



NFPA:

Safety Data Sheet

Revision: A

Carbon Steel Inserts (Metal / Automotive)

Date of Issue: 02/17/2017

SECTION 1: Identification

1.1 Product identifier

Product name **Carbon Steel Inserts (Metal / Automotive)**
Substance name(s) **Carbon Steel (12L14) / LOCTITE 204 / DURA COAT 104**

1.2 Other means of identification

E-Z LOK Part Numbers (Course Thread Sizes): 329-004, 329-006, 329-008, 329-3, 329-4, 329-401, 329-5, 329-501, 329-6, 329-601, 329-7, 329-8, 329-9, 329-10, 329-1018, 329-12, 329-14, 329-16

E-Z LOK Part Numbers (Fine Thread Sizes): 329-332, 329-428, 329-524, 329-624, 329-720, 329-820, 329-918, 329-10F, 329-1216, 329-1414, 329-1614

E-Z LOK Part Numbers (Extra Heavy Wall - Course Thread Sizes): 335-4, 335-5, 335-6, 335-8, 335-10

E-Z LOK Part Numbers (Thin Wall - Course Thread Sizes): 319-3, 319-4, 319-5, 319-6, 319-7, 319-8

E-Z LOK Part Numbers (Thin Wall - Fine Thread Sizes): 319-332, 319-428, 319-524, 319-624, 319-720, 319-820

E-Z LOK Part Numbers (Thin Wall - Metric Thread Sizes): 319-M4, 319-M5, 319-M6, 319-M8, 319-M10, 319-M12

E-Z LOK Part Numbers (Screw Locking Inserts): 329-3-IC, 329-332-IC, 329-4-IC, 329-5-IC, 329-6-IC, 329-8-IC

E-Z LOK Part Numbers (Metric Thread Sizes - Metric Internal / Metric External): 450-3, 450-4, 450-5, 450-6, 450-8, 450-10, 450-12, 450-16, 450-20, 450-24

E-Z LOK Part Numbers (Metric Thread Sizes - U.S. Internal / Metric External): 550-006, 550-008, 550-1024, 550-1032, 550-1420, 550-5, 550-6, 550-8

E-Z LOK Part Numbers (Metric Thread Sizes - U.S. Internal / US External): 650-6, 650-8, 650-10, 650-10F, 650-12, 650-14, 650-16

E-Z LOK Part Numbers (Spark Plug Sizes): 329-1008, 329-1208, 329-1212, 750-14, 329-1406, 329-1408, 329-1412, 329-1808

E-Z LOK Part Numbers (VW Case Savers): 330-10, 330-11

E-Z LOK Kit Numbers (Course Thread - #10 to 7/16"): EZ C107

E-Z LOK Kit Numbers (Course Thread - #10 to 1/2"): EZ C108

E-Z LOK Kit Numbers (Course Thread - 1/2" to 1"): EZ C816

E-Z LOK Kit Numbers (Fine Thread - #10 to 7/16"): EZ F107

E-Z LOK Kit Numbers (Fine Thread - #10 to 1/2"): EZ F108

E-Z LOK Kit Numbers (Fine Thread - 1/2" to 1"): EZ F816

E-Z LOK Kit Numbers (Carbon Steel Thread Inserts For Metal - Metric Thread M3 to M8): EZ M100

E-Z LOK Kit Numbers (Carbon Steel Thread Inserts For Metal - Metric Thread M8 to M16): EZ M200

E-Z LOK Kit Numbers (Carbon Steel Thread Inserts For Metal - Course Thread #10 to 1/2"): EZ M508

E-Z LOK Kit Numbers (Carbon Steel Thread Inserts For Metal - Metric Thread M6 to M12): EZ M612

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1.4 Supplier's details

Name	E-Z LOK
Address	240 E. Rosecrans Avenue Gardena, CA 90248 United States
Telephone	(310) 323-5613
Fax	(310) 353-3919
email	sschaeper@ezlok.com

1.5 Emergency phone number(s)

(800) 234-5613

SECTION 2: Hazard identification

General hazard statement

May cause an allergic skin reaction.
Suspected of causing Cancer.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause eye, skin and respiratory tract irritation.

2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Sensitization, respiratory (chapter 3.4), Cat. 1
- Sensitization, skin (chapter 3.4), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 1
- Corrosive to metals (chapter 2.16), Cat. 1
- Carcinogenicity (chapter 3.6), Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H318	Causes serious eye damage.
H314	Causes severe skin burns and eye damage.
H290	May be corrosive to metals.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapor/spray.
P284	[In case of inadequate ventilation] wear respiratory protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER / doctor.
P501	Dispose of contents/container to an approved waste disposal plant.

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P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.
P321	Specific treatment (see ... on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P305+P351+P338	IF IN EYES: Rinse cautiously with water, remove contact lenses.
P260	Do not breathe dust/fume/gas/mist/vapor/spray.
P264	Wash ... thoroughly after handling.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P310	Immediately call a POISON CENTER, or doctor / physician.
P234	Keep only in original container.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosive resistant/... container with a resistant inner liner.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name(s) **Carbon Steel (12L14) / LOCTITE 204 / DURA COAT 104**

Hazardous components

Carbon Steel (12L14):

1. Iron

Concentration < 98 %
CAS no. 7439-89-6

2. Manganese

Concentration < 2 %
CAS no. 7439-96-5

3. Sulfur

Concentration < 1 %
CAS no. 7704-34-9

4. Lead

Concentration < 1 %
CAS no. 7439-92-1

5. Carbon

Concentration < 1 %
CAS no. 7440-44-0

6. Phosphorus

Concentration < 1 %
CAS no. 7723-14-0

7. Chromium

Concentration < 1 %
CAS no. 7440-47-3

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8. Nickel

Concentration < 1 %
CAS no. 7440-02-0

LOCTITE 204:

1. 2-Propenoic acid, 2-methyl-, 1,1'- (1-methylethylidene) bis (4,1-phenyleneoxy-2,1-ethanediyl) ester

Concentration 30 - < 60 %
CAS no. 24448-20-2

2. Quartz / Silica, crystalline (airborne particles of respirable size)

Concentration 1 - < 5 %
CAS no. 14808-60-7

3. Acrylic polymer

Concentration 1 - < 5 %
CAS no. 25212-88-8

4. Ammonium benzoate

Concentration 1 - < 5 %
CAS no. 1863-63-4

DURA COAT 104:

1. Phosphoric acid (<40%)

Concentration 30 - < 40 %
CAS no. 7664-38-2

2. Nitric acid (<40%)

Concentration 20 - < 25 %
CAS no. 7697-37-2

3. Nickel (II) Carbonate

Concentration 1 - 2 %
CAS no. 3333-67-3

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	If exposed or concerned: Get medical advice / attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
If inhaled	If breathed in, move person into fresh air. If person is not breathing, give artificial respiration. If symptoms develop and persist, consult a physician.
In case of skin contact	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash skin with soap and water and dry hands.
In case of eye contact	Rinse with copious amounts of tepid water, for at least 15 minutes, holding eyelids open all the time. Get medical attention if irritation develops and persists.

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If swallowed

Never give anything by mouth to an unconscious person.
Rinse mouth with water. Keep individual calm.
Get medical attention if symptoms develop or persist.

4.2 Personal protective equipment for first-aid responders

Ensure that emergency responders & medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.3 Most important symptoms/effects, acute and delayed

Dermatitis, Rash.
May cause an allergic skin reaction.

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

Provide general supportive measures and treat symptomatically.
Keep victim under observation.
Symptoms may be delayed.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, foam, dry chemical or carbon dioxide.

5.2 Specific hazards arising from the chemical

When these products are exposed to fire, Oxides of carbon, Oxides of Nitrogen, Oxides of Sulfur, Acrylic Monomers, Irritating Organic Vapors, and gases that are hazardous to health may be formed.

5.3 Special protective actions for fire-fighters

Do not use high pressure water jet as an extinguisher, as this may spread the fire.
Self-contained breathing apparatus and full protective clothing (turn out gear) must be worn in case of fire.

5.4 Further information

Move products from the fire area if you can do so without risk.
Use standard firefighting procedures and consider the hazards of all materials involved.
No unusual fire or explosion hazards noted.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away.
Isolate the hazard area.
Materials are solid products that will have minimal impact if an accidental spill of products occurs.

6.2 Environmental precautions

Do not allow the products to enter sewers, storm water vaults, or surface waters.

6.3 Methods and materials for containment and cleaning up

Products can be contained by shovels and brooms (solid products).
Place cleaned up products into proper DOT storage container(s).
Keep container(s) tightly closed during transportation and disposal activities.
Waste container(s) will require a Hazardous Waste Label that is properly filled out.
Following product recovery, flush area with water.

6.4 Reference to other sections

For personal protection see section 8 of the SDS.
For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not handle until all safety precautions have been read and understood.
Avoid contact with eyes, skin and clothing.
Avoid prolonged vapor or mist exposures.
Provide adequate ventilation.
Wear appropriate personal protective equipment.
Observe good industrial hygiene practices and wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

All personnel who handle these products should be trained in its safe handling.
Store in original tightly closed containers, in cool, dry, and well ventilated areas.
Keep away from heat, sparks and open flames.
Store away from incompatible materials, acids, oxidizing agents, and caustics.
See section 10 of the SDS for incompatible chemicals & materials.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Chromium (II) compounds (as Cr) (CAS: 7440-47-3)

PEL (Inhalation): 0.5 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

2. Chromium (II) compounds (as Cr) (CAS: 7440-47-3)

PEL (Inhalation): 0.5 mg/m³ (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

3. Chromium (II) compounds (as Cr) (CAS: 7440-47-3)

REL (Inhalation): 0.5 mg/m³, See Appendix C (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

4. Chromium (III) compounds (as Cr) (CAS: 7440-47-3)

PEL (Inhalation): 0.5 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

5. Chromium (III) compounds (as Cr) (CAS: 7440-47-3)

PEL (Inhalation): 0.5 mg/m³ (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

6. Chromium (III) compounds (as Cr) (CAS: 7440-47-3)

REL (Inhalation): 0.5 mg/m³, See Appendix C (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

7. Chromium metal and insol. salts (as Cr) (CAS: 7440-47-3)

PEL (Inhalation): 1 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

8. Chromium metal and insol. salts (as Cr) (CAS: 7440-47-3)

PEL (Inhalation): 0.5 mg/m³ (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

9. Chromium metal and insol. salts (as Cr) (CAS: 7440-47-3)

REL (Inhalation): 0.5 mg/m³, See Appendix C (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

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10. Silica, crystalline quartz, respirable dust (CAS: 14808-60-7)

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

11. Silica, crystalline quartz, respirable dust (CAS: 14808-60-7)

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

12. Silica, crystalline quartz, respirable dust (CAS: 14808-60-7)

REL (Inhalation): See Annotated Z-3 (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Provide sufficient mechanical ventilation to maintain exposure below exposure guidelines.

Ventilation rates should be matched to conditions.

If exposure limits have not been established, maintain airborne levels to an acceptable level, or below levels that cause known, suspected, or adverse effects.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

If contact is likely, full face shield, safety goggles, or safety glasses with side shields are recommended.

Skin protection

Wear appropriate chemical resistant gloves (pvc / nitrile), chemical resistant clothing, or an impervious apron to prevent skin contact.

Body protection

Wear appropriate chemical resistant clothing.

Use of an impervious apron is recommended.

Respiratory protection

In cases of insufficient ventilation, wear suitable respiratory equipment.

Use a NIOSH approved air purifying respirator if there is a potential to exceed exposure limit(s).

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Control banding approach

Not Applicable

Environmental exposure controls

Not Applicable

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Solid (Carbon Steel) / Liquid (LOCTITE 204) / Liquid (DURA COAT 104)
Odor	Odorless (Carbon Steel) / Mild (LOCTITE 204) / Faint (DURA COAT 104)
Odor threshold	Not Available
pH	N/A (Carbon Steel) / 7.0 - 10.0 (LOCTITE 204) / 1.0 (DURA COAT 104)
Melting point	2795° F / 1535° C (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Initial boiling point	5432° F / 3000° C (Carbon Steel) / 212° F / 100° C (LOCTITE 204) / N/A (DURA COAT 104)
Flash point	N/A (Carbon Steel) / >199.4° F / 93° C (LOCTITE 204) / N/A (DURA COAT 104)
Evaporation rate	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Flammability (solid, gas)	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Upper/lower flammability limits	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Upper/lower explosive limits	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Vapor pressure	N/A (Carbon Steel) / 20 mm hg @ 71.6° F / 22° C (LOCTITE 204) / N/A (DURA COAT 104)
Vapor density	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Relative density	~7.9 (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Solubility	N/A (Carbon Steel) / Partially Soluble (LOCTITE 204) / N/A (DURA COAT 104)
Partition coefficient: n-octanol/water	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Auto-ignition temperature	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Decomposition temperature	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Viscosity	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Explosive properties	None (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)
Oxidizing properties	N/A (Carbon Steel) / N/A (LOCTITE 204) / N/A (DURA COAT 104)

Other safety information

VOC Content = N/A (Carbon Steel) / 7.77 % / 85.7 g/l (LOCTITE 204) / N/A (DURA COAT 104)

SECTION 10: Stability and reactivity

10.1 Reactivity

Carbon Steel = This product is stable and non-reactive under normal conditions of use, storage and transport.
LOCTITE 204 = No reactivity hazards are known.
DURA COAT 104 = No reactivity hazards are known.

10.2 Chemical stability

Carbon Steel = Material is stable under normal conditions.
LOCTITE 204 = Stable.
DURA COAT 104 = Material is stable under normal conditions of use.

10.3 Possibility of hazardous reactions

Carbon Steel = No dangerous reaction known under conditions of normal use.
LOCTITE 204 = Will not occur.
DURA COAT 104 = No hazardous reactions are known under conditions of normal use.

10.4 Conditions to avoid

Carbon Steel = Contact with incompatible materials. Steel at temperatures above the melting point may liberate fumes containing oxides of iron and alloying agents. Avoid generation of airborne fumes.
LOCTITE 204 = See Handling & Storage (section 7 of this SDS), and Incompatible Materials (section 10 of this SDS).
DURA COAT 104 = Keep away from heat, sparks, open flames / Protect from freezing.

10.5 Incompatible materials

Carbon Steel = Strong Oxidizing Agents, Acids.
LOCTITE 204 = Reducing Agents, Strong Oxidizing Agents, Strong Acids & Bases, Free Radical Inhibitors, Heat, Direct Sunlight, UV Light, and an Oxygen Free Atmosphere.
DURA COAT 104 = Strong Acids & Bases, and Oxidizing Agents.

10.6 Hazardous decomposition products

Carbon Steel = Metallic fumes may be produced during welding, burning, grinding, and possibly during machining or any situation with the potential for thermal decomposition.
LOCTITE 204 = Oxides of carbon, nitrogen, sulfur, Acrylic monomers, and irritating organic vapors.
DURA COAT 104 = May include Oxides of carbon, nitrogen, phosphorous, nickel, and hydrogen fluoride.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Carbon Steel (12L14):

1. Iron

Chronic overexposures: Can cause benign lung disease.

Ingestion: Can cause irritation of gastrointestinal tract, bleeding, changes in the pH of the body fluids and liver damage.

2. Manganese

Fumes: Can cause irritation of the eyes, skin, and respiratory tract.

Chronic overexposures: Can cause inflammation of the lung tissues, scarring of the lungs, central nervous system damage, secondary Parkinson's disease and reproductive harm in males.

Acute overexposures: Can cause metal fume fever (nausea, fever, chills, shortness of breath and malaise).

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3. Sulfur

Dusts: Dust particles may be irritating to the eyes, nose, throat, and skin.

Skin contact: Prolonged contact with sulfur dust in a localized area may result in irritation, primarily from abrasive actions.

Eye critical damage: Dust contact with eyes can be characterized by a scratchy discomfort. This may progress to burning and tearing, with blurring of vision upon repeated or prolonged exposures.

Ingestion: Ingestion of small amounts of solid sulfur should not cause significant health effects. Large doses can produce mucous membrane irritation, difficult swallowing, redness of the throat and tongue, stomach and urinary disturbances.

Inhalation: Inhalation of low concentrations of dust should not cause significant health effects. Inhalation of large amounts of dust may cause inflammation of the nose and throat, resulting in secretions from the nose. Symptoms include sore throat, tightness of the chest, lightheadedness, and persistent cough with sputum.

Carcinogenicity, Cell mutagenicity, and Reproductive toxicity: This product is not reported to have any carcinogenic, mutagenic or reproductive toxicity effects.

4. Lead

Dust & fumes: Can cause irritation of eyes and upper respiratory tract.

Acute overexposure: Can cause nausea and muscle cramps.

Chronic overexposures: Can cause weakness in the extremities, abdominal cramps, gastrointestinal tract effects, kidney damage, liver damage, central nervous system damage, damage to the blood forming organs, blood cell damage, and reproductive harm. Can cause reduced fertility and fetal toxicity in pregnant women. Listed as "reasonably anticipated to be a human carcinogen" by the NPT. Listed as a possibly carcinogenic to humans by the IARC (Group 2A).

5. Carbon

Dust: Can cause irritation of eyes, mucous membranes and upper respiratory tract.

Chronic overexposure: Can cause chronic bronchitis and scarring of the lungs.

6. Phosphorus

Skin: Causes skin irritation.

Eyes: Causes eye irritation.

Inhalation: Causes respiratory tract irritation.

Ingestion: Phosphorus is nonvolatile, insoluble, un-absorbable, and is considered nontoxic when ingested. May cause irritation of the digestive tract, with vomiting, diarrhea, and stomach pains. May cause kidney and liver damage. In general, depending on the intensity and duration of exposure, the effects may vary from mild irritation to severe.

Carcinogenicity, Cell mutagenicity, Teratogenic and Reproductive toxicity: This product is not reported to have any carcinogenic, mutagenic, teratogenic or reproductive toxicity effects.

7. Chromium

Dusts & fumes: Can cause irritation of eye, skin & respiratory tract.

Metallic chromium & Trivalent chromium: Not classifiable as to their carcinogenicity to humans by IARC.

Hexavalent chromium compounds: Can cause irritation of eye, skin, and respiratory tract.

Skin contact: Can cause irritant dermatitis, allergic reactions, and skin ulcers.

Chronic overexposures: Can cause perforation of the nasal septum, respiratory sensitization, asthma, the accumulation of fluid in the lungs, lung damage, kidney damage, lung cancer, nasal cancer, and cancer of the gastrointestinal tract. Listed as "known to be a human carcinogen" by the NTP. Listed as carcinogenic to humans by IARC (Group 1).

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8. Nickel

Dust & fumes: Can cause irritation of eyes, skin, and respiratory tract.

Eye contact: Can cause inflammation of the eyes and eyelids.

Skin contact: Can cause sensitization and allergic contact dermatitis.

Chronic overexposures: Can cause perforation of the nasal septum, inflammation of the nasal passages, respiratory sensitization, asthma and scarring of the lungs.

Nickel Alloys: Listed as possible carcinogenic to humans by IARC (Group 2B).

Nickel compounds: Associated with lung cancer, cancer of the vocal cords, and nasal cancer. Listed as carcinogenic to humans by IARC (Group 1).

LOCTITE 204:

1. 2-Propenoic acid, 2-methyl-, 1,1'- (1-methylethylidene) bis (4,1-phenyleneoxy-2,1-ethanediyl) ester

Routes of exposure

Inhalation: No significant signs or symptoms indicative of any adverse health hazard are expected to occur at standard conditions due to the low volatility of this material. However, aerosols, or vapors which may be generated at elevated processing temperatures, may cause respiratory tract irritation. Symptoms of irritation may include coughing, mucous production and shortness of breath.

Eye contact -- primary route: Although no appropriate human or animal health effects data are known to exist, this material is expected to cause slight eye irritation. Symptoms may include excessive tearing, blinking and redness.

Skin absorption -- primary route: Although no appropriate human or animal health effects data are known to exist, this material is not expected to be a health hazard by skin absorption.

Skin irritation -- primary route: Although no appropriate human or animal health effects data are known to exist, this material is expected to be a slight skin irritant. Symptoms may include a slight localized redness or rash and swelling. Although no appropriate human or animal health effects data is known to exist, this material may cause an allergic skin reaction (sensitization) in susceptible individuals upon repeated exposure.

Ingestion: No significant signs or symptoms indicative of any adverse health hazard are expected to occur due to ingestion.

Medical conditions aggravated by exposure: No additional medical information found.

2. Quartz / Silica, crystalline (airborne particles of respirable size)

Acute toxicity: Not expected to be acutely toxic.

Skin: Dust may cause irritation through mechanical abrasion. Not expected to be a skin hazard. Not known to be a dermal irritant or sensitizer.

Eyes: Direct contact with the eyes may cause temporary irritation through mechanical abrasion.

Inhalation: Discomfort in the chest. Shortness of breath. Coughing. Repeated inhalation of respirable crystalline silica (quartz) may cause silicosis. Silicosis is fibrosis, or scarring of the lungs. Silicosis is irreversible and may be fatal. Silicosis increase the risk of contracting pulmonary tuberculosis. Repeated inhalation of respirable crystalline silica may cause other adverse health effects including lung and kidney cancer.

Respiratory sensitization: No respiratory sensitizing effects known.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Aspiration hazard: Not expected to be an aspiration hazard.

Reproductive toxicity: Not expected to be a reproductive hazard. Symptoms related to physical, chemical, and toxicological characteristics.

Carcinogenicity: Respirable crystalline silica has been classified by IARC and NTP as a known human carcinogen, and classified by ACGIH as a suspected human carcinogen.

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3. Acrylic polymer

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 5000 mg/kg (Rat).

Chronic Effects on Humans: Not a sensitizer.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not mutagenic.

4. Ammonium benzoate

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 825 mg/kg (Rat).

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Material is irritating to mucous membranes and upper respiratory tract.

DURA COAT 104:

1. Phosphoric acid (<40%)

Inhalation: Inhalation is not an expected hazard unless misted or heated to high temperatures. Mist or vapor inhalation can cause irritation to the nose, throat, and upper respiratory tract. Severe exposures can lead to a chemical pneumonitis.

Ingestion: Corrosive. May cause sore throat, abdominal pain, nausea, and severe burns of the mouth, throat, and stomach. Severe exposures can lead to shock, circulatory collapse, and death.

Skin contact: Corrosive. May cause redness, pain, and severe skin burns.

Eye contact: Corrosive. May cause irritation and serious eye damage.

Chronic exposure: No information found.

Pre-existing conditions: Persons with pre-existing skin disorders or eye problems, or impaired respiratory function may be more susceptible to the effects of the substance.

2. Nitric acid (<40%)

Chronic exposure: Contains material which may cause damage to the following organs; lungs, mucous membranes, upper respiratory tract, skin, eyes, and teeth. It may also affect behavior, may cause urinary system failure.

Inhalation: May be fatal if inhaled. Vapor is extremely hazardous. Vapor may cause nitrous gas poisoning. Effects may be delayed.

Skin contact: Severely irritates skin. Causes skin burns and may cause deep and penetrating ulcers of the skin with a characteristic yellow to brown discoloration. May be fatal if absorbed through skin.

Eye contact: Severely irritates eyes. Causes eye burns. May cause irreversible eye injury.

Ingestion: May be fatal if swallowed. Causes serious gastrointestinal tract irritation or burns with nausea, vomiting, severe abdominal pain, and possible "coffee grounds" appearance of the vomitus. May cause perforation of the digestive tract.

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3. Nickel (II) Carbonate

Acute & chronic exposures: Rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Inhalation: Irritating to the respiratory system.

Skin contact: Irritating to the skin.

Eye contact: Irritating to the eyes.

Reproductive toxicity: Category 1B. Suspect reproductive hazard which may injure unborn child.

Mutagenic effects: Category 2 which may cause heritable genetic damage.

Component Analysis – LD50

Carbon Steel (12L14):

1. Iron	(CAS: 7439-89-6)	Oral LD50 Rat: 948 mg/kg
2. Manganese	(CAS: 7439-96-5)	Oral LD50 Rat: 9000 mg/kg
3. Sulfur	(CAS: 7704-34-9)	Oral LD50 Rat: 3000 mg/kg
4. Lead	(CAS: 7439-92-1)	Oral LD50 Rat: 1870 mg/kg
5. Carbon	(CAS: 7440-44-0)	Oral LD50 Rat: 10000 mg/kg
6. Phosphorus	(CAS: 7723-14-0)	Oral LD50 Rat: 3.03 mg/kg
7. Chromium	(CAS: 7440-47-3)	Oral LD50 Rat: 19.8 mg/kg
8. Nickel	(CAS: 7440-02-0)	Oral LD50 Rat: 9000 mg/kg

LOCTITE 204:

1. 2-Propenoic acid, 2-methyl-, 1,1'	(CAS: 24448-20-2)	Oral LD50 Rat: 1000 mg/kg
2. Quartz / Silica, crystalline	(CAS: 14808-60-7)	Oral LD50 Rat: 3160 mg/kg
3. Acrylic polymer	(CAS: 25212-88-8)	Oral LD50 Rat: 5000 mg/kg
4. Ammonium benzoate	(CAS: 1863-63-4)	Oral LD50 Rat: 825 mg/kg

DURA COAT 104:

1. Phosphoric acid (<40%)	(CAS: 7664-38-2)	Oral LD50 Rat: 1530 mg/kg
2. Nitric acid (<40%)	(CAS: 7697-37-2)	Oral LD50 Rat: 2660 mg/kg
3. Nickel (II) Carbonate	(CAS: 3333-67-3)	Oral LD50 Rat: 840 mg/kg

Skin corrosion/irritation

Carbon Steel = May cause an allergic skin reaction.

LOCTITE 204 = Irritant.

DURA COAT 104 = May cause severe skin burns.

Serious eye damage/irritation

Carbon Steel = Direct contact with eyes may cause temporary eye irritation.

LOCTITE 204 = Irritant.

DURA COAT 104 - Corrosive to eye tissue. May cause permanent eye damage and blindness.

Respiratory or skin sensitization

Carbon Steel = Prolonged inhalation may be harmful.

LOCTITE 204 = Prolonged inhalation may be harmful.

DURA COAT 104 = May cause corrosive burns. Repeated or prolonged exposure may cause bronchial irritation.

Safety Data Sheet – E-Z LOK, Carbon Steel Inserts (Metal / Automotive)

Germ cell mutagenicity

Carbon Steel = No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

LOCTITE 204 = No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

DURA COAT 104 = To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Carcinogenicity

Carbon Steel = Suspected of causing Cancer (Chromium, Nickel, Lead).

LOCTITE 204 = Known Carcinogen (Quartz).

DURA COAT 104 - Known Carcinogen (Nickel Carbonate).

Reproductive toxicity

Carbon Steel = This product is not expected to cause reproductive or developmental effects.

LOCTITE 204 = This product is not expected to cause reproductive or developmental effects.

DURA COAT 104 = Not available.

Summary of evaluation of the CMR properties

Carbon Steel = Suspected of causing Cancer (Chromium, Nickel, Lead).

LOCTITE 204 = Known Carcinogen (Quartz).

DURA COAT 104 - Known Carcinogen (Nickel Carbonate).

STOT-single exposure

Carbon Steel = Not classified.

LOCTITE 204 = Not Classified.

DURA COAT 104 = May cause skin and respiratory tract sensitization.

STOT-repeated exposure

Carbon Steel = Not classified. Suspected of causing Cancer.

LOCTITE 204 = Not classified. Known Carcinogen.

DURA COAT 104 = May cause skin and respiratory tract sensitization. May cause Cancer.

Aspiration hazard

Carbon Steel = Not classified.

LOCTITE 204 = Not classified.

DURA COAT 104 = Not classified.

Chronic effects

Carbon Steel = Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

LOCTITE 204 = Known Carcinogen (Quartz) Not classified.

DURA COAT 104 = Not classified.

Additional information

This product contains multiple individual compounds that are suspected / known to be Carcinogens.

This product has not been tested to determine the actual amount of each compound that is present on each product that would lead to a possibility or probability of Cancer causing exposures.

SECTION 12: Ecological information

Toxicity

Carbon Steel = The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills / exposures can have a harmful or damaging effect on the environment.

LOCTITE 204 = Not classified.

DURA COAT 104 = This product is harmful to aquatic life in very low concentrations. The product will be toxic to fish and marine organisms when exposed to streams, lakes, rivers or ponds.

Persistence and degradability

Carbon Steel = No data is available on the degradability of this product.

LOCTITE 204 = Not classified.

DURA COAT 104 = Nickel is one of the most mobile heavy metals in aquatic environments and can persist indefinitely in natural waters.

Bio accumulative potential

Carbon Steel = No data is available.

LOCTITE 204 = Not classified.

DURA COAT 104 = No data is available.

Mobility in soil

Carbon Steel = No data is available.

LOCTITE 204 = Not classified.

DURA COAT 104 = No data is available.

Results of PBT and vPvB assessment

Carbon Steel = No data is available.

LOCTITE 204 = Not classified.

DURA COAT 104 = No data is available.

Other adverse effects

Carbon Steel = No other adverse environmental effects are expected from this product.

LOCTITE 204 = Not classified.

DURA COAT 104 = No data is available.

SECTION 13: Disposal considerations

Disposal of the product

Carbon Steel = Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents / container in accordance with applicable regulations.

LOCTITE 204 = Follow all local, state, and federal regulations for disposal.

DURA COAT 104 = Follow all local, state, and federal regulations for disposal.

Disposal of contaminated packaging

Carbon Steel = Empty containers should be taken to an approved waste handling site for recycling or disposal. since emptied containers may retain product residue, follow label warnings even after the container is emptied.

LOCTITE 204 = Empty containers should be taken to an approved waste handling site for recycling or disposal. since emptied containers may retain product residue, follow label warnings even after the container is emptied.

DURA COAT 104 = Empty containers should be taken to an approved waste handling site for recycling or disposal. since emptied containers may retain product residue, follow label warnings even after the container is emptied.

Waste treatment

Carbon Steel = Collect, reclaim, treat or dispose in sealed containers at licensed waste disposal / treatment site.

LOCTITE 204 = Collect, reclaim, treat or dispose in sealed containers at licensed waste disposal / treatment site.

DURA COAT 104 - Collect, reclaim, treat or dispose in sealed containers at licensed waste disposal / treatment site.

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Sewage disposal

Carbon Steel = Not for sewage disposal. Dispose in accordance with all applicable regulations.
LOCTITE 204 = Not for sewage disposal. Dispose in accordance with all applicable regulations.
DURA COAT 104 = Not for sewage disposal. Dispose in accordance with all applicable regulations.

Other disposal recommendations

Carbon Steel = None
LOCTITE 204 = None
DURA COAT 104 = None

SECTION 14: Transport information

DOT (US)

Carbon Steel = Not regulated as dangerous goods.
LOCTITE 204 = Not regulated as dangerous goods.
DURA COAT 104 = UN Number: 1760
Class: Corrosive liquids, N.O.S (contains phosphoric acid)
Packing Group: III
Proper Shipping Name: Corrosive liquids, N.O.S (contains phosphoric acid)
Reportable quantity (RQ): Not available
Marine pollutant: No
Poison inhalation hazard: Not available

IMDG / IATA

Carbon Steel = Not regulated as dangerous goods.
LOCTITE 204 = Not regulated as dangerous goods.
DURA COAT 104 = Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Chemical name: Manganese
CAS number: 7439-96-5

New Jersey Right To Know Components

Common name: Manganese
CAS number: 7439-96-5

Pennsylvania Right To Know Components

Chemical name: Manganese
CAS number: 7439-96-5

Massachusetts Right To Know Components

Chemical name: Chromium
CAS number: 7440-47-3

New Jersey Right To Know Components

Common name: Chromium
CAS number: 7440-47-3

Pennsylvania Right To Know Components

Chemical name: Chromium
CAS number: 7440-47-3

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New Jersey Right To Know Components

Common name: Silica, Quartz
CAS number: 14808-60-7

Pennsylvania Right To Know Components

Chemical name: Quartz
CAS number: 14808-60-7

Massachusetts Right To Know Components

Chemical name: Ammonium Benzoate
CAS number: 1863-63-4

New Jersey Right To Know Components

Common name: Ammonium Benzoate
CAS number: 1863-63-4

Pennsylvania Right To Know Components

Chemical name: Benzoic Acid, ammonium salt
CAS number: 1863-63-4

Massachusetts Right To Know Components

Chemical name: Phosphoric acid
CAS number: 7664-38-2

New Jersey Right To Know Components

Common name: Phosphoric Acid
CAS number: 7664-38-2

Massachusetts Right To Know Components

Chemical name: Nitric Acid
CAS number: 7697-37-2

New Jersey Right To Know Components

Common name: Nitric Acid
CAS number: 7697-37-2

Pennsylvania Right To Know Components

Chemical name: Nitric Acid
CAS number: 7697-37-2

New Jersey Right To Know Components

Common name: Nickel Carbonate
CAS number: 3333-67-3

Pennsylvania Right To Know Components

Chemical name: Carbonic Acid, nickel (2+) salt (1:1)
CAS number: 3333-67-3

California Prop. 65 components

Chemical name: Nickel (II) Carbonate
CAS number: 3333-67-3
10/01/1989 – Cancer

California Prop. 65 components

Chemical name: Silica, Crystalline (airborne particles of respirable size)
CAS number: 14808-60-7
10/01/1988 - Cancer

California Prop. 65 components

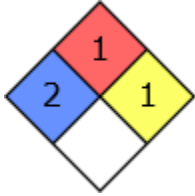
Chemical name: Lead
CAS number: 7439-92-1
Possible Carcinogen / Group 2B (IARC)

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HMIS Rating

Carbon Steel (12L14)	
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	1
PERSONAL PROTECTION	A

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

E-Z LOK cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. The information included herein is not intended to be all-inclusive as to the appropriate manner and/or conditions of use, handling and/or storage. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, damage or expense due to improper use. The information in this safety data sheet was written based upon knowledge and experience available at the time of authoring. E-Z LOK makes no representation or warranty, express or implied, including the warranties of merchantability and fitness, for a purpose with respect to the information contained herein.

Standard 29 CFR 1910.1200 requires that information be provided to personnel regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this safety data sheet available to your employees, personnel and/or end users.

16.2 Preparation information

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