

Material Safety Data Sheet

Ferromel 20

according to 1907/2006/EC, Article 31

1. IDENTIFICATION OF THE SUBSTANCE

Trade name of the product : FERROMEL-20

Application of the substance / the preparation : Precipitant and flocculant, Municipal sewage treatment, Water treatment, Chromate reduction in cement, Chlorosis control, Fertilizer, Mosskiller

Supplier : Melspring International B.V.
Arnhemsestraatweg 8
Postbus 268
6880 AG VELP
Tel. ++31-(0)26-3842040

Emergency Information : Tel. ++31-(0)26-3842040

2. COMPOSITION/DATA ON DANGEROUS COMPONENTS.

Chemical description : Ferrous Sulphate (FeSO₄.6-7H₂O)
CAS-No . : 7782-63-0
Dangerous components :

<u>CAS-No.</u>	<u>EINECS-Number</u>	<u>Designation</u>	<u>%</u>	<u>Index</u>	<u>R-phrases</u>
7782-63-0	231-753-5	Iron Sulphate	53,0	Xn/Xi	R 22-36/38

HAZARDS IDENTIFICATION

Hazard designation : Xn Harmful
Information pertaining to particular hazards for man and environment : R 22 - Harmful if swallowed
R 36/38 – Irritating to eyes and skin

Classification system : The classification is in line with current EC lists.
It is expanded however by information from technical literature and by information furnished by supplier companies.

3. FIRST AID MEASURES

After inhalation : Supply fresh air; consult doctor in case of symptoms.
After skin contact : Instantly wash with water and soap and rinse thoroughly
After eye contact : Rinse opened eye for several minutes under running water.
Then consult doctor.
After swallowing : Call a doctor immediately. Rinse out mouth and then drink plenty of water.

4. FIRE FIGHTING MEASURES

Suitable extinguishing agents : CO₂, extinguishing powder or water jet.
Fight larger fires with water jet.

Special hazards caused by the material, its products of combustion or resulting vapours: Sulphur dioxide (SO₂)

Protective equipment : Put on breathing apparatus. Wear full protective suit.

5. ACCIDENTAL RELEASE MEASURES.

Person-related safety precautions : Wear protective clothing.
Measures for environmental protection : Inform respective authorities in case product reaches water or sewage system. Do not allow to enter the ground/soil.
Measures for cleaning/collecting waste : Collect mechanically. Dispose of contaminated material as according to item 13. Rinse off scraps with plenty of water.
Additional information : See Section 7 for information on safe handling.
equipment. : See Section 8 for information on personal protection
See Section 13 for information on disposal.

6. HANDLING AND STORAGE

Handling : No special precautions necessary if used correctly.
Prevent formation of dust.
Protection against explosions and fires : The product is not inflammable.
Storage. Requirements to be met by storerooms and containers: Suitable material for containers and pipes: High-grade steel, plastics and rubber-lined steel. Protect from contamination. Protect from heat and direct sunlight.
Information about storage in one common storage facility: Do not store together with alkalis (caustic solutions)

7. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Technical measures : No further data; see item 7
Components with critical values that require monitoring at the workplace: The lists that were valid during the compilation were used as basis.
Personal protective equipment :
General protective and hygienic measures: The usual precautionary measures should be adhered to in handling the chemicals. Avoid contact with the eyes and skin.
Breathing equipment : Use breathing protection with high concentrations. EN 149 FFP2
Protection of hands : Requirements according to EN 420. Check protective gloves prior to each use for their proper condition. Preventive skin protection by use of skin-protecting agents is recommended.
Material of gloves : Polychloroprene Mechanical resistance: Level 1,2,2,2 (EN 388)
Penetration time of glove materials : value for the permeation: level \geq 4 (EN 374) Sulphuric acid
Eye protection : Safety glasses
Body protection : Protective work clothing

8. PHYSICAL AND CHEMICAL PROPERTIES

Form : Crystalline powder
Colour : Light green
Smell : Recognizable

	<u>VALUE/RANGE</u>	<u>UNIT</u>	<u>METHOD</u>
Change in condition			
Melting point/Melting range	: ca. 64	°C	
Boiling point/Boiling range	: Not applicable / not determined		
Flash point	: Not applicable		
Self-inflammability	: Product is not selfigniting		
Danger of explosion	: Product is not explosive		
Density	: 1,9	g/cm3	at 20 °C
Apparent density	: 0,8 - 0,9	kg/l	at 20 °C
Solubility in/Miscibility with water	: 365	g/l	at 10 °C
pH-value	: 2		at 20 °C
Viscosity	: 3	mPas	dynamic at 20 °C
Solvent content	: 0	%	
Solids content	: 100	%	

9. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications. Loss of constitutional water on heating

Dangerous reactions : No dangerous reaction known

Dangerous products of decomposition : No dangerous decomposition products known

10. TOXICOLOGICAL INFORMATION.

Acute Toxicity :
LD/LC50-values that are relevant for classification:

<u>Components</u>	<u>Type</u>	<u>Value</u>	<u>Species</u>
Ferrous Sulphate (7720-78-7)	oral	1480 mg/kg	rat

Primary irritant effect :
 on the skin : moderate skin irritation
 on the eye : irritant effect

Sensitization : No sensitizing effect known

Additional toxicological information: Larger amounts of ferrous sulphate can be resorbed through the intestines and may induce a paralysis similar to magnesium narcosis. Ingestion of toxic amounts of iron sulphate leads to sanguinolent vomiting, hypotonia, hyporeflexia, tarry stool. Gastric strictures may develop.

Material Safety Data Sheet

Ferromel 20

according to 1907/2006/EC, Article 31

11. ECOLOGICAL INFORMATION

AOX-indication : < 2 mg/kg
General notes : Ferrous sulphate hydrolyzes forming iron hydroxide and diluted sulfuric acid. When diluted, both substances are ecologically harmless.
Water hazard class 1 : slightly hazardous to water
Do not allow undiluted product or large quantities of it to penetrate into ground water, water bodies or sewage system. At present there are no ecotoxicological assessments available.

12. DISPOSAL CONSIDERATIONS

Product : European waste catalogue Waste code number according to origin of waste
Uncleaned packagings : Disposal according to official regulations.

13. TRANSPORT INFORMATION

Transport/additional information : Not dangerous according to transport specifications.

14. REGULATORY INFORMATION

Designation according to EC guidelines:

The product has been labelled in accordance with EC Directives / relevant national laws.

Code letter and hazard designation of product : Xn Harmful
Hazard-determining components for labelling : Ferrous sulphate heptahydrate
Risk phrases : R22 Harmful if swallowed.
R 36/38 Irritating to eyes and skin
Safety phrases : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S46 If swallowed, seek medical advice immediately and show packaging or label.
Water hazard class : class 1 : slightly hazardous for water
To observe : Melspring Information leaflet
" Transport, Storage, Metering / Ferrous Sulphate, Ferromel-20."

15. OTHER INFORMATION

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant R-phrases : R22 Harmful if swallowed.
R 36/38 Irritating to eyes and skin