SAFETY DATA SHEET

1. Identification

GHS product identifier	**STEEL-IT #1002B Polyurethane (aerosol)**
(M)SDS number	SDS-1002b-NA
Version #	01
Issue date	03-01-2012
CAS #	Mixture
Recommended use	Not available.
Recommended Restrictions	Not available.
Manufacturer information	Stainless Steel Coatings, Inc 835 Sterling Road South Lancaster, MA, 01561 Contact person: CHEMTREC sds@steel-it.com (978) 365-9828

2. Hazards identification

GHS classification

Physical hazards	Flammable aerosols	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2 (Kidney, Lung)
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 3

GHS label elements

Hazard statement

Causes serious eye irritation. Causes skin irritation. May cause drowsiness or dizziness. May cause respiratory irritation. Toxic to aquatic life with long lasting effects. May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs (Kidney, Lung) through prolonged or repeated exposure. Extremely flammable aerosol. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Ground/bond container and receiving equipment. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Avoid breathing gas/mist/vapors/spray. Avoid release to the environment.
Response	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor if you fell unwell.
Storage	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Specific hazards

Overexposure to mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation.

3. Composition/information on ingredients

Components	CAS #	Percent
Propane	74-98-6	12-18

Acetone	67-64-1	10-16
4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene	98-56-6	10-15
Stoddard solvent	8052-41-3	10-15
Butane	106-97-8	8-14
Solvent naphtha (petroleum), medium aliph.	64742-88-7	3-5
Chromium	7440-47-3	2 - 3
Distillates, (petroleum), Hydrotreated Light	64742-47-8	1-2
Nickel	7440-02-0	1-2
Xylene	1330-20-7	<1
Ethylbenzene	100-41-4	<0.1
Quartz	14808-60-7	<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 If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Skin Wash area with soap and water. Get medical attention if irritation develops or persists.

Eye Check for and remove any contact lenses. Immediately flush with plenty of water for up to 15 minutes. Get medical attention immediately.

Ingestion Get medical attention if any discomfort occurs.

Most important symptoms and effects, both acute and delayed Prolonged or repeated contact may dry skin and cause irritation. Sensitization. Skin irritation. Upper respiratory tract irritation. Headaches, dizziness and nausea.

Notes to physician Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media Carbon dioxide (CO2). Foam. Dry chemical. Water fog.

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.

Protective equipment and precautions for firefighters Move container from fire area if it can be done without risk.

6. Accidental release measures

Personal precautions Ensure adequate ventilation. Wear suitable protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions Prevent entry into waterways, sewer, basements or confined areas.

Methods for containment ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Liquid Spills: Absorb up with sand or other non-combustible absorbent material.

Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Handling Use only with adequate ventilation. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid inhalation of aerosols. Avoid contact with skin and eyes.

Storage Store locked up. Keep container tightly closed and in a well-ventilated place. Store in closed original container at room temperature. Store away from incompatible materials.

8. Exposure controls / personal protection

Control parameters

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Acetone (67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Butane (106-97-8)	TWA	1000 ppm	
Chromium (7440-47-3)	TWA	0.5 mg/m3	
Ethylbenzene (100-41-4)	TWA	20 ppm	
Nickel (7440-02-0)	TWA	1.5 mg/m3	Inhalable fraction.
Propane (74-98-6)	TWA	1000 ppm	
Quartz (14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Solvent naphtha (petroleum), medium aliph. (64742-88-7)	TWA	5 mg/m3	Inhalable fraction.
Stoddard solvent (8052-41-3)	TWA	100 ppm	
Xylene (1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

Recommended monitoring procedures Follow standard monitoring procedures.

Engineering controls Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

Personal protective equipment

Eye/face protection Use approved safety goggles or face shield.

Skin protection Wear appropriate chemical resistant clothing to prevent any possibility of skin contact. Nitrile chemical resistant gloves are recommended.

Respiratory protection In case of inadequate ventilation, use respiratory protection. In case of inadequate ventilation or when the product is heated, use suitable respiratory equipment with gas filter for organic gas.

Hand protection Wear appropriate chemical resistant gloves. Nitrile gloves are recommended. Suitable gloves can be recommended by the glove supplier.

9. Physical and chemical properties

Appearance Aerosol- Pressurized Liquid.

Physical state Liquid.

Color Silver.

Form Spray.

Odor Characteristic of solvents.

Odor threshold No data available

pH Not established.

Melting point/Freezing point Not established.

Boiling point -0.4 - 350.6 °F (-18 - 177 °C)

Flash point < 137 °F (< 58.3 °C) (Propellant)

Evaporation rate Faster than ether (butyl acetate = 1)

Flammability (solid, gas) No data available.

Flammability limits in air, lower, % by volume 2 %

Flammability limits in air, upper, % by volume 10 %

Vapor pressure < 0.48 mPa (at 10 °C/ 70°F)

Vapor density > 1 (Air = 1)

Relative density 0.849 (at 15°C/ 60°F)

Solubility (H2O) No data available

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not established.

Viscosity No data available

VOC (Weight %) 43.28 % Test Method: Product Formulation Data

Bulk density	Not Applicable.
Percent volatile	No data 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. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Metal oxides.

11. Toxicological information

Toxicological data

Components	Test Results
Butane (106-97-8)	Acute Inhalation LC50 Mouse: 680 mg/l 2 Hours Acute Inhalation LC50 Rat: 658 mg/l 4 Hours
Xylene (1330-20-7)	Acute Oral LD50 Rat: 4300 mg/kg
Acetone (67-64-1)	Acute Dermal LD50 Rabbit: 20000 mg/kg Acute Inhalation LC50 Rat: 50 mg/l 8 Hours Acute Oral LD50 Rat: 5800 mg/kg
Propane (74-98-6)	Acute Inhalation LC50 Rat: > 1442.847 mg/l 15 Minutes

Routes of exposure	Eye contact. Inhalation. Skin contact.
Toxicological information	Occupational exposure to the substance or mixture may cause adverse effects.
Acute toxicity	Overexposure to mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation. Causes skin and eye irritation.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitization	None known.
Skin sensitization	May cause an allergic skin reaction.
Mutagenicity	There is no data to indicate that any component present at greater than 0.1% may present a risk.
Carcinogenicity	Suspected of causing cancer.

ACGIH Carcinogens

Acetone (CAS 67-64-1)	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.
Nickel (CAS 7440-02-0)	A5 Not suspected as a human carcinogen.
Quartz (CAS 14808-60-7)	A2 Suspected human carcinogen.
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)	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.
Nickel (CAS 7440-02-0)	2B Possibly carcinogenic to humans.
Quartz (CAS 14808-60-7)	1 Carcinogenic to humans.
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)	3 Not classifiable as to carcinogenicity to humans.
Stoddard solvent (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

Specific target organ toxicity - single exposure	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Respiratory system.
Teratogenicity	There is no data to indicate that any component present at greater than 0.1% may present a risk.
Symptoms	Prolonged or repeated contact may dry skin and cause irritation. Sensitization. Skin irritation. Upper respiratory tract irritation. Headaches, dizziness and nausea.

12. Ecological information

Ecotoxicological data

Components	Test Results
Xylene (1330-20-7)	LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss): 8 mg/l 96 Hours
Acetone (67-64-1)	LC50 Fathead minnow (Pimephales promelas): > 100 mg/l 96 hours

Ecotoxicity Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence / degradability No data available.

Bioaccumulation No data available.

Mobility No data available.

Other adverse effects Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

Disposal methods Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

Waste from residues / unused products Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

ADR

UN number UN1950
UN proper shipping name AEROSOLS
Transport hazard class(es) 2.2
Subsidiary class(es) -
Environmental hazards No
Tunnel restriction code D
Labels required 2.2
Special precautions for user Not available.

IATA

UN number UN1950
UN proper shipping name Aerosols
Transport hazard class(es) 2.1
Subsidiary class(es) -
Environmental hazards No
Labels required 2.2
ERG Code 10L
Special precautions for user Not available.

IMDG

UN number UN1950
UN proper shipping name AEROSOLS
Transport hazard class(es) 2
Subsidiary class(es) 5T
Marine pollutant No
Special precautions for user Not available.

RID

UN number UN1950
UN proper shipping name AEROSOLS
Transport hazard class(es) 2.2
Subsidiary class(es) -
Environmental hazards No
Labels required 2.2
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.

15. Regulatory information

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
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)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply 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.

Revision date 03-02-2012