According to Regulation (EC) No. 2015/830

1. Product and Company Identification

1.1 Product identifiers

S-ES HDD XTRA

1.2 Relevant identified uses of the substance or mixtures and uses advised against

Relevant identified uses

Industrial application

Discouraged applications

Not applicable

1.3 Details of the supplier of the Safety Data Sheet

Sirius-ES Handels GmbH
Bahnhofplatz 3
4600 Wels
Austria

Telephone:	+43(0)7242 – 93965660
Telefax:	+43(0)7242 – 93965666
e-mail:	office@sirius-es.com
Web:	www.sirius-es.com

1.4 Emergency telephone number

Germany: Giftnotruf Berlin (Berlin):	+49 30 19 240
Austria: Vergiftungszentrale Wien:	+43 1 406 43 430

2. Hazards Identification

2.1 Classification of the substance or mixture

Not as a hazardous mixture according to Reg. (EC) No 1272/2008 and its amendments.
Not classified as dangerous goods for transport.

2.2 GHS Label Elements, including precautionary statements

Hazard pictograms	not applicable
Hazard warnings	not applicable
EUH2010	Safety data sheet available on request
SAFETY INSTRUCTIONS: Prevention	Not applicable
SAFETY INSTRUCTIONS: Reaction	Not applicable
SAFETY INSTRUCTIONS: Storage	Not applicable
SAFETY INSTRUCTIONS: Disposal	Not applicable

2.3 Other hazards

N/A

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3. Composition/information on ingredients

3.1 Chemical characterization

See "Composition of the components" in section 3.2

3.2 Mixtures

1. CAS-No. 2. EG-No. 3. Indexnumber 4.REACH Number	% [weight]	Name	Classification under the Regulation (EC) No. 1272/2008 [CLP]
1.1302-78-9 2.215-108-5 3.not available 4.01-2119419080-54-XXXX|01-2119485596-21-XXXX	>96	Bentonit	Burning/irritation of the skin, hazard category 2, eye irritation, hazard category 2, STOT - SE (. Resp. Irr.) category 3; H315, H319, H335 [1]
1.14808-60-7 2.238-878-4 3.not available 4.not available	>1	Quarz- (SiO2)	Organ damage Hazard category 2; H373 [1]
1.not available 2.not available 3.not available 4.not available	<2	Identified ingredients/contents are not dangerous	Not applicable

Legend: 1st CAS No; 2nd classification drawn from EC Directive 67/548/EEC - Annex I ; 3rd classification drawn from EC Directive 1272/2008 - Annex VI 4th classification drawn from C & L

4. First Aid measures

4.1 Description of first aid measures

Eye contact

If this product comes into contact with the eyes: Wash immediately with fresh running water.
Ensure complete rinsing by lifting the eyelids.
If pain persists or recurs, seek medical attention.
Contact lens removal after eye injury should only be performed by trained personnel.

Skin contact

If product comes into contact with skin or hair:
Immediately wash thoroughly with running water (and soap, if available).
Consult a doctor if irritation occurs.

Inhalation

If the dust is inhaled, remove the victim from the contaminated area.
Encourage the patient to blow his nose and make sure that the airways are clean or not blocked.
If irritation and discomfort persist, consult a physician.

Ingestion

Give a glass of water immediately.
First aid is not normally required. However, if in doubt, contact a poison information center or see a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3 Indication of any immediate medical attention and special treatment needed

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Treat symptomatically

5. Firefighting measures

5.1 Extinguisher media

There are no restrictions on the type of fire extinguisher used.
Use extinguishing agents that are suitable for ambient fire.

5.2 Special hazards arising from substance or mixture

Fire intolerance: none known

5.3 Advice for firefighters

Fire fighting

Alert the fire brigade and inform them of the location and nature of the danger.
Wear special gloves and breathing apparatus suitable for firefighting.

Fire/explosion hazard

Non-combustible.
Not considered a major fire hazard, but container may burn.

Decomposes when heated and produces

Carbon monoxide (CO)
Carbon dioxide (C02)
Nitric oxide (NOx)

5.4 Further information

Not specified

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

See Section 8

6.2 Environmental precautions

See Section 12

6.3 Methods and materials for containment and cleaning up

Release of small quantities

Remove spilled product immediately. Avoid contact with skin and eyes.

6.4 Reference to other sections

Guidance on personal protective equipment is given in section 8 of the safety sheet.

7. Handling and storage

7.1 Precautions for safe handling

Safe handling

Limit any unnecessary personal contact.
Wear protective clothing if there is a risk of exposure.

Fire and explosion protection

See section 5

Other information

Follow the manufacturer's storage and handling recommendations.

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7.2 Conditions for safe storage, including any incompatibilities

Suitable container

Multilayer paper bags with plastic coating or strong plastic bags. Check containers for clear marking and tightness.

Storage Incompatibility

None known.

7.3 Specific end use(s)

See Section 1.2

8. Exposure controls / personal protection

8.1 Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not available

PREDICTED NO EFFECT LEVEL (PNEC)

Not available

WORKPLACE LIMIT

DATA ON THE INGREDIENTS

Source	contents	substance name	GW	STEL	culmination	comment
Germany recommended limit values, - Substances for which no MAK value can currently be established	Bentonit	Montmorillonite, Bentonite [84]	not availabl e	not available	not available	not available
Germany recommended limit values, - Substances for which no MAK value can currently be established	Bentonit	Montmorillonite, Bentonite [84]	not availabl e	not available	not available	not available

Emergency limits

contents	Substance name	TEEL-1	TEEL-2	TEEL-3
Bentonit	Montmorillonite	30 mg/m3	330 mg/m3	2,000 mg/m3
Quarz- (SiO2)	Silica, crystalline-quartz; (Silicon dioxide)	0.075 mg/m3	33 mg/m3	200 mg/m3

contents	Original IDLH	revised IDLH
Bentonit	not available	not available
Quarz- (SiO2)	not available	not available
Identified ingredients are not dangerous	not available	not available

8.2 Exposure controls

Appropriate engineering controls

Use it in a well-ventilated area.

Personal protective equipment

Wear eye/face protection.

Safety glasses with side protection; or as prescribed, chemical safety glasses.
Contact lenses may pose a particular hazard; soft contact lenses may absorb and concentrate the irritant.

Skin protection

See hand protection below

Hands / Feet Protection

The choice of suitable safety gloves depends not only on the material, but also on the quality, which can vary from manufacturer to manufacturer. In the case of a chemical that is a preparation of several substances, the resistance of the glove material cannot be determined in advance and must therefore be checked before use.
Experience shows that the following polymers are suitable as glove material for protection against undissolved dry substances:
- Polychloroprene
- Nitrile rubber
- Butyl rubber
- Fluoro rubber
- polyvinyl chloride

Gloves should always be checked for possible wear and/or decomposition.

Body protection

See Other protection below

Other protection

Overall
PVC apron
Barrier cream
Skin cleansing cream
Eye rinsing device

Hazards due to heat

Not available

Respiratory protection

Type AX-P filter with sufficient capacity (AS / NZS 1716 & 1715, complies with EN 143:2000 and 149:2001, ANSI Z88 or national)

Limitation and monitoring of environmental exposure

See section 12

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	distributed solid
Odour	not available
Odour threshold	not available
pH (as supplied)	non applicable
Melting point/freezing point (°C)	>450

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Initial boiling point and boiling range (° C)	non applicable
Flash point (°C)	non applicable
Evaporation rate	non applicable
Flammability	non applicable
Upper explosion limit (%)	non applicable
Lower explosion limit (%)	non applicable
Vapour pressure (kPa)	non applicable
Solubility in water (g/L)	soluble
Vapour density (Air = 1)	non applicable
Specific gravity (Water= 1)	2.6
Octanol/water coefficient	not available
ignition temperature (°C)	non applicable
Decomposition temperature	not available
Viscosity (cSt)	non applicable
Molecular weight (g/mol)	non applicable
Taste	not available
Explosive properties	not available
Oxidizing properties	not available
Surface Tension (dyn/cm or mN/m)	non applicable
Volatile component (%vol)	non applicable
Gas group	not available
pH of a solution (1%)	9.0-10.5 (5%)
VOC g/L	not available

9.2 Other safety information

Not available

10. Stability and reactivity

10.1 Reactivity

See Section 7.2

10.2 Chemical stability

Product is considered stable; hazardous polymerisation will not occur

10.3 Possibility of hazardous reactions

See Section 7.2

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10.4 Conditions to avoid

See Section 7.2

10.5 Incompatible materials

See Section 7.2

10.6 Hazardous decomposition products

See Section 5.3

11. Toxicological information

11.1 Information on toxicological effects

Inhalation	Effects on the lungs are significantly improved in the presence of respirable particles. Overexposure to respirable dust can cause wheezing, coughing and breathing difficulties or lead to symptomatically impaired lung function.
Ingestion	The substance has NOT been classified as "harmful if swallowed" by EC Directives or other classification systems. This is due to the lack of scientifically validated studies in humans or animals.
Skin contact	The substance is not expected to have any adverse health effects or to cause irritation as a result of skin contact (according to classification according to EC Directive based on animal testing), but good hygiene practice requires that exposure is kept to a minimum and that suitable protective gloves are worn at the workplace. Open wounds/cuts, scraped or irritated skin should not be exposed to this material.
Eyes	Although the substance is not considered to be irritant (according to EC directive), direct eye contact may cause temporary discomfort, characterized by tears or conjunctival redness (as in wind burn). Slight damage in the form of abrasion may also occur.
chronic	Long-term exposure to high dust concentrations can cause changes in lung function, i.e. pneumonitis; caused by particles of less than 0.5 micrometres that penetrate the lungs and remain there. Repeated exposure to high levels of particulate matter in the workplace may cause dusty lung, which describes the deposition of inhaled dust in the lungs, regardless of the effect. This is correct if a significant number of particles smaller than 0.5 micro (1/50,000 inch) are present.

S-ES HDD XTRA	**TOXICITY** Not available	**IRRITATION** Not available
Bentonit	**TOXICITY** Dermal (Rat) LD50: >2000 mg/kg[1] Inhalative (Rat) LC50: >50 mg/l1 h[1] Oral (Rat) LD50: >2000 mg/kg[1] Oral (Rat) LD50: >5000 mg/kg[1]	**IRRITATION** Not available
Quarz- (SiO2)	**TOXICITY** Not available	**IRRITATION** Not available
Legend:	*1 Value from Europe ECHA registered substances received -... Acute toxicity 2 * value from manufacturer MSDS received. If not stated otherwise data are extracted from RTECS - (Register of Toxic Effects of Chemical Substances)*	
BENTONIT	Asthma-like symptoms can persist for months or even years - even if there is no longer any exposure to the material. This may be due to a non-allergenic condition known as Reactive Airways Dysfunction Syndrome (RADS). No significant acute toxicological data identified in literature study.	

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QUARZ- (SIO2)	WARNING: For inhalation exposure only: This substance has been classified by IARC as Group 1: CARCINOGENIC TO HUMANS.		
acute toxicity	⊘	**Carcinogenicity**	⊘
skin irritation / burns	⊘	**Reproduction-**	⊘
Severe eye damage / Irritation	⊘	**STOT - unique Exposure**	⊘
Respiratory or skin sensitization	⊘	**STOT - repeated Exposure**	⊘
Mutagenicity	⊘	**Risk of aspiration**	⊘

Legend: ✘ – Data available, but not filling the criteria for classification
✔ – Classification required to be provided Data
⊘ – Data not to be made available Classification

12. Ecological information

12.1 Toxicity

S-ES HDD XTRA	**endpoint**	**TEST-duration(hours)**	**SPEZIES**	**value**	**source**
	not available	not available	not available	not available	not available
Bentonit	**endpoint**	**TEST-duration(hours)**	**SPEZIES**	**value**	**source**
	LC50	96	Fisch	19000mg/L	4
Quarz- (SiO2)	**endpoint**	**TEST-duration(hours)**	**SPEZIES**	**value**	**source**
	not available	not available	not available	not available	not available
Legend:	*Extracted from 1. IUCLID toxicity data 2. Europe ECHA registered substances - ecotoxicological information - aquatic toxicity 3. EPIWIN sequence V3.12 (QSAR) - aquatic toxicity data (estimated) 4. US EPA, ecotox database - aquatic toxicity data 5. ECETOC water hazard assessment data 6. NITE (Japan) - bioconcentration data 7. METI (Japan) - bioconcentration data 8. supplier data*				

DO NOT discharge into drains or surface water.

12.2 Persistence and degradability

contents	Persistence: Water/soil	Persistence: Air
	No data available for all contents/ingredients	No data available for all contents/ ingredients

12.3 Bioaccumulative potential

contents	Bioaccumulation
	No data available for all contents/ingredients

12.4 Mobility in soil

contents	Mobility
	No data available for all contents/ingredients

12.5 Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not available	Not available	Not available

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PBT criteria fulfilled?	Not available	Not available	Not available

12.6 Other adverse effects

No data available.

13. Disposal considerations

13.1 Waste treatment methods

Product / packaging disposal	Recycle, if possible, or contact the manufacturer for recycling possibilities. For disposal, contact the competent authority.
Waste treatment options	Not available
Wastewater disposal options	Not available

14. Transport information

14.1 UN number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Not applicable

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

Not applicable

14.8 Additional information

not specified

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU Legislation

BENTONITE(1302-78-9) WAS INCLUDED IN THE FOLLOWING REGULATORY LIST

substances for which no MAK value can currently be established;
European Customs Inventory of Chemical Products ECICS (English);
European Union, European Inventory of existing Commercial Chemical Substances (EINECS)

QUARTZ (SIO2)(14808-60-7) WAS FOUND ON THE FOLLOWING REGULATORY LIST

Europe Aerospace and Defence Industries Association of Europe (ASD) REACH Implementation Working Group Priority declarable Substances List (PDSL);
European Trade Union Confederation (ETUC) priority list for REACH authorisation;
European Union, European Inventory of existing Commercial Chemical Substances (EINECS)

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International Agency for Research on Cancer (IARK)- Agents classified by IARC

This safety data sheet complies with the following EU legislation and its adaptations - where applicable: 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008 and their amendments.

15.2 Chemical Safety assessment

For further information please refer to the Chemical Safety Assessment and exposure scenarios prepared by your supply chain, if available

ECHA Summary

contents	CAS-Number	Indexnumber	ECHA-Dossier
Bentonit	1302-78-9	Not available	Not available

Harmonisation (C & L Inventory)	Hazard class and category Code (s)	Pictogram Signal word Code (s)	Hazard warning Code (s)
1	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3	GHS07; Wng	H315; H319; H335
2	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT SE 2; Acute Tox. 4; STOT SE 1; Carc. 2; STOT RE 1; STOT RE 2	GHS08; Dgr	H315; H319; H335; H332; H370; H351; H372
1	Not classified	Not available	Not available
2	Not classified	Not available	Not available
1	STOT SE 3	GHS07; Wng	H335
2	STOT SE 3	Wng; GHS02; GHS09; GHS03; GHS05; GHS06	H335; H302; H311; H315; H331; H400
1	Not classified	Not available	Not available
2	Not classified	Not available	Not available
1	Not classified	Not available	Not available
2	Not classified	Not available	Not available
1	Not classified	Not available	Not available
2	Not classified	Not available	Not available
1	Not classified	Not available	Not available
2	Not classified	Not available	Not available
1	Not classified	Not available	Not available
2	Not classified	Not available	Not available

Harmonisation code 1 = The most common classification. Harmonisation code 2 = The most stringent classification requires

contents	CAS-Number	Indexnumber	ECHA-Dossier
Quarz- (SiO_2)	14808-60-7	Not available	Not availble

Harmonisation (C & L Inventory)	Hazard class and category Code (s)	Pictogram Signal word Code (s)	Hazard warning Code (s)
1	Not classified	Not available	Not available
2	STOT RE 1; STOT RE 2; Carc. 1A; Acute Tox. 4; STOT SE 1; Carc. 2; Muta. 2; Carc. 1B; STOT SE 2; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3	GHS08; Dgr	H372; H350; H332; H370; H341; H319; H335; H315; H302; H413
1	Flam. Liq. 2; Skin Irrit. 2; Skin Sens. 1; Eye Dam. 1; STOT SE 3; STOT SE 3; STOT RE 1; Aquatic Chronic 2	GHS02; GHS09; GHS08; GHS05; Dgr	H225; H315; H317; H318; H335; H336; H372; H411

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2	Flam. Liq. 2; Skin Irrit. 2; Skin Sens. 1; Eye Dam. 1; STOT SE 3; STOT RE 1; Aquatic Chronic 2	GHS02; GHS09; GHS08; GHS05; Dgr	H225; H315; H317; H318; H335; H336; H372; H411

Harmonisation code 1 = The most common classification. Harmonisation code 2 = The most stringent classification requires

15.3 Classification of substances and mixtures in water hazard classes

PREPARATION IS WGK NOT HAZARDOUS TO WATER

Name	WGK	Partitur	source
BENTONIT	not water-hazardous		P: Classification according to annex 3
QUARZ- (SIO2)	not water-hazardous		W: VwVwS

Nationale Inventar	statement
Australien - AICS	Y
Kanada - DSL	Y
Kanada - NDSL	N (Bentonit; Quarz- (SiO2))
China - IECSC	Y
Europa - EINECS / ELINCS / NLP	Y
Japan - ENCS	N (Bentonit)
Korea - KECI	Y
Neuseeland - NZIoC	Y
Philippinen - PICCS	Y
USA - TSCA	Y
Legend:	*Y = All components are in the inventory* *N = not determined or one or more ingredients are not in the inventory and are not excluded from the listing (see specific ingredients in brackets)*

16. Other information

Full text risk and hazard codes

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.

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H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Not available	

Further information

Ingredients with multiple CAS numbers

Name	CAS-Nr.
Bentonit	1302-78-9, 11004-12-9, 10043-07-9, 115628-71-2, 12198-92-4, 12199-69-8, 135945-01-6, 37320-72-2, 52623-66-2, 850872-77-4, 67479-91-8, 89382-86-5, 90989-60-9, 85049-30-5, 97862-66-3, 84776-12-5, 70131-50-9, 90989-59-6
Quarz- (SiO2)	14808-60-7, 122304-48-7, 122304-49-8, 12425-26-2, 1317-79-9, 70594-95-5, 87347-84-0, 308075-07-2

The classification of the mixture and its individual components is based on official and authoritative sources, independent reports and existing literature references.

The SDS is a hazard communication tool and should be used in the risk assessment of a product. Many factors determine whether the reported risks are hazards in the workplace or in other environments.

Detailed information regarding personal protective equipment refers to the following EU CEN standards:
EN 166 - Personal eye protection
EN 340 - protective clothing
EN 374 - Protective gloves against chemicals and microorganisms.
EN 13832 - Footwear protecting against chemicals
EN 133 - Equipment for respiratory protection

Abbreviations and acronyms

PC-TWA: allowable concentration- Most frequent average time
PC-STEL: permissible concentration short-term limit value
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Government Industrial Hygienists
STEL: Short-term limit value
TEEL: Temporary emergency limit.
IDLH: Immediate danger to life and health - concentration
OSF: Odour Safety factor
NOAEL: No observed adverse effect
LOAEL: Lowest observed adverse effect
TLV: Maximum limit value
LOD: Limit of detection
OTV: Odour thresholds Value

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BCF: Bioconcentration factors
BEI: Biological Exposure Index

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MGS Europe GmbH . Brüsseler Allee 21c . 41812 Erkelenz . Germany . Tel + 49(0) 2431 945762 . www.mgs-europe.de . info@mgs-europe.de