
Carcinogenic effect:	Based on the available data, the classification criteria for the mixture are not met.		
Reproductive toxicity:	Based on the available data, the classification criteria for the mixture are not met.		
Specific target organ toxicity – single exposure:	Based on the available data, the classification criteria for the mixture are not met.		
Specific target organ toxicity – repeated exposure:	Based on the available data, the classification criteria for the mixture are not met.		
Aspiration hazard:	Based on the available data, the classification criteria for the mixture are not met.		

Section 12: Ecological information.

12.1. Toxicity .

Based on available data, the product has not been classified as harmful to aquatic organisms.

Toxicity of the mixture.

The product is not classified as hazardous to the environment.

12.2. Durability and ability todecomposition.

Name of the substance	Test	Result
Sulfonic acids, C14-17-secalkane, sodium salts CAS: 97489-15-1 EC: 307-055-2		This surfactant meets the biodegradability criteria laid down in Regulation (EC) No 648/2004 on detergents.

12.3. Bio accumulative potential.

Bioaccumulation is not expected.

12.4. Mobility insoil .

The product is mobile in soil. It dissolves in water and spreads throughout the aquatic environment. The mobility of the mixture's components depends on their hydrophilic and hydrophobic properties, as well as the abiotic and biotic conditions of the soil, including its structure, climatic conditions, season, and soil organisms.

12.5. Results of the PBT andvPvB .

The substances contained in the mixture are not assessed as PBT and vPvB.

12.6. Other harmful effects actions .

The mixture is not classified as hazardous to the ozone layer. The potential for other harmful effects of individual components of the mixture on the environment should be considered (e.g., potential for endocrine disruption, contribution to global warming).

Section 13: Waste management.

13.1. Waste disposal methods.

Act of 14 December 2012 on waste (Journal of Laws of 2013, item 21) as amended.

Information on likely routes of exposure:

Inhalation: No data available.
Consumption: No data available.
Skin contact: No data available.
Eye contact: No data available.
Symptoms related to physical, chemical and toxicological properties:
Inhalation: No data available.
Consumption: No data available
Skin contact: No data available.
Eye contact: No data available.
Delayed, immediate and chronic effects from short and long-term exposure:
No data available.
Effects of interaction:
No data available.

Section 14: Shipping Information.

14.1. UN number (UN number).

Not applicable. The product is not classified as hazardous during transport.

14.2. Proper shipping name UN .

Not applicable.

14.3. Hazard class(es) in transport .

Not applicable.

14.4. Packing group.

Not applicable.

14.5. Threats to environment .

Not applicable.

14.6. Special precautions for users.

Not applicable.

14.7.Transport in bulk in accordance with Annex II to MARPOL and the IBC Code.

Not applicable.

Section 15: Regulatory Information.

15.1. Safety, health and environmental regulations specific to the substance or mixture.

Act of 25 February 2011 on chemical substances and their mixtures (Journal of Laws of 2011, No. 63, item 322, as amended) amended).

Regulation of the Minister of Labour and Social Policy of 12 June 2018 on the highest permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286).

Waste Act of 14 December 2012 (Journal of Laws of 2013, item 21 as amended).

Act of 13 June 2013 on the management of packaging and packaging waste (Journal of Laws of 2013, item 888 as amended).

Regulation of the Minister of the Environment of 9 December 2014 on the waste catalogue (Journal of Laws of 2014, item 1923).

Regulation of the Minister of Health of 2 February 2011 on tests and measurements of factors harmful to health in the work environment (Journal of Laws of 2011, No. 33, item 166, as amended).

European Agreement on the International Carriage of Dangerous Goods by Road (ADR).

1907/2006/EC Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended.

1272/2008/EC Regulation of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, as amended.

2015/830/EU Commission Regulation of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

2008/98/EC Directive of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, as amended

94/62/EC Directive of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste, as amended
2016/425/EU Regulation of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.
648/2004/EC Regulation of the European Parliament and of the Council of 31 March 2004 on detergents, as amended.

15.2. Chemical safety assessment.

A chemical safety assessment for the mixture is not required.

Section 16: Other information.

Full text of H phrases from section 3 of the card

H225	Highly flammable liquid and vapor
H290	May cause corrosion of metals.
H301	Toxic if swallowed.
H310	May be fatal on contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Irritates the skin.
H317	May cause allergic skin reaction.
H318	Causes serious eye damage.
H319	Irritating to eyes.
H330	Inhalation may result in death.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic organisms.
H410	Very toxic to aquatic life with long lasting effects. EUH066 Repeated exposure may cause skin dryness or cracking.
EUH071	It is corrosive to the respiratory tract.

Explanation of abbreviations and acronyms

Acute Tox. 2	Acute toxicity category 2
Acute Tox. 3	Acute toxicity category 3
Aquatic Acute 1	Posing an acute hazard to the aquatic environment, category 1
Aquatic Chronic 1	Posing a chronic hazard to the aquatic environment, category 1
Eye Dam. 1	Serious eye damage category 1
Eye Irrit. 2	Eye irritation category 2
Flam. Liq. 2	Flammable liquid substance category 2
Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Skin Corr. 1A	Corrosive action category 1A
Skin Corr. 1B	Corrosive action category 1B
Skin Corr. 1C	Corrosive action category 1C
Skin Irrit. 2	Skin irritation category 2
Skin Sens. 1A	Skin sensitization category 1A
STOT SE 3	Specific target organ toxicity – single exposure category 3
NDS	Highest Allowable Concentration
NDSCh	Maximum Allowable Momentary Concentration
NDSP	Highest Permissible Ceiling Concentration
DSB	Permissible Concentration in Biological Material
PBT	Persistent, bio accumulative and toxic substance
vPvB	Very persistent and highly bio accumulative substances
DNEL	Derived no-change level
PNEC	Predicted No Effect Concentration

NOEC	The highest concentration of a toxic substance at which no adverse effects are observed. the effect of its action.

Training

Before starting to work with the product, the user should familiarize himself with the health and safety regulations regarding handling chemicals, and in particular, undergo appropriate on-the-job training.

References to key literature and data sources

The data sheet was prepared on the basis of component data sheets provided by the manufacturer, literature data, online databases and existing knowledge and experience, taking into account the currently applicable legal regulations.

Classification and procedures used to classify the mixture in accordance with Regulation (EC) No 1888/20031272/2008 [CLP] as amended

Skin Irrit. 2 H315	calculation method
Eye Dam. 1 H318	calculation method

Additional information

This Charter was developed based on data provided by the manufacturers of the product's ingredients, national regulations in force at the time of its preparation, and our knowledge. The information contained in this Charter should be considered solely as an aid to safe use, as well as to procedures during transport, distribution, and storage. The Charter is not a certificate of product quality. The information contained in this Charter applies only to the specified product and cannot be transferred to similar products.