

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Nickel Paste

Product Number: All applicable American Elements product codes, e.g. NI-M-01-PST

CAS #: 7440-02-0

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:

+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS02 Flame

Flam. Sol. 2 H228 Flammable solid.

GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

STOT RE 1 H372 Causes damage to the lung, the kidneys and the liver through prolonged or repeated exposure. Route of exposure: Inhalative.

GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

T; Toxic

R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.

Xn; Harmful

R40: Limited evidence of a carcinogenic effect.

Xi; Sensitizing

R43: May cause sensitization by skin contact.

F; Highly flammable

R11: Highly flammable.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Carc. Cat. 3

Information concerning particular hazards for human and environment:

N/A

Hazards not otherwise classified

No data available.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.

Hazard pictograms



Signal word: Danger

Hazard statements

H228 Flammable solid.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H372 Causes damage to the lung, the kidneys and the liver through prolonged or repeated exposure.

Route of exposure: Inhalative.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

B4 - Flammable solid

D2A - Very toxic material causing other toxic effects

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH

FIRE

REACTIVITY

1

3

1

Health (acute effects) = 1

Flammability = 3

Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment:

PBT: N/A.

vPvB: N/A.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

CAS No. / Substance Name:

7440-02-0 Nickel

Identification number(s):
EC number: 231-111-4
Index number: 028-002-01-4

SECTION 4. FIRST AID MEASURES

Description of first aid measures

If inhaled:

Supply fresh air. If not breathing, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

In case of skin contact:

Immediately wash with soap and water; rinse thoroughly.

Seek immediate medical advice.

In case of eye contact:

Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Special powder for metal fires. Do not use water.

For safety reasons unsuitable extinguishing media

Carbon dioxide

Water

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Nickel oxides

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

Environmental precautions:

Do not allow material to be released to the environment without official permits.

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

Methods and material for containment and cleanup:

Keep away from ignition sources.
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
Prevention of secondary hazards:
Keep away from ignition sources.
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.

SECTION 7. HANDLING AND STORAGE

Handling

Precautions for safe handling
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure adequate ventilation.
Information about protection against explosions and fires:
Protect against electrostatic charges.
Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles:
Store in a cool location.
Information about storage in one common storage facility:
Store away from oxidizing agents.
Store away from halogens.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well-sealed containers.
Specific end use(s)
No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

7440-02-0 Nickel (100.0%)

PEL (USA) Long-term value: 1 mg/m³

REL (USA) Long-term value: 0.015 mg/m³ as Ni; See Pocket Guide App. A

TLV (USA) Long-term value: 1.5* mg/m³ elemental, *inhalable fraction

EL (Canada) Long-term value: 0.05 mg/m³ as Ni; ACIGH A1, IARC 1

EV (Canada) Long-term value: 1* 0.2** 0.1*** mg/m³ inh.;*metal;**insol. compds.;***soluble compds.

Additional information: No data

Exposure controls

Personal protective equipment

Follow typical general protective and industrial hygiene measures for handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Recommended filter device for short term use:

Use a respirator with type P100 (USA) or P3 (EN 143) cartridges as a backup to engineering controls.

Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.

Protection of hands: Impervious gloves

Inspect gloves prior to use.

Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer.

Material of gloves

Nitrile rubber, NBR

Penetration time of glove material (in minutes)

480

Glove thickness

0.11 mm

Eye protection: Safety glasses

Body protection: Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Powder or flakes

Color: Silver gray

Odor: Odorless

Odor threshold: No data available.

pH: N/A.

Melting point/range: 1455 °C (2651 °F)

Boiling point/range: 2732 °C (4950 °F)

Sublimation temperature / start: No data available.

Flammability (solid, gas): Highly flammable.

Ignition temperature: No data available.

Decomposition temperature: No data available.

Auto igniting: No data available.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: No data available.

Upper: No data available.

Vapor pressure: N/A.

Density at 20 °C (68 °F): 8.908 g/cm³ (74.337 lbs/gal)

Relative density: No data available.

Vapor density: N/A.

Evaporation rate: N/A.

Solubility in Water (H₂O): Insoluble

Partition coefficient (n-octanol/water): No data available.

Viscosity:

Dynamic: N/A.

Kinematic: N/A.

Other information

No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions

No dangerous reactions known

Conditions to avoid

No information available.

Incompatible materials:

Halogens

Hazardous decomposition products:

Nickel oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.

LD/LC50 values that are relevant for classification: No data

Skin irritation or corrosion: May cause irritation

Eye irritation or corrosion: Irritating effect.

Sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.

Carcinogenicity: Suspected of causing cancer.

IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.

NTP-R: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.

ACGIH A5: Not suspected as a human carcinogen: Not suspected as a human carcinogen on the basis of properly conducted epidemiologic studies in humans.

Studies have sufficiently long follow-up, reliable exposure histories, sufficiently high dose, and adequate statistical power to conclude that exposure to the agent does not convey a significant risk of cancer to humans. Evidence suggesting a lack of carcinogenicity in experimental animals will be considered if it is supported by other relevant data.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.

Reproductive toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.

Specific target organ system toxicity - repeated exposure:

Causes damage to the lung, the kidneys and the liver through prolonged or repeated exposure. Route of exposure: Inhalative.

Specific target organ system toxicity - single exposure: N/A

Aspiration hazard: N/A

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Carcinogenic categories

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity:

No information available.

Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

Mobility in soil:

No information available.

Ecotoxicological effects:

Remark:

Harmful to aquatic organisms

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system.

Do not allow material to be released to the environment without official permits.

Danger to drinking water if even small quantities leak into the ground.

May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

Harmful to aquatic organisms

Results of PBT and vPvB assessment:

PBT: N/A.

vPvB: N/A.

Other adverse effects

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation:

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number

DOT, IMDG, IATA

UN3089
UN proper shipping name
DOT
RQ Metal powders, flammable, n.o.s. (Nickel powder)
IMDG, IATA
METAL POWDER, FLAMMABLE, N.O.S. (Nickel powder)
Transport hazard class(es)
DOT
Class
4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
Label
4.1
Class
4.1 (F3) Flammable solids, self-reactive substances and solid desensitised explosives
Label
4.1
IMDG, IATA
Class
4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
Label
4.1
Packing group
DOT, IMDG, IATA
II
Environmental hazards:
N/A.
Special precautions for user
Warning: Flammable solids, self-reactive substances and solid desensitised explosives
EMS Number:
F-G,S-G
Segregation groups
Heavy metals and their salts (including their organometallic compounds), powdered metals
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N/A.
Transport/Additional information:
DOT
Hazardous substance:
100 lbs, 45.4 kg
Marine Pollutant (DOT):
No
UN "Model Regulation":
UN3089, Metal powders, flammable, n.o.s. (Nickel powder), 4.1, II

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).
SARA Section 313 (specific toxic chemical listings)
7440-02-0 Nickel
California Proposition 65

Prop 65 - Chemicals known to cause cancer

7440-02-0 Nickel

Prop 65 - Developmental toxicity

Substance is not listed.

Prop 65 - Developmental toxicity, female

Substance is not listed.

Prop 65 - Developmental toxicity, male

Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use)

Substance is not listed.

REACH - Pre-registered substances

Substance is listed.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Pictograms



GHS Categories

GHS02

Flammable

Flam. Liq. 2: H225

GHS08

Health Hazard

Carcinogenicity

2: H351

Rep. Tox. 2: H361

Spec. Organ Tox., Single exposure 3: H372

GHS07

Irritant

Spec. Target Organ Tox., Repeated exposure 1,2:

H336

Eye irritation 2: H319

Sensitization 1: H317

Skin irritation 3: H315

Environmental hazard: Chronic Aquatic Toxicity 3: H412

2.2 Label elements

Signal word: DANGER

Hazard statements

H225

Highly flammable liquid and vapor.

H315

Causes skin irritation.

H317

May cause allergic skin reaction.

H319

Causes serious eye irritation.

H336

May cause drowsiness and dizziness.

H351

Suspected of causing cancer.

H361

Suspected of damaging fertility or the unborn child.

H372

Causes damages to organs (lungs, central nervous system, inner ear) through prolonged or repeated exposure by inhalation.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statements

P102

Keep out of reach of children.

P201

Obtain special instructions before use.

P202

Do not handle until all safety precautions have been read and understood.

P210

Keep away from heat, hot surfaces, sparks, flames, and other ignition sources. No Smoking.

P233

Keep container tightly closed.

P240

Ground and bond container and receiving equipment.

P243

Take action to prevent static discharges.

P260

Do not breathe mist/vapors/spray.

P264

Wash hands thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P271

Use only outdoors or in a well-ventilated area.

P272

Contaminated work clothing should not be allowed out of the workplace.

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection.

P303+P361+P364+P352

IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water.

P304+P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313

IF exposed or concerned: Get medical advice/attention.

P312

Call a POISON CENTER/doctor if you feel unwell.

P333+P313

If skin irritation or rash occurs: Get medical advice/attention.

P337+P313

If eye irritation persists: Get medical advice/attention.

P370+P378

In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.

P403+P235

Store in a well-ventilated place. Keep cool.

P405

Store locked up.

P501

Dispose of contents/container in accordance to local/regional/international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Nickel (7440-02-0) 30-60%

Toluene(108-88-3) 7-13%

Acetone(67-64-1) 5-10%

SECTION 4. FIRST AID MEASURES

Eye(s) Contact:

Symptoms: Immediate: irritation, redness.

Response:

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.

Skin Contact:

Symptoms: Immediate: irritation, pain, redness; Delayed: dry skin, rash.

Response:

Take off contaminated clothing and wash it before reuse.

Wash with plenty of water.

If skin irritation or rash persists, get medical attention.

Inhalation:

Symptoms: Immediate: dizziness, drowsiness, headaches, nausea, cough, blurred vision, fatigue.

Response:

Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing.

If feeling unwell, call a POISON CENTER/doctor.

If exposed or concerned: Get medical advice.

Ingestion:

Symptoms: Immediate: nausea, sore throat, diarrhea, drowsiness, or dizziness.

Response:

Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. If exposed or concerned: Get medical advice.

Note to physician

Treatment: ND
Medical Conditions generally
Aggravated by Exposure: ND

SECTION 5. FIREFIGHTING MEASURES

Flash Point: -17°C.

Lower bound FP estimate is based on the closed cup value for the acetone component.

Flammable Limits:

LFL 1% UFL 12% (in volume%)

Auto-ignition point:

≥315°C.

Values based on 1-methoxy-2-propanol acetate, which is the component with the lowest auto-ignition value.

Fire Extinguishing Media:

Use dry chemical, carbon dioxide, or chemical foam to extinguish

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and full fire-fighting turn-out gear for fire-fighting

Unusual Fire and Explosion Hazards:

Will burn if involved in a fire.

The liquid may float on water and ignite.

Vapors are heavier than air, and may travel to sources of ignition near the ground.

Vapors may travel long distances and ignite at an ignition source, which can cause a flashback or an explosion. Produces irritating and toxic fumes in fires or in contact with hot surfaces. May produce very toxic nickel carbonyl gas in the presence of carbon monoxide in a reducing atmosphere.

Hazardous combustion products:

Produces CO, CO₂, nitrous oxides, nickel oxides, and smoke. May produce a very toxic nickel carbonyl gas in presence of CO.

DOT Class:

Flammable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled:

Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection.

Precautions for response: Do not breathe the mist/spray/vapors. Remove or keep away all sources of extreme heat or open flames.

Cleaning: Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound (such as soil, sand, vermiculite) onto spill, then sweep into the container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water to remove the last traces of residue.

Environmental precautions: Avoid releasing to the environment. Prevent spill from entering drains and waterways.

Recommendation: A metal container is suggested. Dispose of spill waste according to Section 13

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

SECTION 7. HANDLING AND STORAGE

Precautions to be taken in Handling and Storage.

Prevention:

Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe mist/vapors/spray. Do not eat, drink, or smoke when using this product. Store in well-ventilated place. Store locked up.

Handling:

Wear protective gloves/protective clothing/eye protection. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Avoid release to the environment.

Storage temperature:

Keep cool.

Storage Pressure:

NA

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Ventilation required:

Keep airborne concentrations below exposure limits given in Section 3.

Recommendation: Respect the time weighted average of 20 ppm for toluene.

Personal Protection Equipment

Respiratory protection:

For over-exposures up to 10 x OEL of mist/vapors/spray, wear respirator such as a half-mask respirator with organic vapor cartridges. Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus. RECOMMENDATION:

Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this SDS, and that the respirator is fitted to the employee by a professional.

Recommendation: Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this

MSDS, and that the respirator is fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

Protective gloves:

For likely contacts, use of protective butyl rubber, fluorinated rubber, or other chemically resistant gloves. For incidental contacts, use nitrile, neoprene, PVC gloves, or other chemically-resistant gloves.

Skin protection:

Wear appropriate protective clothing to prevent skin contact.

Eye protection:

Wear appropriate protective eyeglasses or chemical safety goggles.

Recommendation: Use safety glasses with lateral protection (side shields).

General hygiene considerations:

Wash hands thoroughly with water and soap after handling.

Additional clothing and/or equipment:

ND

Exposure Guidelines

See Composition/Information on Ingredients
(Section 3)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Physical State:

Steel grey liquid.

Odor (threshold):

Benzene like, sweetish (2 ppm)

Specific Gravity (H₂O=1):

1.67 @25°C

Vapor Pressure (mm Hg):

100 hPa [75 mmHg]

Vapor Density (air=1):

>2

Percent Volatile by volume:

ND

VOC (Volatile Organic Content) = 27% [466 g/L]

Evaporation Rate (butyl acetate=1):

Fast

Boiling Point:

≥56 °C

Freezing point / melting point:

NE

Partition Coefficient:

NE

Viscosity:

≥34 mm²/s @40°C

pH:

NE

Solubility in Water:

Partial

Molecular Weight:

NA

SECTION 10. STABILITY AND REACTIVITY

Stability:

Stable at normal temperatures and pressures.

Conditions to Avoid:

Ignition sources, open flames, excessive heat, and incompatible substances.

Materials to Avoid (Incompatibility):

Strong oxidizing agents, strong acids, strong bases, ammonium nitrate, perchlorates, phosphorus, selenium, and sulfur.

Reactivity: The nickel can react vigorously with acids and liberate hydrogen, which can form an explosive mixture in air. Nickel may react with carbon monoxide in a reducing atmosphere to form a very toxic nickel carbonyl gas.

Hazardous Decomposition Products:

Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

Hazardous Polymerization:

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Routes of exposure:

eyes, ingestion, inhalation, and skin.

Symptoms summary

Eyes

Cause eye redness and severe irritation.

Skin

May causes skin redness and mild irritation.

Inhalation

May cause drowsiness, dizziness, cough, headaches, nausea, unconsciousness.

Ingestion

May cause nausea, sore throat, and diarrhea (see inhalation symptoms).

Chronic

Prolonged or repeated exposure may cause skin dryness, cracking, as well as defatting the skin.

Chronic inhalation exposure to nickel dust or mist may affect the central nervous system, damage lungs, and lead to hearing loss with co-exposure to loud noises.

Ingestion or inhalation of paint material, mist, or vapor during pregnancy may increase the chances fetal death and developmental defects.

Human experience

Skin corrosion/irritation:

The toluene component is a known severe skin irritant.

Prolonged or repeated skin contact may cause dermatitis.

Serious eye damage/irritation:

Acetone, ethanol, and ethyl acetate cause serious eye irritations. Contains mechanically abrasive particles.

Sensitization (allergic reactions): Nickel may cause skin sensitization in humans.

Carcinogenicity (risk of cancer):

Nickel is classified as a suspect carcinogen based on animal intratracheal instillation (intubation) or interperitoneal (in body cavity) injection studies. A reliable 2008 study by Oller et al. shows no carcinogenicity for the nickel metal via normal inhalation route. Evidence of carcinogenicity of ethanol relates to excessive alcoholic beverage consumption, and doesn't relate to exposure risks when used in the workplace or as a non-comestible consumer product.

SECTION 12. ECOLOGICAL INFORMATION

Acute ecotoxicity: Harmful to aquatic life with long lasting effects.

Chronic Ecotoxicity:

Harmful to aquatic life with long lasting effects.

Avoid release to the environment.

Collect spillage.

Biodegradability: The nickel content is not biodegradable.

Note: Nickel can be recovered from the waste to reclaim the value of the nickel.

Chemical Fate Information:

ND

SECTION 13. DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 Classification:

ND

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

SECTION 14. TRANSPORT INFORMATION

Classified as Consumer Commodity. Ground USA: -4L size and smaller

US DOT Information: Proper shipping name:

Paint

Hazard Class: 3

Packaging group:

II

UN Number:

UN1263

IATA: Proper shipping name:

Paint

Hazard Class:

3

Packing group:

II

UN Number:

UN1263

Marine Pollutant:

None listed

Canadian TDG:

Proper shipping name: Paint

Hazard class: 3

Packing group: II

UN Number: UN1263

SECTION 15. REGULATORY INFORMATION

SDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product contains toluene (CAS# 108-88-3), which is listed as hazardous air pollutants.

SARA:

(Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

SARA Title III:

This product contains Toluene (CAS# 108-88-3, 13%) and Nickel (CAS #7440-02-0 (45%), 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

RCRA:

ND

EPCRA

(Emergency Planning and Right to Know Act, USA, 40 CFR 372.45

This product contains toluene (CAS# 108-88-3) and nickel (CAS# 7440-02-0) subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA:

(Toxic Substances Control Act of 1976, USA) All substances are TSCA listed.

CERCLA:

The following components are listed:

Toluene

(CAS# 108-88-3)

RQ is 1000lbs, Acetone(67-64-1)

RQ is 5000 lbs,

Nickel (CAS #7440-02-0)

RQ is 100 lbs, Ethyl acetate (141-78-6)

RQ is 5000lbs. State Regulations

California Proposition 65:

Warning! This product is or contains chemical(s) known to the state of California to cause cancer or reproductive harm.

This product contains Nickel,(metallic), which is listed as a carcinogen.

This product contains toluene, which is listed as reproductively toxic.

International Regulations

Canada WHMIS: Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL/NDSL.

Europe EINECS Numbers:

ND

Europe:

RoHS:

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.