SAFETY DATA SHEET

64000130

Section 1. Identification

: RADNOR® Cold Galvanizing Compound Zinc-Rich Primer **Product name**

Matte Finish

Product code

: 64000130

Other means of identification

Not available.

Product type

: Aerosol.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Manufacturer

: Mfg. for: Radnor

P.O. Box 6675 Radnor, PA 19087

Emergency telephone number of the company : (216) 566-2917

Product Information

: Not available.

Telephone Number

Regulatory Information **Telephone Number**

: (216) 566-2902

Transportation Emergency

Telephone Number

: (800) 424-9300

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE AEROSOLS - Category 1

GASES UNDER PRESSURE - Compressed gas SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION (Unborn child) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation and Narcotic effects) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 67.9%

GHS label elements

Hazard pictograms









Signal word

: Danger

Section 2. Hazards identification

Hazard statements

- : Extremely flammable aerosol.
 - Contains gas under pressure; may explode if heated.
 - Causes serious eye irritation.
 - Causes skin irritation.
 - Suspected of damaging the unborn child.
 - Suspected of causing cancer.
 - May be fatal if swallowed and enters airways.
 - May cause respiratory irritation.

 May cause drowsiness and dizziness.
 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling.

Response

Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. 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 attention.

Storage

: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

Disposal

Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Supplemental label elements

- DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
- Please refer to the SDS for additional information. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

Date of issue/Date of revision : 5/8/2015. Date of previous issue : No previous validation. Version : 1 2/14

Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Propane	12.8	74-98-6
Butane	12.3	106-97-8
Methyl Ethyl Ketone	11.0	78-93-3
Toluene	4.5	108-88-3
Lt. Aliphatic Hydrocarbon Solvent	3.0	64742-89-8
Heptane	2.7	64742-49-0
Cumene	0.1	98-82-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower **Eve contact** eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it Inhalation

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Flush contaminated skin with plenty of water. Remove contaminated clothing and Skin contact

shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing

before reuse. Clean shoes thoroughly before reuse.

: Get medical attention immediately. Call a poison center or physician. Wash out mouth Ingestion

with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical

attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

: Causes serious eye irritation. **Eve contact**

Can cause central nervous system (CNS) depression. May cause drowsiness and Inhalation

dizziness. May cause respiratory irritation.

: Causes skin irritation. Skin contact

: Can cause central nervous system (CNS) depression. May be fatal if swallowed and Ingestion

enters airways. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

: Adverse symptoms may include the following: **Eve contact**

pain or irritation watering redness

Section 4. First aid measures

Inhalation

: Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact

: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion

: Adverse symptoms may include the following:

nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments

Protection of first-aiders

: No specific treatment.

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

Specific hazards arising from the chemical

: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

Ingredient name	Exposure limits		
Copper Crystalline silica, quartz	ACGIH TLV (United States, 4/2014). TWA: 1 mg/m³, (Cu) 8 hours. Form: Dusts and mists TWA: 0.2 mg/m³ 8 hours. Form: Fume OSHA PEL (United States, 2/2013). TWA: 1 mg/m³ 8 hours. Form: Dusts and mists TWA: 0.1 mg/m³ 8 hours. Form: Fume NIOSH REL (United States, 10/2013). TWA: 1 mg/m³, (Cu) 10 hours. Form: Dusts and mists OSHA PEL Z3 (United States, 2/2013). TWA: 10 mg/m³ 8 hours. Form: Respirable TWA: 250 mpcf 8 hours. Form: Respirable NIOSH REL (United States, 10/2013). TWA: 0.05 mg/m³ 10 hours. Form: Respirable dust ACGIH TLV (United States, 4/2014). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction		

Canada

Occupational exposure limits		TWA	(8 hours))	STEL (15 mins)		Ceiling				
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
Natural graphite	US ACGIH 4/2014	_	2	-	-	-	-	-	-	-	[a] [b] [c]
Natural grapfille	AB 4/2009	-	2	-	-	-	-	-	-	-	[b]
	BC 7/2013	_	2	-	-	-	-	-	-	-	[c]
	ON 1/2013	-	2	-	-	-	-	-	-	+	[a]
	QC 1/2014	-	2	-	-	-	-	-	-	}	[d]
C C::	US ACGIH 4/2014	-	1	-	-	-	-	-	-	-	[d] [e]
US ACGIH 4/2014 AB 4/2009	-	0.2	-	-	-	-	-	-	}	[f]	
	1	-	1	-	-	-	-	-	-	-	[e]
	AB 4/2003	-	0.2	-	-	-	-	-	-	-	[f]
	BC 7/2013	-	1	L	_	-	-	-	-	-	[f] [e] [f] [e] [f]
	BC 172013	-	0.2	_	-	-		-	-	-	[f]
	ON 1/2013	_	1	L	_	_	_	-	-	-	[e]
Copper	ON 1/2013		0.2	L	-	-	-	-	-	-	[f]
	QC 1/2014		1	L	-	_	-	_	-	-	[e] [f]
Copper, Cu	QC 1/2014 QC 1/2014		0.2		-	_	-	-	-	-	[f]
	US ACGIH 4/2014	-	0.025		-	-	-	-	-	-	[a]
Crystalline silica, quartz			0.025		-	_	-	-	-	-	[g]
	AB 4/2009	-	0.025		_	-	-	-	-	-	[c] [a] [d] [d]
	BC 7/2013	-	0.025				_	-	_	-	โลโ
	ON 1/2013	-	0.1	Γ			1_	-	-	1	idi
	QC 1/2014	-		Γ				-	_	-	īdī
Graphite, synthetic	QC 1/2014	-	2	Γ	-						r-1

Form: [a]Respirable fraction [b]Respirable (all forms except graphite fibres) [c]Respirable [d]Respirable dust [e]Dusts and mists [f]Fume [g]Respirable particulate.

Mexico



Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits		
Natural graphite	NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 2 mg/m ³ 8 hours.		
Graphite, synthetic	NOM-010-STPS (Mexico, 9/2000).		
	LMPE-PPT: 2 mg/m³ 8 hours. Form: powder LMPE-PPT: 10 mg/m³ 8 hours.		
Copper	NOM-010-STPS (Mexico, 9/2000).		
ooppo.	LMPE-PPT: 1 mg/m³, (as Cu) 8 hours. Form: powder and fog LMPE-CT: 2 mg/m³, (as Cu) 15 minutes. Form: powder and fog		
	LMPE-CT: 2 mg/m³, (as Cu) 15 minutes. Form: smoke		
	LMPE-PPT: 0.2 mg/m³, (as Cu) 8 hours. Form: smoke		
Crystalline silica, quartz	NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 0.1 mg/m³ 8 hours.		

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Personal protective equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

: Solid. [Rod.] Physical state Black. Color : Odorless. Odor Not available. Odor threshold Not available.

pH : Weighted average: 1112.71°C (2034.9°F) **Melting point**

: Not available. **Boiling point** : Not available. Flash point : Not available. **Evaporation rate** : Not available. Flammability (solid, gas) : Not available. Lower and upper explosive

(flammable) limits

: Not available. Vapor pressure : Not available. Vapor density : Not available. Relative density

: Insoluble in the following materials: cold water and hot water. Solubility

Partition coefficient: n-

octanol/water

: Not available.

: Not available. **Auto-ignition temperature** : Not available. **Decomposition temperature** : Not available. **Viscosity** : Not available. Volatility : Not available. VOC (w/w)

Section 10. Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. Reactivity

The product is stable. **Chemical stability**

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

: No specific data. Conditions to avoid

: Incompatible with some strong acids. Incompatible materials

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Crystalline silica, quartz	-	1	Known to be a human carcinogen.	A2	-	+

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Crystalline silica, quartz	Category 1	Inhalation	kidneys, respiratory tract and testes

Aspiration hazard

There is no data available.

Information on the likely routes of exposure

: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact
Inhalation
Skin contact
Ingestion

No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects



Section 11. Toxicological information

General

: Causes damage to organs through prolonged or repeated exposure.

Carcinogenicity

: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity

: No known significant effects or critical hazards.

Teratogenicity

: No known significant effects or critical hazards.

Developmental effects

: No known significant effects or critical hazards.

Fertility effects

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care



Section 13. Disposal considerations

should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	TDG / NOM-003-SCT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-		-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

AERG: Not applicable.

DOT-RQ Details

: Copper

5000 lbs / 2270 kg

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

: United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Copper

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602

: Not listed

Class I Substances

Clean Air Act Section 602 Class II Substances

: Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List I Chemicals (Precursor Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients



Section 15. Regulatory information

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification : Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Crystalline silica, quartz	0.1 - 1	No.	No.	No.	No.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Copper	7440-50-8	10 - 30
Supplier notification	Copper	7440-50-8	10 - 30

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts

: The following components are listed: Natural graphite; Copper; Crystalline silica, quartz

New York

: The following components are listed: Copper

New Jersey

: The following components are listed: Natural graphite; Copper; Crystalline silica, quartz

Pennsylvania

: The following components are listed: Natural graphite; Copper; Crystalline silica, quartz

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Carbon Arc electrodes Crystalline silica, quartz	Yes.	No.	No.	No.
	Yes.	No.	No.	No.

Canada

Canadian lists

Canadian NPRI

: The following components are listed: Copper

CEPA Toxic substances

: None of the components are listed.

Canada inventory

: All components are listed or exempted.

International lists

National inventory

Australia : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : Not determined.

Malaysia : Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Carbon Arc electrodes

Section 15. Regulatory information

: All components are listed or exempted. Republic of Korea

Taiwan Not determined.

Section 16. Other information

History

Date of issue mm/dd/yyyy : 05/15/2015 : 05/15/2014 Date of previous issue

: 5 Version

: KMK Regulatory Services Inc. Prepared by

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.