



Steel Mill Scale

Safety Data Sheet (SDS)

Section 1 – Identification

- 1(a) Product Identifier Used on Label:** Steel Mill Scale
1(b) Other Means of Identification: SSAB-004
1(c) Recommended Use of the Chemical and Restrictions on Use: None
1(d) Name, address, and telephone number:
SSAB Americas Phone: (251) 662-4400 (8:00 am to 5:00 pm)
11 N. Water Street
Suite 17000
Mobile, AL 36602
1(e) Emergency Phone Number: (563) 381-5311 (after 5:00pm, weekends, holidays)

Section 2 – Hazard(s) Identification

- 2(a) Classification of the Chemical:** Steel Mill Scale is NOT considered a hazardous material according to the criteria specified in REACH [REGULATION (EC) No 1907/2006] and CLP [REGULATION (EC) No 1272/2008] and OSHA 29 CFR 1910.1200 Hazard Communication Standard. The categories of Health Hazards as defined in “GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev. 3” United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information.
2(b) Signal Word, Hazard Statement(s), Symbols and Precautionary Statement(s): Not Applicable (NA)
2(c) Hazards not Otherwise Classified: None Known
2(d) Unknown Acute Toxicity Statement (Mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical Name, Common Name (synonyms), CAS Number and Other Identifiers, and Concentration:

Chemical Name	CAS Number	EC Number	% weight
Mill Scale, ferrous metal	65996-74-9	266-007-8	100%
The following components comprise this product and were used for hazard determination:			
Iron and Iron Oxides	1345-25-1 1309-38-2 1309-37-1 7439-89-6	215-721-8 215-169-8 215-168-2 231-096-4	70-99

EC – European Community

CAS – Chemical Abstract Service

Note: Steel Mill Scale is comprised of primarily iron oxides with calcium, manganese and magnesium oxides and compounds along with carbon, oil and greases.

Section 4 – First-aid Measures

- 4(a) Description of Necessary Measures:** If exposed, concerned: Get medical advice/attention.
- **Inhalation:** If inhaled: Remove person to fresh air and keep comfortable for breathing.
 - **Eye Contact:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.
 - **Skin Contact:** If on skin: Wash with plenty of water.
 - **Ingestion:** If swallowed: Call a poison center or doctor/physician if you feel unwell.
- 4(b) Most Important Symptoms/Effects, Acute and Delayed (Chronic):**
- Acute effects:**
- **Inhalation:** Excessive exposure to high concentrations of dust may cause irritation to the mucous membranes of the upper respiratory tract.
 - **Eye:** Particles of iron or iron compounds may become imbedded in the eye. Excessive exposure to high concentrations of dust may cause irritation to the eyes.
 - **Skin:** Skin contact with dusts may cause irritation, possibly leading to dermatitis.
 - **Ingestion:** Ingestion of dust may cause nausea and/or vomiting.
- Chronic Effects:**
Individuals with chronic respiratory disorders (i.e., asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any airborne particulate matter exposure. Persons with pre-existing skin disorders may be more susceptible to dermatitis.
- 4(c) Immediate Medical Attention and Special Treatment:** Treat symptomatically.

Section 5 – Fire-fighting Measures

5(a) Suitable (and Unsuitable) Extinguishing Media: Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards Arising from the Chemical: Not applicable for solid product.

5(c) Special Protective Equipment and Precautions for Fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 – Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust. Personnel should be protected against contact with eyes and skin. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. Do not release into sewers or waterways.

6(b) Methods and Materials for Containment and Clean Up: Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 – Handling and Storage

7(a) Precautions for Safe Handling: Wear protective gloves / protective clothing / eye protection / face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Emergency safety showers and eye wash stations should be present.

7(b) Conditions for Safe Storage, including any Incompatibilities: Whenever feasible, store locked up.

Section 8 – Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): The following exposure limits are offered as reference, for an experience industrial hygienist to review.

Ingredients	8(a) OSHA PEL ¹	ACGIH TLV ²	NIOSH REL ³	IDLH ⁴
Iron and iron oxides	10 mg/m ³ (iron oxide fume)	5.0 mg/m ³ (iron oxide, respirable fraction ⁵)	5.0 mg/m ³ (iron oxide dust and fume)	2,500 mg/m ³ (as Fe)

NE – None Established

1. OSHA Permissible Exposure Limits (PELs) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (C) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Peak is defined as the acceptable maximum peak for a maximum duration above the ceiling concentration for an eight-hour shift. A skin notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as the maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures. A "skin" notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. DSEN – May cause dermal sensitization. This notation is used to indicate the potential for dermal sensitization resulting from the interaction of an absorbed agent and ultraviolet light (i.e. photosensitization). RSEN – May cause respiratory sensitization.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL) - Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The "immediately dangerous to life or health air concentration values (IDLHs)" are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970's by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994. Ca is designated as carcinogen.
5. Respirable fraction. The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in ACGIH 2018 TLVs[®] and BEIs[®] Appendix D, paragraph C.

8(b) Appropriate Engineering Controls: Local exhaust ventilation should be used to control the emission of air contaminants. General dilution ventilation may assist with the reduction of air contaminant concentrations. Emergency eye wash stations and deluge safety showers should be available in the work area.

8(c) Individual Protection Measures:

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (immediately dangerous to life or health) for ...

Section 8 – Exposure Controls / Personal Protection (continued)

8(c) Individual Protection Measures (continued):

- **Respiratory Protection (continued):** ... any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.
 - **Warning!** Air-purifying respirators both negative-pressure and powered-air do not protect workers in oxygen-deficient atmospheres.
- **Eyes:** Wear eye protection/face protection. Contact lenses should not be worn where industrial exposure to this material is likely.
- **Skin:** Persons handling this product should wear appropriate clothing to prevent skin contact. Wear protective gloves.
- **Other protective equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 – Physical and Chemical Properties

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| 9(a) Appearance (physical state, color, etc.): Black or Reddish Black, Solid Powder or Granular
9(b) Odor: Slightly metallic odor
9(c) Odor Threshold: NA
9(d) pH: ND
9(e) Melting Point/Freezing Point: 1450 - 1600°C, 2642 - 2912°F
9(f) Initial Boiling Point and Boiling Range: NA
9(g) Flash Point: NA
9(h) Evaporation Rate: NA
9(i) Flammability (solid, gas): Not flammable | 9(j) Upper/Lower Flammability or Explosive Limits: NA
9(k) Vapor Pressure: NA
9(l) Vapor Density (Air = 1): NA
9(m) Relative Density: 2.3 – 3.2 SG
9(n) Solubility(ies): ND
9(o) Partition Coefficient n-octanol/water: NA
9(p) Auto-ignition Temperature: ND
9(q) Decomposition Temperature: ND
9(r) Viscosity: ND |
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NA – Not Applicable

ND – Not Determined for product as a whole

Section 10 – Stability and Reactivity

- 10(a) Reactivity:** Not Determined (ND)
- 10(b) Chemical Stability:** Steel Mill Scale is stable under normal storage and handling conditions.
- 10(c) Possibility of Hazardous Reaction:** None Known
- 10(d) Conditions to Avoid:** Storage with strong acids or calcium hypochlorite.
- 10(e) Incompatible Materials:** Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.
- 10(f) Hazardous Decomposition Products:** Thermal oxidative decomposition of this product can produce fumes containing oxides of carbon and other metallic oxides.

Section 11 – Toxicological Information

11 Information on Toxicological Effects: Steel Mill Scale is Not Classified

The Toxicological data listed below are presented regardless to classification criteria:

- No LC₅₀ or LD₅₀ has been established for **Steel Mill Scale**. The following data has been determined for the components:
 - **Iron Oxide:** LD₅₀ = >10,000 mg/kg (Oral/ Rat)
 - **Iron:** Rat LD₅₀ = 1060 mg/kg (IUCILD) (oral)
- No Skin (Dermal) Irritation data available for **Steel Mill Scale** as a mixture. The following Skin (Dermal) Irritation data has been determined for the components:
 - **Iron Oxide:** Moderately irritating.
 - **Iron:** Irritating when administered as Iron metal. Rabbit Draize – irritating (IUCILD)
- No Eye Irritation data available for **Steel Mill Scale** as a mixture. The following Eye Irritation information was found for the components:
 - **Iron Oxide:** Severely irritating; may cause burns. Human Corrosive (IUCILD).
- No Skin (Dermal)/Respiratory Sensitization data available for **Steel Mill Scale** as a mixture or its individual components.
- No Aspiration Hazard data available for **Steel Mill Scale** as a mixture or its individual components.
- No Germ Cell Mutagenicity data available for **Steel Mill Scale** as a mixture. The following Germ Cell Mutagenicity information was found for the components:
 - **Iron Oxide:** Both positive and negative data.
- Carcinogenicity: IARC, NTP, and OSHA do not list **Steel Mill Scale** as carcinogens. The following Carcinogenicity information was found for the components:
 - **Iron Oxide:** IARC-3, unclassifiable as to carcinogenicity in humans; ACGIH TLV-A4, not classifiable as a human carcinogen
- No Toxic Reproduction data available for **Steel Mill Scale** as a mixture or its individual components.

Section 11 – Toxicological Information (continued)

11 Information on Toxicological Effects (continued):

- i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Steel Mill Scale** as a mixture. The following STOT following a Single Exposure data was found for the components:
 - **Iron Oxide:** May cause lung irritation.
 - **Iron:** Irritating to Respiratory tract.
- j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Steel Mill Scale** as a whole. The following STOT following Repeated Exposure data was found for the components:
 - **Iron Oxide:** Some pulmonary and lung effects reported from Iron oxide exposure in humans.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2018, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS), European Union Classification, Labeling and Packaging. (EU CPL), Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), International Uniform Chemical Information Database (IUCLID), TOXicology Data NETwork (TOXNET), European Risk Assessment Reports (EU RAR).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s):

Acute Effects by Component:

- **IRON (IRON OXIDE):** Iron is harmful if swallowed, causes skin irritation, and causes eye irritation. Contact with iron oxide has been reported to cause skin irritation and serious eye damage.

Delayed (chronic) Effects by Component:

- **IRON (IRON OXIDE):** Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign lung disease, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of ferric oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Iron oxide is listed as a Group 3 (not classifiable) carcinogen by the International Agency for Research on Cancer (IARC).

Section 12 – Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No data available for the product, **Steel Mill Scale** as a whole. However, individual components of the product have been found to be toxic to the environment. Dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Iron Oxide:** LC₅₀: >1000 mg/L; Fish

12(b) Persistence & Degradability: No Data Available

12(c) Bioaccumulative Potential: No Data Available

12(d) Mobility (in soil): No Data Available

Additional Information:

Hazard Category: NA

Signal Word: No Signal Word

Hazard Symbol: NA

Hazard Statement: NA

Section 13 – Disposal Considerations

Disposal: Dispose of in accordance with Local, State, Federal and International regulations. Observe safe handling precautions.

Container Cleaning and Disposal: Follow Local, State, Federal and international regulations. Observe safe handling precautions.

Please note this information is for Steel Mill Scale in its original form. Any alterations can void this information.

Section 14 – Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 does not regulate **Steel Mill Scale** as a hazardous material. All Local, State, Federal and international regulations that apply to the transport of this type of material must be adhered to.

<p>Shipping Name: NOT Regulated Shipping Symbols: NA Hazard Class: NA UN No.: NA Packing Group: NA DOT/ IMO Label: NA Special Provisions (172.102): NA</p>	<p>Packaging Authorizations a) Exceptions: NA b) Non-bulk: NA c) Bulk: NA</p>	<p>Quantity Limitations a) Passenger Aircraft or Rail: NA b) Cargo Aircraft Only: NA Vessel Stowage Location: NA DOT reportable quantities: NA</p>
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International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.



Steel Mill Scale

SSAB Code No.: SSAB-004

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Section 14 – Transport Information (continued)

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Steel Mill Scale** as a hazardous material.

Shipping Name: N OT Regulated
Classification Code: NA
UN No.: NA
Packing Group: NA
ADR Label: NA
Special Provisions: NA
Limited Quantities: NA

Packaging
a) Packing Instructions: NA
b) Special Packing Provisions: NA
c) Mixed Packing Provisions: NA

Portable Tanks & Bulk Containers
a) Instructions: NA
b) Special Provisions: NA

International Air Transport Association (IATA) does not regulate **Steel Mill Scale** as a hazardous material.

Shipping Name: NOT Regulated
Class/Division: NA
Hazard Label (s): NA
UN No.: NA
Packing Group: NA
Excepted Quantities (EQ): NA

Passenger & Cargo Aircraft Limited Quantity (EQ)	
Pkg Inst: NA	Pkg Inst: NA
Max Net Qty/Pkg: NA	Max Net Qty/Pkg: NA

Cargo Aircraft Only:	Special Provisions:
Pkg Inst: NA	NA
Max Net Qty/Pkg: NA	ERG Code: NA

Pkg Inst – Packing Instructions

Max Net Qty/Pkg – Maximum Net Quantity per Package

ERG – Emergency Response Drill Code

Transport Dangerous Goods (TDG) does not regulate **Steel Mill Scale** as a hazardous material.

Section 15 – Regulatory Information

Regulatory Information: *The following listing of regulations relating to an SSAB product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.* This product and/or its constituents are subject to the following regulations:

OSHA Regulations: Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-2, Z-3): The product, **Steel Mill Scale** as a whole is not listed. However, individual components of the product are listed refer to Section 8.

EPA Regulations: The product, **Steel Mill Scale** and it's components are not listed.

SARA Potential Hazard Categories: Immediate Acute Health Hazard, Delayed Chronic Health Hazard

Section 313 Supplier Notification: The product, **Steel Mill Scale** does not contain toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

Regulations Key:

CAA	Clean Air Act (42 USC Sec. 7412; 40 CFR Part 61 [As of: 8/18/06])
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (42 USC Secs. 9601(14), 9603(a); 40 CFR Sec. 302.4, Table 302.4, Table 302.4 and App. A)
CWA	Clean Water Act (33 USC Secs. 1311; 1314(b), (c), (e), (g); 136(b), (c); 137(b), (c) [as of 8/2/06])
RCRA	Resource Conservation Recovery Act (42 USC Sec. 6921; 40 CFR Part 261 App VIII)
SARA	Superfund Amendments and Reauthorization Act of 1986 Title III Section 302 Extremely Hazardous Substances (42 USC Secs. 11023, 13106; 40 CFR Sec. 372.65) and Section 313 Toxic Chemicals (42 USC Secs. 11023, 13106; 40 CFR Sec. 372.65 [as of 6/30/05])
TSCA	Toxic Substance Control Act (15 U.S.C. s/s 2601 et seq. [1976])
SDWA	Safe Drinking Water Act (42 U.S.C. s/s 300f et seq. [1974])

State Regulations: The product, **Steel Mill Scale** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

Pennsylvania Right to Know (RTK): Contains regulated material in the following categories:

- Hazardous Substances: Iron Oxide

California Prop. 65: This product does not contain chemicals which is known to the State of California to cause cancer or reproductive toxicity. For more information go to www.P65Warnings.ca.gov.

New Jersey: None Listed

Minnesota: None Listed

Massachusetts: Iron Oxide

Other Regulations:

WHMIS Classification (Canadian): The product, **Steel Mill Scale** as a whole and it's components are not listed.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 – Other Information

Prepared By: AM Health and Safety, Inc.

Revision History:

7/01/2015 - Add additional means of identification
 10/31/2018 – Update exposure limits and WHMIS 2015

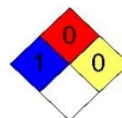
Expiration Date: 10/31/2021

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

National Fire Protection Association (NFPA)



HEALTH= 1, * Denotes possible chronic hazard if airborne dusts or fumes are generated
 Irritation or minor reversible injury possible.

FIRE= 0, Materials that will not burn.

PHYSICAL HAZARDS = 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FIRE = 0, Materials that will not burn.

INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	NIF	No Information Found
BEIs	Biological Exposure Indices	NIOSH	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service	NTP	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	ORC	Organization Resources Counselors
CFR	Code of Federal Regulations	OSHA	Occupational Safety and Health Administration
CNS	Central Nervous System	PEL	Permissible Exposure Limit
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract	PNOR	Particulate Not Otherwise Regulated
HMIS	Hazardous Materials Identification System	PNOC	Particulate Not Otherwise Classified
IARC	International Agency for Research on Cancer	PPE	Personal Protective Equipment
LC₅₀	Median Lethal Concentration	ppm	parts per million
LD₅₀	Median Lethal Dose	RCRA	Resource Conservation and Recovery Act
LD_{Lo}	Lowest Dose to have killed animals or humans	RTECS	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit	SARA	Superfund Amendment and Reauthorization Act
LOEL	Lowest Observed Effect Level	SCBA	Self-contained Breathing Apparatus
LOAEC	Lowest Observable Adverse Effect Concentration	SDS	Safety Data Sheet
µg/m³	microgram per cubic meter of air	STEL	Short-term Exposure Limit
mg/m³	milligram per cubic meter of air	TLV	Threshold Limit Value
mppcf	million particles per cubic foot	TWA	Time-weighted Average
MSHA	Mine Safety and Health Administration	UEL	Upper Explosive Limit
NFPA	National Fire Protection Association		

Disclaimer: This information is taken from sources or based upon data believed to be reliable. However, SSAB Americas and AM Health and Safety, Inc. make no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.