

Safety Data Sheet acc. to OSHA HCS

Printing date 01/08/2017

Reviewed on 01/08/2017

1 Identification

Product identifier

Trade name: **AMAGRIT**

Application of the substance / the mixture *blasting agent*

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Ervin Industries, Inc.

3893 Research Park Drive

Ann Arbor, MI 48108-2217

Phone: (734)-769-4600/Fax: (734)-663-0136

sales@ervinindustries.com

http://www.ervinindustries.com/

Information department:

Quality Assurance Department

(mo-thu: 8a.m.-4p.m., fr 8a.m.-1p.m.)

Emergency telephone number: *Tel.: +(734)-769-4600/Fax: (734)-663-0136*

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

Label elements

GHS label elements *Void*

Hazard pictograms *Void*

Signal word *Void*

Hazard statements *Void*

Classification system:

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)



*Health = *2*

Fire = 0

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: *Not applicable.*

vPvB: *Not applicable.*

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: *Mixture: consisting of the following components.*

Dangerous components:		
7440-47-3	chromium	<35%
7439-96-5	manganese	<5%
7440-21-3	silicon	<5%

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/08/2017

Reviewed on 01/08/2017

Trade name: AMAGRIT

(Contd. of page 1)

7440-44-0	carbon	<5%
-----------	--------	-----

4 First-aid measures

Description of first aid measures

General information: Take affected persons out into the fresh air.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Rinse with warm water.

Generally the product does not irritate the skin.

After eye contact: 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.

If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed irritation caused by dusts.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Avoid formation of dust.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Product forms slippery surface when combined with water.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose of the collected material according to regulations.

Ensure adequate ventilation.

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.

Protective Action Criteria for Chemicals

PAC-1:		
7439-89-6	iron	3.2 mg/m ³
7440-47-3	chromium	1.5 mg/m ³
7440-44-0	carbon	6 mg/m ³
7439-96-5	manganese	3 mg/m ³
7440-21-3	silicon	45 mg/m ³
PAC-2:		
7439-89-6	iron	35 mg/m ³
7440-47-3	chromium	17 mg/m ³
7440-44-0	carbon	330 mg/m ³

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/08/2017

Reviewed on 01/08/2017

Trade name: AMAGRIT

		(Contd. of page 2)
7439-96-5	manganese	5 mg/m ³
7440-21-3	silicon	100 mg/m ³
PAC-3:		
7439-89-6	iron	150 mg/m ³
7440-47-3	chromium	99 mg/m ³
7440-44-0	carbon	2,000 mg/m ³
7439-96-5	manganese	1,800 mg/m ³
7440-21-3	silicon	630 mg/m ³

7 Handling and storage

Handling:**Precautions for safe handling**

Only handle and refill product in closed systems.

Provide suction extractors if dust is formed.

Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.

Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities**Storage:**

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with acids.

Further information about storage conditions: Store in dry conditions.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

Control parameters**Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

7440-47-3 chromium	
PEL	Long-term value: 1 mg/m ³
REL	Long-term value: 0.5* mg/m ³ *metal+inorg.compds.as Cr; See Pocket Guide App. C
TLV	Long-term value: 0.5 mg/m ³
7439-96-5 manganese	
PEL	Ceiling limit value: 5 mg/m ³ as Mn
REL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³ fume, as Mn
TLV	Long-term value: 0.02* 0.1* mg/m ³ as Mn; *respirable **inhalable fraction
7440-21-3 silicon	
PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	TLV withdrawn

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/08/2017

Reviewed on 01/08/2017

Trade name: AMAGRIT

(Contd. of page 3)

Additional information: *The lists that were valid during the creation were used as basis.*

Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: *Filter P2*

Protection of hands:

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Natural rubber, NR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Recommended thickness of the material: ≥ 0.33 mm

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions.

Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Value for the permeation: Level ≤ 6

Eye protection:

Tightly sealed goggles

Body protection: *Protective work clothing*

9 Physical and chemical properties

Information on basic physical and chemical properties**General Information****Appearance:**

Form:	<i>Solid</i>
Color:	<i>Silver grey</i>
Odor:	<i>Odorless</i>
Odor threshold:	<i>Not determined.</i>

pH-value: *Not applicable.*

Change in condition

Melting point/Melting range:	<i>1400 - 1550 °C (2552 - 2822 °F)</i>
Boiling point/Boiling range:	<i>Undetermined.</i>
Flash point:	<i>Not applicable.</i>
Flammability (solid, gaseous):	<i>Not determined.</i>

Ignition temperature:

Decomposition temperature:	<i>Not determined.</i>
Auto igniting:	<i>Product is not selfigniting.</i>
Danger of explosion:	<i>Product does not present an explosion hazard.</i>

Explosion limits:

Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
Vapor pressure:	<i>Not applicable.</i>
Density at 20 °C (68 °F):	<i>7.9 g/cm³ (65.926 lbs/gal)</i>
Relative density	<i>Not determined.</i>
Vapor density	<i>Not applicable.</i>
Evaporation rate	<i>Not applicable.</i>

Solubility in / Miscibility with

Water: *Insoluble.*

Partition coefficient (n-octanol/water): *Not determined.*

(Contd. on page 5)

US —

Safety Data Sheet acc. to OSHA HCS

Printing date 01/08/2017

Reviewed on 01/08/2017

Trade name: AMAGRIT

(Contd. of page 4)

Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content:	
Organic solvents:	0.0 %
VOC content:	0.0 g/l / 0.00 lb/gl
Solids content:	100.0 %
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Toxic metal oxide smoke

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenic categories

IARC (International Agency for Research on Cancer)	
7440-47-3 chromium	3
NTP (National Toxicology Program)	
None of the ingredients is listed.	
OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

(Contd. on page 6)

— US —

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/08/2017

Reviewed on 01/08/2017

Trade name: AMAGRIT

(Contd. of page 5)

Other adverse effects *No further relevant information available.*

13 Disposal considerations

Waste treatment methods

Recommendation: *Contact manufacturer for recycling information.*

Uncleaned packagings:

Recommendation:

*Disposal must be made according to official regulations.
completely emptied packaging in 25kg paper bag: paper recycling
completely emptied packaging in big bags: commercial waste disposal
completely emptied packaging in steel barrels: metal recycling*

14 Transport information

UN-Number DOT, ADR, ADN, IMDG, IATA	<i>Void</i>
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	<i>Void</i>
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	<i>Void</i>
Packing group DOT, ADR, IMDG, IATA	<i>Void</i>
Environmental hazards: Marine pollutant:	<i>No</i>
Special precautions for user	<i>Not applicable.</i>
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	<i>Not applicable.</i>
UN "Model Regulation":	<i>Void</i>

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara

Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

7440-47-3 chromium

7439-96-5 manganese

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/08/2017

Reviewed on 01/08/2017

Trade name: AMAGRIT

(Contd. of page 6)

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity categories**EPA (Environmental Protection Agency)**

7440-47-3 chromium

D

7439-96-5 manganese

D

TLV (Threshold Limit Value established by ACGIH)

7440-47-3 chromium

A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

GHS label elements Void**Hazard pictograms** Void**Signal word** Void**Hazard statements** Void**National regulations:****Information about limitation of use:** Employment restrictions concerning young persons must be observed.**Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

Contact: Dr. W. Assmann**Date of preparation / last revision** 01/08/2017 / 1**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

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)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

* Data compared to the previous version altered. AMAGRIT