

# SAFETY DATA SHEET

## FERROUS SULFATE HEPTAHYDRATE

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

SECTION 1: Identification of the	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	FERROUS SULFATE HEPTAHYDRATE
Chemical name	Ferrous sulfate heptahydrate
Product number	6168
CAS number	7782-63-0
1.2. Relevant identified uses of the substance or mixture and uses advised against	
Uses advised against	No specific uses advised against are identified.
1.3. Details of the supplier of the	safety data sheet
Supplier	LAPİSCHEM KİMYA SAN. ve TİC. A.Ş. Yeni Mh. Aliağa Sk.Bumerang Kartal No:8 K:2 D: 4 Pk: 34880 Kartal- İstanbul - Türkiye + 90 216 599 07 53 + 90 216 599 07 54 info@lapischem.com www.lapischem.com
1.4. Emergency telephone number	er
National emergency telephone number	Health Service : 112 Email: director.birmingham.unit@npis.org
SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture Classification (SI 2019 No. 720)	

Classification (SI 2019 No. 720)	
Physical hazards	Not Classified
Health hazards	Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards	Not Classified

Classification (Regulation (EC) No. 1272/2008 CLP).

2.2. Label elements

Hazard pictograms



Signal word

Warning

Hazard statements

H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.



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Precautionary statements	<ul> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P270 Do not eat, drink or smoke when using this product.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</li> <li>P302+P352 IF ON SKIN: Wash with plenty of water.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P501 Dispose of contents/ container in accordance with national regulations.</li> </ul>
Contains	iron (II) sulfate (1:1) heptahydrate

#### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

3.2. Mixtures		
iron (II) sulfate (1:1) heptahydrate		90-100%
CAS number: 7782-63-0	EC number: 231-753-5	
Classification		
Acute Tox. 4 - H302		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures			
4.1. Description of first aid me	4.1. Description of first aid measures		
General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.		
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.		
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.		
Skin contact	Brush off loose particles from skin. Rinse with water.		
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.		
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.		
4.2. Most important symptoms and effects, both acute and delayed			
General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will		

vary dependent on the concentration and the length of exposure.



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

Inhalation	Dust may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.	
Ingestion	May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.	
Skin contact	Redness. Irritating to skin.	
Eye contact	Irritating to eyes.	
4.3. Indication of any immediate m	4.3. Indication of any immediate medical attention and special treatment needed	
Notes for the doctor	Treat symptomatically.	
SECTION 5: Firefighting measure	s	
5.1. Extinguishing media		
Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.	
5.2. Special hazards arising from	the substance or mixture	
Specific hazards	This product is toxic.	
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.	
5.3. Advice for firefighters		
Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.	
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.	
SECTION 6: Accidental release measures		
6.1. Personal precautions, protect	ive equipment and emergency procedures	
Personal precautions	No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material.	
6.2. Environmental precautions		

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Approach the spillage from upwind. Avoid generation and spreading of dust. Small Spillages: Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Large Spillages: Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Neutralise with alkali. Caution. May generate heat. Following dilution and neutralisation, discharge to the sewer with plenty of water may be permitted. The requirements of the local water authority must be complied with if contaminated water is flushed directly to the sewer. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
6.4. Reference to other sections	
Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. Avoid handling which leads to dust formation. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.
7.2. Conditions for safe storage, in	cluding any incompatibilities
Storage precautions	Store in accordance with local regulations. Store away from the following materials: Alkalis. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.
Storage class	Toxic storage.
7.3. Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
SECTION 8: Exposure controls/Pe	rsonal protection
8.1. Control parameters	

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Occupational exposure limits

There is no current information on occupational exposure limit values of the product and its components.



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

8.2. Exposure controls



Appropriate engineering controls	Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection should be worn. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> . Wear a suitable dust mask. Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges suitable for intended use should be used. Full face mask respirators with replaceable filter cartridges suitable for intended use should be used. Half mask and quarter mask respirators with replaceable filter cartridges suitable for intended use should be used.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



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SECTION 9: Physical and chemical properties	
9.1. Information on basic physical	and chemical properties
Appearance	Solid.
Colour	Blue-green. On exposure to air: yellow-brown
Odour	No characteristic odour.
Odour threshold	Inconclusive data.
рН	pH (diluted solution): 3-4 (%5)
Melting point	>60°C
Initial boiling point and range	No specific test data are available.
Flash point	No information available.
Evaporation rate	No information required.
Evaporation factor	Inconclusive data.
Flammability (solid, gas)	Not relevant.
Upper/lower flammability or explosive limits	Not relevant.
Relative density	~ 1,90 g/cm3
Solubility(ies)	Slightly soluble in water.
Viscosity	No information required.
Explosive properties	No specific test data are available.
9.2. Other information	
Other information	No information required.
SECTION 10: Stability and reactiv	ity
10.1. Reactivity	
Reactivity	There are no known reactivity hazards associated with this product.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
10.3. Possibility of hazardous read	tions
Possibility of hazardous reactions	No potentially hazardous reactions known.
10.4. Conditions to avoid	
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
10.5. Incompatible materials	
Materials to avoid	Alkalis. Amines.
10.6. Hazardous decomposition pl	roducts
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.
SECTION 11: Toxicological inform	ation



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

#### 11.1. Information on toxicological effects

Information on hazard classes as defined in Regulation (EC) No 1272/2008	
Acute toxicity - oral	
Notes (oral LD₅₀)	Acute Tox. 4 - H302 Harmful if swallowed.
ATE oral (mg/kg)	502.51
Acute toxicity - dermal	
Notes (dermal LD₅o)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC <sub>50</sub> )	Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Irritating.
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxicity - sing	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<b>U</b> .	
Specific target organ toxicity - repo STOT - repeated exposure	eated exposure Not classified as a specific target organ toxicant after repeated exposure.
	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
Aspiration hazard	Not relevant. Solid.
General information	Dust may irritate the eyes and the respiratory system. The severity of the symptoms described will vary
	dependent on the concentration and the length of exposure.
Inhalation	Dust may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Ingestion	May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.
Skin contact	Redness. Irritating to skin.
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According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

Eye contact	Irritating to eyes.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
11.2 Information on other hazards	
Information on other hazards	No information available.
Toxicological information on ingre	dients.
	iron (II) sulfate (1:1) heptahydrate
Acute toxicity - oral	
ATE oral (mg/kg)	500.0
SECTION 12: Ecological informati	ion
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
12.1. Toxicity	
Toxicity	Based on available data the classification criteria are not met.
12.2. Persistence and degradability	ty
Persistence and degradability	The degradability of the product is not known.
12.3. Bioaccumulative potential	
Bioaccumulative potential	No data available on bioaccumulation.
12.4. Mobility in soil	
Mobility	No data available.
12.5. Results of PBT and vPvB as	esessment
Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current UK criteria.
12.6 Endocrine disrupting properties	
Endocrine disrupting properties	This product does not have endocrine disrupting properties.
12.6. Other adverse effects	
Other adverse effects	None known.
SECTION 13: Disposal consideration	tions
13.1. Waste treatment methods	
General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.
SECTION 14: Transport information	n
General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
14.1. UN number	
UN number or ID number	
Not applicable.	
14.2. UN proper shipping name	
Not applicable.	
14.3. Transport hazard class(es)	
No transport warning sign required	ł.
14.4. Packing group	
Not applicable.	
14.5. Environmental hazards	
Environmentally hazardous substa	ance/marine pollutant
14.6. Special precautions for user	
Not applicable.	
14.7. Transport in bulk according	to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
Maritime transport in bulk	

Maritime transport in bulk according to IMO instruments



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#### SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI
	2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### Inventories

#### **EU - EINECS/ELINCS**

None of the ingredients are listed or exempt.

#### SECTION 16: Other information

Classification procedures according to SI 2019 No. 720	Acute Tox. 4 - H302: Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: : Calculation method.
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Issued by	Chemical Assessment Specialist:Bora ŞenEffective Date:November 25, 2025Certificate No & Date:TÜV / 11.49.03 & 2 November 2020Mobil: +90 533 622 57 99Email: bora@vegatmgd.com
Revision date	03/01/2023
Revision	1
Supersedes date	03/01/2023
SDS number	6168
SDS status	Approved.
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.