



SAFETY DATA SHEET

1. Identification

GHS product identifier STEEL-IT 4210A Epoxy Primer, Part "A"
Product code 4210A
Version # 01
Issue date 10-29-2012
Revision date -
Supersedes date -
CAS # Mixture
Recommended use Paint / Industrial coating.
Recommended Restrictions Not available.
Manufacturer information Stainless Steel Coatings, Inc
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South Lancaster, MA, 01561
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(978) 365-9828

2. Hazards identification

GHS classification

| | | |
|-------------------------|-----------------------------------|------------|
| Physical hazards | Flammable liquids | Category 2 |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2 |
| | Sensitization, skin | Category 1 |
| | Carcinogenicity | Category 2 |

Environmental hazards Not classified.

GHS label elements

Signal word Danger



Hazard statement Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe the mist or vapor.

Response In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder or water fog for extinction. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Storage Store in a well-ventilated place. Keep cool. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Specific hazards

Vapors irritate the respiratory system, and may cause coughing and difficulties in breathing. May cause lung damage. Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain. Contains ethylbenzene, which is classified as an IARC 2B chemical (Possibly Carcinogenic to Humans).

3. Composition/information on ingredients

| Components | CAS # | Percent |
|---|------------|---------|
| Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol] | 67924-34-9 | 40 - 60 |
| Xylene | 1330-20-7 | 15 - 20 |
| Titanium dioxide | 13463-67-7 | 10 - 15 |
| 1-Methoxy-2-propanol | 107-98-2 | 1 - 5 |
| Barium Phosphate | 10048-98-3 | 1 - 5 |
| Ethylbenzene | 100-41-4 | 1 - 5 |
| Chromium | 7440-47-3 | 1 - 3 |
| Dipropylene glycol monomethyl ether | 34590-94-8 | 1 - 3 |
| m-Xylene | 108-38-3 | 1 - 3 |
| Silicon dioxide | 7631-86-9 | 1 - 2 |
| Nickel | 7440-02-0 | <1 |

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First aid measures

First aid procedures

| | |
|-------------------|--|
| Inhalation | Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort occurs. |
| Skin | Remove contaminated clothing immediately and wash skin with soap and water. If skin rash or an allergic skin reaction develops, get medical attention. |
| Eye | Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention. |
| Ingestion | If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention if any discomfort occurs. |

Most important symptoms and effects, both acute and delayed Vapors may cause drowsiness and dizziness. Irritation of eyes. Skin irritation. Sensitization.

Notes to physician Treat symptomatically.

General advice Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

5. Fire-fighting measures

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed. Solvent vapors may form explosive mixtures with air.

Protective equipment and precautions for firefighters Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Protection of fire-fighters Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

6. Accidental release measures

Personal precautions Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation of vapors and spray mist and contact with skin and eyes.

Environmental precautions Do not allow to enter drains, sewers or watercourses.

Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Methods for cleaning up Remove sources of ignition. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

7. Handling and storage

Handling

Local exhaust is recommended. Avoid inhalation of vapors and spray mist and contact with skin and eyes. The product is highly flammable, and explosive vapor/air mixtures may be formed. Do not smoke, use open fire or other sources of ignition. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Use non-sparking hand tools and explosion-proof electrical equipment. Observe good industrial hygiene practices.

Storage

Store in closed original container in a dry place. Keep away from heat, sparks and open flame. Protect against direct sunlight. Store away from incompatible materials.

8. Exposure controls / personal protection

Control parameters

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|--|------|-----------|---------------------|
| 1-Methoxy-2-propanol (CAS 107-98-2) | STEL | 150 ppm | |
| | TWA | 100 ppm | |
| Barium Phosphate (CAS 10048-98-3) | TWA | 0.5 mg/m3 | |
| Chromium (CAS 7440-47-3) | TWA | 0.5 mg/m3 | |
| Dipropylene glycol monomethyl ether (CAS 34590-94-8) | STEL | 150 ppm | |
| | TWA | 100 ppm | |
| Ethylbenzene (CAS 100-41-4) | TWA | 20 ppm | |
| m-Xylene (CAS 108-38-3) | STEL | 150 ppm | |
| | TWA | 100 ppm | |
| Nickel (CAS 7440-02-0) | TWA | 1.5 mg/m3 | Inhalable fraction. |
| Titanium dioxide (CAS 13463-67-7) | TWA | 10 mg/m3 | |
| Xylene (CAS 1330-20-7) | STEL | 150 ppm | |
| | TWA | 100 ppm | |

Recommended monitoring procedures

Follow standard monitoring procedures.

Engineering controls

Use explosion-proof equipment. Provide adequate ventilation and minimize the risk of inhalation of vapors and mists. Explosion-proof general and local exhaust ventilation. Provide easy access to water supply or an emergency shower.

Personal protective equipment

Eye/face protection

Chemical goggles are recommended.

Skin protection

Wear suitable protective clothing. Chemical/oil resistant clothing is recommended.

Respiratory protection

In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

Hand protection

Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Color

Gray.

Form

Liquid.

Odor

Characteristic of solvents.

Odor threshold

Not available.

pH

Not available.

Melting point/Freezing point

Not available.

Boiling point

241 - 407 °F (116.1 - 208.3 °C)

Flash point

72 °F (22.2 °C)

Evaporation rate

Slower than ether.

Flammability (solid, gas)

Not applicable.

| | |
|---|----------------|
| Flammability limits in air, lower, % by volume | 0.9 % |
| Flammability limits in air, upper, % by volume | Not available. |
| Vapor pressure | Not available. |
| Vapor density | > 1 (air=1) |
| Relative density | 1.3 (77°F) |
| Solubility (H2O) | < 2 g/100 g |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| VOC (Weight %) | 456 g/l |
| Molecular weight | Not available. |
| Other data | |
| Explosive limit | Not available. |
| Explosive properties | Not available. |
| Oxidizing properties | Not available. |

10. Stability and reactivity

| | |
|---|--|
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Will not occur. |
| Conditions to avoid | Heat, sparks, flames. |
| Incompatible materials | Strong oxidizing agents. Strong reducing agents. Strong acids. |
| Hazardous decomposition products | Carbon oxides. Aldehydes. Nitrogen compounds. |

11. Toxicological information

Toxicological data

| Components | Species | Test Results |
|--|---------|-------------------------|
| 1-Methoxy-2-propanol (CAS 107-98-2) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Rat | 15000 ppm, 4 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | 6600 mg/kg |
| Dipropylene glycol monomethyl ether (CAS 34590-94-8) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 9.5 g/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 5.35 g/kg |
| Ethylbenzene (CAS 100-41-4) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 18156 mg/kg |
| <i>Inhalation</i> | | |
| LC50 | Rat | 55000 mg/m ³ |
| <i>Oral</i> | | |
| LD50 | Rat | 3500 mg/kg |
| m-Xylene (CAS 108-38-3) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 12100 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 4300 mg/kg |

| Components | Species | Test Results |
|---|---|--|
| Silicon dioxide (CAS 7631-86-9) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Mouse | > 15000 mg/kg |
| | Rat | > 22500 mg/kg |
| Xylene (CAS 1330-20-7) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Rat | 4300 mg/kg |
| Routes of exposure | Inhalation. Ingestion. Skin contact. Eye contact. | |
| Toxicological information | Occupational exposure to the substance or mixture may cause adverse effects. | |
| Acute toxicity | May cause discomfort if swallowed. | |
| Skin corrosion/irritation | Causes skin irritation. | |
| Serious eye damage/irritation | Causes serious eye irritation. | |
| Respiratory sensitizer | No data available. | |
| Skin sensitization | May cause an allergic skin reaction. | |
| Mutagenicity | No data available. | |
| Carcinogenicity | Suspected of causing cancer. | |
| ACGIH Carcinogens | | |
| Barium Phosphate (CAS 10048-98-3) | | A4 Not classifiable as a human carcinogen. |
| Chromium (CAS 7440-47-3) | | A4 Not classifiable as a human carcinogen. |
| Ethylbenzene (CAS 100-41-4) | | A3 Confirmed animal carcinogen with unknown relevance to humans. |
| m-Xylene (CAS 108-38-3) | | A4 Not classifiable as a human carcinogen. |
| Nickel (CAS 7440-02-0) | | A5 Not suspected as a human carcinogen. |
| Titanium dioxide (CAS 13463-67-7) | | A4 Not classifiable as a human carcinogen. |
| Xylene (CAS 1330-20-7) | | A4 Not classifiable as a human carcinogen. |
| IARC Monographs. Overall Evaluation of Carcinogenicity | | |
| Chromium (CAS 7440-47-3) | | 3 Not classifiable as to carcinogenicity to humans. |
| Ethylbenzene (CAS 100-41-4) | | 2B Possibly carcinogenic to humans. |
| m-Xylene (CAS 108-38-3) | | 3 Not classifiable as to carcinogenicity to humans. |
| Nickel (CAS 7440-02-0) | | 2B Possibly carcinogenic to humans. |
| Silicon dioxide (CAS 7631-86-9) | | 3 Not classifiable as to carcinogenicity to humans. |
| Titanium dioxide (CAS 13463-67-7) | | 2B Possibly carcinogenic to humans. |
| Xylene (CAS 1330-20-7) | | 3 Not classifiable as to carcinogenicity to humans. |
| Reproductive toxicity | No data available. | |
| Specific target organ toxicity - single exposure | No data available. | |
| Specific target organ toxicity - repeated exposure | No data available. | |
| Aspiration hazard | No data available. | |
| Symptoms | Vapors may cause drowsiness and dizziness. Skin and eye irritation. Sensitization. | |
| Other information | Organic solvents may be absorbed into the body by inhalation and cause permanent damage to the nervous system, including the brain. | |

12. Ecological information

Ecotoxicological data

| Components | Species | Test Results |
|-----------------------------|---------|---|
| Ethylbenzene (CAS 100-41-4) | | |
| Aquatic | | |
| Crustacea | EC50 | Daphnia |
| | | 2.1 mg/l, 48 hours |
| Fish | LC50 | Bluegill (<i>Lepomis macrochirus</i>) |
| | | 32 - 88 mg/l, 96 hours |
| | | Fathead minnow (<i>Pimephales promelas</i>) |
| | | 12.1 mg/l, 96 hours |

| Components | Species | Test Results |
|--|--|--|
| m-Xylene (CAS 108-38-3) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (Daphnia magna) 2.81 - 5 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 8.4 mg/l, 96 hours |
| Xylene (CAS 1330-20-7) | | |
| Aquatic | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 8 mg/l, 96 Hours |
| Ecotoxicity | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. | |
| Persistence / degradability | No data available. | |
| Bioaccumulation | | |
| Bioaccumulative potential | | |
| Octanol/water partition coefficient log Kow | | |
| Ethylbenzene | | 3.15 |
| Xylene | | 3.2 |
| m-Xylene | | 3.2 |
| Mobility | The product contains organic solvents which will evaporate easily from all surfaces. | |
| Other adverse effects | No data available. | |
| 13. Disposal considerations | | |
| Disposal methods | Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket. | |
| Waste from residues / unused products | Dispose of in accordance with local regulations. | |
| Contaminated packaging | Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. | |
| 14. Transport information | | |
| ADR | | |
| UN number | UN1263 | |
| Proper shipping name | Paint | |
| Hazard class | 3 | |
| Packing group | III | |
| Environmental hazards | | |
| Marine pollutant | No | |
| Tunnel restriction code | (D/E) | |
| Labels required | 3 | |
| Special precautions | Read safety instructions, SDS and emergency procedures before handling. | |
| IATA | | |
| UN number | UN1263 | |
| Proper shipping name | Paint | |
| Hazard class | 3 | |
| Packing group | III | |
| Labels required | 3 | |
| Special precautions | Read safety instructions, MSDS and emergency procedures before handling. | |
| IMDG | | |
| UN number | UN1263 | |
| Proper shipping name | Paint | |
| Hazard class | 3 | |
| Packing group | III | |
| Environmental hazards | | |
| Marine pollutant | No | |
| Labels required | 3 | |
| EmS | F-E, S-E | |
| Special precautions | Read safety instructions, MSDS and emergency procedures before handling. | |
| RID | | |
| UN number | UN1263 | |

| | |
|------------------------------|---|
| Proper shipping name | Paint |
| Hazard class | 3 |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | No |
| Labels required | 3 |
| Special precautions | Read safety instructions, SDS and emergency procedures before handling. |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Regulatory information This material safety data sheet was prepared in accordance with "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)".

Inventory status

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|-------------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other information

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.

List of abbreviations Not available.