

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: ESBACH'S REAGENT

CAS#: -

Synonym: Not Available.

Chemical Name: Esbach's Reagent

Chemical Formula: Not Available

Composition and Information on Ingredients

Name	Contents	S.K.U	EC No	Annex No	REACH Ref.	Classification
ESBACH'S REAGENT		GCS-4825				100
2,4,6-trinitrophenol; picric acid	> 1 <5 %	88-89-1	201-865-9	609-009-00-X	----	Not classified (DSD/DPD) ----- --- Not classified (GHS)
Citric acid	> 1 <5 %	77-92-9	201-069-1	-----	-----	Xi; R36 ----- --- Eye irrit 2 H319
Water	> 75 < 99 %	7732-18-5	231-791-2	-----	-----	Not classified (DSD/DPD) ----- --- Not classified (GHS)

Hazards Identification

Classification of the substance or mixture Classification EC 67/548 or EC 1999/45
Classification: Not classified.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Not classified.

Label elements
Labelling EC 67/548 or EC 1999/45
Not classified.

R Phrase(s): None.

S Phrase(s): None.

Contains: Water - SODIUM NITRATE EXTRA PURE 99%
Labelling Regulation EC 1272/2008 (CLP): Not classified.
Contains: Water - SODIUM NITRATE EXTRA PURE 99%
Other hazards:
The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

First Aid Measures

Description of first aid measures

Inhalation: Assure fresh air breathing. Allow the victim to rest.

Skin contact:

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact:

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Ingestion:

Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms relating to use: Not expected to present a significant hazard under anticipated conditions of normal use.

Indication of any immediate medical attention and special treatment needed

General information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Fire and Explosion Data

Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

Surrounding fires: Use water spray or fog for cooling exposed containers.

Special hazards arising from the substance or mixture

Hazardous combustion products: Under fire conditions, hazardous fumes will be present

Advice for fire-fighters

Protection against fire: Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For emergency responders: Equip cleanup crew with proper protection. Ventilate area.
For non-emergency personnel: Evacuate unnecessary personnel.

Environmental precautions:

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Methods and material for containment and cleaning up

Clean up methods: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Handling and Storage

Precautions for safe handling

Handling: Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.
Wash thoroughly after handling.

Technical protective measures: Provide good ventilation in process area to prevent formation of vapour.

Special precautions: Avoid breathing dust, fume, gas, mist, vapours, and spray

Conditions for safe storage, including any incompatibilities

Storage: Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

Storage - away from: Strong bases. Strong acids. Sources of ignition. Direct sunlight.

Exposure Controls/Personal Protection

Exposure controls Personal protection

Personal protection: Avoid all unnecessary exposure.

Respiratory protection: Wear approved mask.

Hand protection: Wear protective gloves.

Skin protection: Wear suitable protective clothing.

Eye protection: Chemical goggles or face shield.

Others: When using, do not eat, drink or smoke.

Control parameters

Occupational Exposure Limits: No data available

Physical and Chemical Properties

Physical state at 20 °C	: Liquid.
Colour	: Colorless
Odour	: Characteristic.
Odour threshold	: No data available.
Molecular Weight	: Not Available.

pH value	: No data available.
Melting point [°C]	: No data available.
Decomposition point [°C]	: Not Available.
Critical temperature [°C]	: No data available.
Auto-ignition temperature [°C]	: No data available.
Flammability (solid, gas)	: Not Available.
Flash point [°C]	: No data available.
Boiling point [°C]	: Not Available.
Initial boiling point [°C]	: No data available.
Final boiling point [°C]	: No data available.
Evaporation rate	: Not Available.
Vapour pressure [20°C]	: No data available.
Vapour pressure mm/Hg	: Not Available.
Vapour density	: Not Available.
Density [g/cm ³]	: Not Available.
Relative density, gas (air=1)	: Not Available.
Relative density, liquid (water=1)	: Not Available.
Solubility in water [% weight]	: Not Available.
Solubility in water	: No data available.
Log Pow octanol / water at 20°C	: No data available.
Solubility	: Not Available.
Viscosity at 40°C [mm ² /s]	: No data available

Stability and Reactivity Data

Reactivity: Not established.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Not established.

Conditions to avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible materials: Strong acids. Strong bases.

Hazardous decomposition products:

Fumes. Carbon monoxide. Carbon dioxide.

Toxicological Information

Information on toxicological effects

Toxicity information: The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

Acute toxicity

Inhalation: Based on available data, the classification criteria are not met.

Dermal: Based on available data, the classification criteria are not met. Ingestion: Based on available data, the classification criteria are not met. Corrosion: Causes severe skin burns and eye damage.

Irritation: May cause respiratory irritation.

Sensitization: Based on available data, the classification criteria are not met. Mutagenicity:

Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met.

Toxic for reproduction: 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: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste treatment methods

General: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

Transformation Information

Land transport (ADR-RID)

General information: Not regulated.

Sea transport (IMDG) [English only]

General information: Not regulated.

Air transport (ICAO-IATA) [English only]

General information: Not regulated.

Other Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture Safety, health and environmental regulations/legislation specific for the substance or mixture: Ensure all national/local regulations are observed.

REACH Restrictions - Annex XVII: The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV: The components of this product are not subject to authorization.

Chemical Safety Assessment

Chemical Safety Assessment: It has not been carried out.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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