

Safety data sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS



Printing date: 28.08.2017

Revision: 27.06.2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product Identifier	Sulfex: Red, Blue, Yellow, Pyrite, Iron Pyrite, Pyrical, Sulfex 325, Sulfex 06 HQ
	GHS Product Identifier	Sulfex: Red, Blue, Yellow, Pyrite, Iron Pyrite, Pyrical, Sulfex 325, Sulfex 06 HQ
	Chemical Name	Iron Pyrite
	Trade Name	See Product Identifier
	CAS No.	1309-36-0
	EINECS No.	215-167-7
	REACH Registration No.	Not available
1.2	Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against	
	Application of the substance / the mixture	Industrial uses.
1.3	Details Of The Supplier Of The Safety Data Sheet	
	Company Identification	Washington Mills
	Address	1801 Buffalo Avenue Niagara Falls, NY 14302
	Telephone	1-800-828-1666
	E-Mail (Competent Person)	info@washingtonmills.com
1.4	Emergency Telephone Number – ChemTel (800)255-3924 (USA/Canada), 813-248-0585 (International)	

SECTION 2: HAZARDS IDENTIFICATION

2.1	Classification Of The Substance Or Mixture		
2.1.1	Classification according to Regulation (EC) No. 1272/2008		
	The following classifications are applicable only to OSHA (USA) regulations and not the specific CLP regulation: Combustible Dust. May form combustible dust concentrations in air. (USA GHS Only) The substance is not classified as hazardous according to the CLP regulation.		
2.2	Label Elements		
2.2.1	Label Elements According to Regulation (EC) No. 1272/2008 Not regulated		
	Hazard Pictogram(s)	Not Regulated	Signal Word(s) WARNING Applicable only within the United States (USA)
	Hazard-determining components of labelling:		None
	Hazard Statement(s)	The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: Combustible Dust. May form combustible dust concentrations in air. (USA GHS Only)	
	Additional information	EUH032 Contact with acids liberates very toxic gas.	
	Hazard description:		
	NFPA ratings (scale 0 - 4)		Health = 1 Fire = 1 Reactivity = 0
	HMIS-ratings (scale 0 - 4)		Health = 1 Fire = 1 Reactivity = 0
	HMIS Long Term Health Hazard Substances	Substance is not listed.	
2.3	Other Hazards		

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May form explosible dust-air mixture if dispersed.

**Results of PBT
and vPvB
assessment** PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
CAS No. Description
1309-36-0 Pyrite (FeS₂)
Identification number(s)
EC number: 215-167-7

SECTION 4: FIRST AID MEASURES

- 4.1 Description of First Aid Measures**
- General Information:** Take affected persons out into the fresh air. In case of irregular breathing or respiratory arrest provide artificial respiration.
- After Inhalation:** Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing. In case of irregular breathing or respiratory arrest provide artificial respiration.
- After Skin Contact:** Brush off loose particles from skin. Immediately wash with soap and water and rinse thoroughly. If skin irritation is experienced, consult a doctor.
- After Eye Contact:** Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After Swallowing:** Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.
- 4.2 Most Important Symptoms And Effects, Both Acute And Delayed**
- Breathing difficulty, Coughing, Nausea in case of ingestion, Gastric or intestinal disorders when ingested.
- Hazards**
- Danger of impaired breathing.
- 4.3 Indication Of The Immediate Medical Attention And Special Treatment Needed**
- Contains inorganic sulphides. Consult literature for specific antidotes.
Medical supervision for at least 48 hours.
If necessary oxygen respiration treatment.
If blue colouring appears (lips, ear-lobes, finger-nails), give oxygen treatment as quickly as possible.

SECTION 5: FIRE-FIGHTING MEASURES

- 5.1 Extinguishing Media**
- Suitable Extinguishing Media** Use fire extinguishing methods suitable to surrounding conditions.
- Unsuitable Extinguishing Media** None.
- 5.2 Special Hazards Arising From The Substance Or Mixture**
- May form combustible dust concentrations in air.
During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for Fire-Fighters**
- Wear self-contained respiratory protective device. Wear fully protective suit.
- Additional Information** No further relevant information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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6.1 Personal Precautions, Protective Equipment And Emergency Procedures	Ensure adequate ventilation. Avoid formation of dust. Wear protective equipment. Keep unprotected persons away. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
6.2 Environmental Precautions	No special measures required.
6.3 Methods And Material For Containment And Cleaning Up	Pick up mechanically. Dispose contaminated material as waste according to item 13. Send for recovery or disposal in suitable receptacles.
6.4 Reference To Other Sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions For Safe Handling	Prevent formation of dust. Any unavoidable deposit of dust must be regularly removed. Use only in well ventilated areas. Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
Information About Fire – and explosion protection	Dust can combine with air to form an explosive mixture. Keep respiratory protective device available. Keep ignition sources away - Do not smoke.
7.2 Conditions For Safe Storage, Including Any Incompatibilities: Requirements to be Met by Storerooms and Receptacles: Information About Storage in One Common Storage Facility: Further information about storage conditions:	Avoid storage near extreme heat, ignition sources or open flame. Provide ventilation for receptacles. Store away from foodstuffs. Do not store together with oxidising and acidic materials. Protect from humidity and water.
7.3 Specific End Use(s)	Store in cool, dry conditions in well sealed receptacles. Keep container tightly sealed. No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace:

Pyrite (FeS ₂)	1309-36-0	PEL (USA)	Long-term value: 15 (total), 5 (resp.) mg/m ³
		REL (USA)	Long-term value: 1 mg/m ³ as Fe
		TLV (USA)	Long-term value: 1 mg/m ³ as Fe

DNELs No further relevant information available.

PNECs No further relevant information available.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure Controls

8.2.2 Personal Protective Equipment:

General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Immediately remove all soiled and contaminated clothing. Keep away from foodstuffs, beverages and feed. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work.
Respiratory Protection	Suitable respiratory protective device recommended. Use suitable respiratory protective device when high concentrations are present.



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	Eye Protection	Safety glasses.
	Protection of Hands	Wear protective gloves.
	Body Protection	Protective work clothing.
	Limitation and supervision of exposure into the environment	No further relevant information available.
	Risk Management Measures	See Section 7 for additional information. No special requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information On Basic Physical And Chemical Properties		
Appearance	Granulate	Color	Color Varies
Odor	Pungent	Odor Threshold (ppm)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available	Boiling Point/Boiling Range (°C)	Not available
Flash Point (°C)	No Data	Explosive Limit Ranges	Not available
Auto Ignition Temperature (°C)	Not available	Decomposition Temperature (°C)	Not available
Explosive Properties	None	Oxidizing Properties	Not available
Flammability (Solid, Gas)	Not available. May form combustible dust concentrations in air.	Ph (Value)	Not available
Evaporation Rate	N/A	Vapor Pressure (mm Hg)	Not available
Vapor Density (Air=1)	N/A	Density at 20 °C:	4,7 g/cm ³
Solubility (Water)	Insoluble	Solubility (Other)	Not available
Partition Coefficient (N-Octanol/Water)	Not available	Viscosity (mPa.s)	Not available
9.2	Other Information No further relevant information available.		

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	
10.2	Chemical Stability	
	Thermal Decomposition / conditions to be avoided:	May form combustible dust concentrations in air.
10.3	Possibility of Hazardous Reactions	Reacts with water. Contact with acids releases toxic gases. Reacts with acids, alkalis and oxidising agents. As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion. Toxic fumes may be released if heated above the decomposition point.
10.4	Conditions To Avoid	Moisture. Avoid acids. Store away from oxidising agents.
10.5	Incompatible Materials	Contact with acids liberates toxic gas.
10.6	Hazardous Decomposition Product(s)	Hydrogen sulphide, Sulphur oxides (SO _x), Toxic metal oxide smoke

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on Toxicological Effects
	Acute toxicity:

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Primary Irritant Effect:

On the skin:	Slight irritant effect on skin and mucous membranes.
On the eye:	Slight irritant effect on eyes.
Sensitisation:	No sensitizing effects known.
Repeated dose toxicity:	May cause metal fume disease.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	
Aquatic toxicity:	No further relevant information available.
12.2 Persistence and Degradability	Inorganic product, is not eliminable from water by means of biological cleaning processes.
12.3 Bioaccumulative Potential	No further relevant information available.
12.4 Mobility in Soil	No further relevant information available.
Additional ecological information:	
General notes:	Negative ecological effects are, according to the current state of knowledge, not expected. Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.
12.5 Results of PBT and vPvB Assessment	PBT: Not applicable. vPvB: Not applicable.
12.6 Other Adverse Effects	No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods Recommendation	Smaller quantities can be disposed of with household waste. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
Uncleaned Packaging: Recommendation:	Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

Land Transport (ADR/RID) (c)(d)		Land Transport (Within USA) (b)(d)	
UN Number	None	UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.	Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None	Transport Hazard Class(es)	None
Packing Group	None	Packing Group	None
Hazard Label(s)	None	Hazard Label(s)	None
Environmental Hazards	None	Environmental Hazards	None
Special Precautions For User	None	Special Precautions For User	None
Sea Transport (IMDG) (c)		Air Transport (ICAO/IATA) (c) (d)	
UN Number	None	UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.	Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None	Transport Hazard Class(es)	None
Packing Group	None	Packing Group	None
Marine Pollutant	None	Marine Pollutant	None
Special Precautions For User	None	Special Precautions For User	None

(b)- ORM-D may be applicable within the USA for package sizes less than 30kg.

(c)- Consult with transport provider.

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(d)– Check relevant regulations for Special Provisions.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health And Environmental Regulations/Legislation Specific For The Substance Or Mixture

United States (USA)

SARA

Section 355 (extremely hazardous substances) Substance is not listed.

SARA 313 (Specific toxic chemical listings) Substance is not listed.

TSCA (Toxic Substance Control Act) Substance is listed.

Proposition 65 (California):

Chemicals known to cause cancer: Substance is not listed.

Chemicals known to cause reproductive toxicity for females: Substance is not listed.

Chemicals known to cause reproductive toxicity for males: Substance is not listed.

Chemicals known to cause developmental toxicity: Substance is not listed.

Carcinogenic Categories

EPA (Environmental Protection Agency) Substance is not listed.

IARC (International Agency for Research on Cancer) Substance is not listed.

TLV (Threshold Limit Value established by ACGIH) Substance is not listed.

MAK (German Maximum Workplace Concentration) Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.

Canada

Canadian Domestic Substances List (DSL) Substance is not listed.

Canadian Ingredient Disclosure list (limit 0.1%) Substance is not listed.

Canada Ingredient Disclosure list (limit 1%) Substance is not listed.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Additional information:

- The accumulation of airborne dust particles may lead to health and safety risks in some cases. The use of good industrial practices will mitigate this risk.
- The health risks from inhalation of dust particles vary; this is due to particle concentration, exposure length, number of exposures and type of particles inhaled. Please read Section 2,4,6,7 and 8 of the SDS to understand these potential risks. Wear personal protective equipment and follow storage and handling procedures to maintain a safe workplace.

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- In rare instances, combustible dusts may represent a potential explosion hazard when airborne. This hazard is often associated with organic dust such as foodstuffs and coal, but may also occur with mineral products. While the majority of our products would be considered non-combustible, the overall airborne environment should be considered when determining the need for mitigation from the potential hazard. Consult recognized experts when necessary in order to determine any possible hazard.
Please read the SDS for specific information concerning these hazards, and contact us with any further questions. We appreciate your continued business.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Sources

SDS Prepared by:

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