STELUX CG

SECTION 1: Identification of the substance/mixture and of the company

1.1 Product identifier

Identifier : mixture

Designation : high chromium white cast iron blasting media

Trade name : STELUX CG

1.2 Relevant identified uses of the mixture and uses advised against

1.2.1 Relevant identified uses

Main use category: industrial purpose

Identified use: blasting operation

1.2.2 Uses advised against

No further information available

1.3 Detail of the supplier of the Safety Data Sheet

Adress :

e-mail : xxx@winoagroup.com
Telephone :

1.4 Emergency telephone number

Country	Organisation	Address	Phone, e-mail, website

SECTION 2: Hazards identification

2.1 Classification of the substance or the mixture

Classification based on relevant data available for the mixture

Not classified

2.2 Label elements

No label

2.3 Other hazards

Risks are dependent upon the user's process and application. Health risks are linked to the exposure to dust. Dust is produced by the fragmentation of the abrasives and particles removed from the blasted parts.

Health hazard :	Dust may cause mechanical irritation of the eyes and respiratory tract.
Fire - Explosion :	Dust can form an explosive mixture with air.
Other risks :	Noise. Risk of falling due to the presence of abrasives on the floor.

SECTION 3: Composition/informations on ingredients

3.1 Substances

Not applicable

3.2 Mixture

Designation	Identifier	%	Classification according regulation (EC) N° 1272/2008 [CLP]
Iron	(N° CAS) 7439-89-6 (N° CE) 231-096-4	60 - 70	Not classified
Chromium	(N° CAS) 7440-47-3 (N° CE) 231-157-5	26 - 30	Not classified
Silicon	(N° CAS) 7440-21-3 (N° CE) 231-130-8	<= 3,5	Not classified
Carbon	(N° CAS) 7440-44-0 (N° CE) 231-153-3	1.5 – 2.5	Not classified
Manganese	(N° CAS) 7439-96-5 (N° CE) 231-105-1	<= 2	Not classified

Additional information:

The product is manufactured from melting of recovered scrap metal. Due to the scrap metal recovery process, other unintentionally added elements such as nickel (Ni) and copper (Cu), may be present as impurities. The concentrations of these elements could in some case individually exceed 0.1% but do not lead to a global classification of the alloy.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information :	In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Following inhalation :	Remove person to fresh air and keep comfortable for breathing.
Following skin contact :	If on skin, wash thoroughly with water after handling. If irritation occurs: get medical advice/attention
Following eye contact :	Do not rub, wash thoroughly with water keeping eyelids wide open (at least 15 minutes). If irritation persists, consult an ophthalmologist.
Following ingestion :	Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/effects : Dust may cause mechanical irritation of the eyes and respiratory tract.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Select media appropriate for the surrounding materials/area
In the event of Class A fires (packaging): ABC powder, water, foam
In the event of Class D fires (metal fire): powders, CO2

Unsuitable extinguishing agents : No further relevant information available

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: Metal oxides smoke, fumes or vapor. Carbon oxides (CO, CO2).

5.3 Advice for fire-fighters

Fire-fighting instructions : Dike and contain extinguishing fluids. Do not inhale the smoke

Fire-fighting protection: Do not intervene without suitable protective equipment.
Wear self-contained breathing apparatus and full body protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedure

General measures : Provide adequate ventilation. Steel abrasives on horizontal surfaces can create slip and fall hazards. It is recommended to keep floors, stairs and work areas clean at all time.

6.1.1 For non-emergency personnel

Emergency procedure : Mark the application area and prohibit access to unauthorized persons. Avoid contact with skin, eyes or clothing. Do not breathe dust. Response limited to qualified personnel with appropriate protection.

6.1.2 For emergency responders

Protective equipement: Use personal protective equipment, see section 8.

Emergency procedure: Prevent or limit the formation and dispersion of dust.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Cleaning up :	Upon accidental release: quickly clean the area with a vacuum cleaner or magnetic brush to reduce the risk of falling. Prevent or limit the formation and dispersion of dust.
Other information :	The material may be reused, recycled or disposed of in compliance with local regulations.

6.4 Reference to other sections

For more information, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling:	Handle with care to avoid damage to packaging to avoid spillage. Use in well-ventilated area. Do not breath dust. Avoid contact with eye, skin, clothing.
General occupational hygiene :	Do not drink, eat or smoke at the workplace. Wash hands after handling. Separate work clothes from street clothes. Clean them separately.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage :	Winoa knows of no incompatible substance. Store in dry place. No safety risk but oxidation and aggregation may occur in the presence of moisture.

7.3 Specific end use(s)

No further relevant information available

SECTION 8: Exposure controls and personal protection

8.1 Control parameters

8.1.1 Occupational exposure Levels

Dust		
France	Local name	Dust with no specific effect
France	Restrictive statutory limit values (mg/m3)	7 (inhalable fraction) (a) 3,5 (respirable fraction) (b)
France	Note	(a) values reduced to 4 mg/m3 on 2023/07/01 (b) values reduced to 0,9 mg/m3 on 2023/07/01
Chromium (7440-47-3)		
EU	Local name	Chromium metal
EU	IOELV TWA (mg/m³)	2 mg/m³
EU	Note	SCOEL recommendation (2002)

Nickel (7440-02-0)		
EU	Local name	Nickel compounds
EU	BOELV TWA (mg/m³)	0,1 (inhalable fraction, up to January 2025) 0,05 (inhalable fraction, from 18/01/2025) 0,01 (respiralable fraction)
EU	Regulation reference	Directive 2004/37/CE ; Directive 2022/431
EU	Note	to be transposed into national law by 15/04/2024 by EU members
Manganese (7439-96-5)		
EU	Nom local	Manganese
EU	IOELV TWA (mg/m³)	0,2 (inhalable fraction) 0,05 (respirable fraction)
EU	Regulation reference	Commission Directive (EU) 2017/164
Silicon (7440-21-3)		
France	Local name	Silicon
France	VME (mg/m³)	10 mg/m³
France	Note (FR)	Valeurs recommandées/admises
Copper (7440-50-8)		
EU	Local name	Copper
EU	IOELV TWA (mg/m³)	0,01 (respirable fraction)
EU	Regulation reference	SCOEL Recommendations (2011)

8.1.2 Biological limit values

Chromium (7440-47-3)		
Germany	local name	chromium and its compounds
Germany	BAR	0,6µg/L urine, at end of exposure
Germany	Notes	DFG recommendations 2018
Nickel (7440-02-0)		
EU	Local name	Nickel and nickel compounds
EU	BGV	3 µg/L urine
EU	Notes	SCOEL Recommendations (2011)
Germany	local name	Nickel and its compounds
Germany	BAR	3 µg/L urine, at end of exposure
Germany	Notes	DFG recommendations 2018
Manganese (7439-96-5)		
Germany	local name	Manganese and its inorganic compounds
Germany	BAR	15 µg/L whole blood, at end of exposure
Germany	Notes	DFG recommendations 2018

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation. The user must know the exact nature of the dust produced during the industrial process for which the abrasive is used, and must take the necessary measures to protect his workers. A metrological study is necessary for blasted parts that may contain any substance with an exposure limit. Emergency eye rinses should be installed in the vicinity of any area where there is a risk of exposure.

Hand protection:

Protective gloves against mechanical risks according to EN 388

Eye and face protection :

Tightly sealed goggles according to EN 166

Skin protection :

Wear suitable protective clothing according to EN ISO 14877

Respiratory protection :

Filter P2 according to EN 149

Environmental exposure controls :

Take all necessary measures to avoid the accidental release of the product outside, in case of rupture of containers or transfer systems.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Solid; Massive metal alloy.
Color :	Varied shades/hues of grey.
Odor :	Odorless.
Melting range :	1400 - 1550 °C (2552 – 2822 °F)
Freezing point :	No data available
Boiling range :	2850 – 3150 °C (5162 – 5702 °F)
Flammability (solid, gaz) :	Non-flammable
Lower and upper explosion limit	Not applicable
Flash point :	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature:	No data available
pH :	Not applicable
Kinematic viscosity	Not applicable
Solubility(s) :	Water: Insoluble
Partition coefficient n-octanol/water :	Not applicable
Vapour pressure:	No data available
Density :	> 7,6 g/cm³
Bulk density :	3 - 5 g/cm^3
Relative vapour density :	Not applicable
Particles characteristics :	Diameter range 0.05 mm to 8 mm depending on grade

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosion test : EN 14034-1:2005 and EN 14034-2:2006 Product tested : high carbon steel blasting media Particles size : 100% below 355µm ; 96% above 63µm	Results explosion class St=0

9.2.2 Other safety characteristics

Formation of explosive dust/air mixture:

Dust is produced by the fragmentation of the abrasives and particles removed from the blasted parts.

Risks are dependent upon the user's process and application.

Explosion test : EN 14034-1:2005 and EN 14034-2:2006 Product tested : dust recovered after crushing of the high carbon steel blasting media Particles size : 100% below 315µm ; 90% below 63µm.	Results Kst = 13 m.bar/s with Pmax of 2.3bar. Explosion class St 1

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable under normal conditions of storage and handling.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Water. Humidity.

10.5 Incompatible materials

Acids.

10.6 Hazardous decomposition products

No hazardous decomposition products under normal storage and uses conditions. Toxic metal oxide smoke can be released in case of fire.

SECTION 11: Toxicological information

11.1 Information on toxicological effects as defined in the regulation (EU) 1272/2008

Acute toxicity (oral)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met) pH: Not applicable
Eye damage/irritation	Not classified (Based on available data, the classification criteria are not met)
Skin sensibilisation or to the respiratory tract	Not classified (Based on available data, the classification criteria are not met)
Additional indications	Based on available data. The release rate of nickel is low <0,5 µg/cm²/week, the sensibilisation induced by stainless steel can be considered as unlikely.
Germ cell mutagenicity/Genotoxicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Non classé. (Based on available data. Etude sur la toxicité de l'acier inoxydable - FINNISH INSTITUTE OF OCCUPATIONAL HEALTH - 2010. (méthode OCDE 451). Determination by expert opinion and probative force)
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	Not classified (Based on available data. Etude sur la toxicité de l'acier inoxydable - FINNISH INSTITUTE OF OCCUPATIONAL HEALTH - 2010. (method OCDE 412))
Aspiration hazard	Not classified (Technical impossibility to obtain data)

11.2 Information on other hazards

No further relevant information available

SECTION 12: Ecological information

12.1 Toxicity

Ecology – general :	Does not present a particular risk to the environment, subject to compliance with Section 13 disposal recommendations and national or local regulatory requirements that may apply.
Acute aquatic toxicity :	Not classified
Chronic aquatic toxicity :	Not classified

12.2 Persistance and degradability

Not applicable. Does not contain any PBT or vPvB substances

12.3 Bioaccumulative potentiel

Not applicable. Does not contain any PBT or vPvB substances

12.4 Mobility in soil

No further relevant information available

12.5 Results of PVP and vPvP assessment

No further relevant information available. Does not contain any PBT or vPvB substances

12.6 Endocrine disrupting properties

No further relevant information available

Does not contain any substance with endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7 Other adverse effect

No further relevant information available

SECTION 13: Disposal information

13.1 Waste treatment methods

The waste holder has the duty to assess the hazard properties of the waste.

Recommendation

Material recycling. Do not discharge the product into the environment. Dust and used abrasives may contain pollutants resulting from the industrial process. Each user must study the problem of waste in relation to his specific activity, in contact with specialized organizations

SECTION 14: Transport information

According to ADR / RID / IMDG / IATA / ADN requirements

ADR	IMDG	IATA	ADN	RID
14.1 UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2 UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3 Transport hazard class				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.4 Packaging group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5 Environmental hazard				
Not applicable	Not applicable	Not applicable	Not applicable	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

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the mixture

15.2 Chemical safety assessment

No chemical safety assessment done for the product.

SECTION 16: Other information

Data :	Guidance on the compilation of SDS. ECHA - European Chemicals Agency. Etude sur la toxicité de l'acier inoxydable - FINNISH INSTITUTE OF OCCUPATIONAL HEALTH - 2010. Décision de l'association européenne EuroFer Stainless sur la classification de l'acier inoxydable - 2014. GESTIS-DUST-EX Database Combustion and explosion characteristics of dusts
RoHS :	The product for the identified use does not fall within the scope of RoHS directive. For information, the chemical composition of the product complies with Annex II of the directive 2011/65/EU modified by directive 2015/863/EU.