

SAFETY DATA SHEET

Revision Date: 01/14/2018

1. PRODUCT AND COMPANY IDENTIFICATION

CRL Catalog Numbers: ARM32

Trade Name: CRL EZ Armor Metals Surface Protector

Supplier Address: C.R. Laurence Co., Inc. 2503 E. Vernon Ave

Los Angeles, Ca 90058-1826 Telephone: (323) 588-1281

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Flam. Liq. 3;H226 Flammable liquid and vapor.

Acute Tox. 4;H302 Harmful if swallowed.

Acute Tox. 5;H313 May be harmful in contact with skin. (Not adopted by US OSHA)

Acute Tox. 4;H332 Harmful if inhaled.
Skin Irrit. 2;H315 Causes skin irritation.

Eye Irrit. 2;H319 Causes serious eye irritation.

Repr. 2;H361D Suspected of damaging the unborn child.

STOT SE 3;H336 May cause drowsiness or dizziness.

STOT RE 2;H373 May cause damage to organs through prolonged or repeated exposure. Specific Target

Organs: (Not Available)

Asp. Tox. 1;H304 May be fatal if swallowed and enters airways.

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2. HAZARDS IDENTIFICATION (CONTINUED)

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.







Danger

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H313 May be harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness and dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P235 Keep cool.

P240 Ground / bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilating / light / equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

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2. HAZARDS IDENTIFICATION (CONTINUED)

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P310 Immediately call a POISON CENTER or doctor / physician.

P314 Get Medical advice / attention if you feel unwell.

P321 Specific treatment (see information on this label).

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P332+313 If skin irritation occurs: Get medical advice / attention.

P337+313 If eye irritation persists: Get medical advice / attention.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P362 Take off contaminated clothing and wash before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|-------------------------------------|----------|--|--------|
| Toluene CAS Number: 0000108-88-3 | 25 - 50 | Flam. Liq. 2;H225 Repr. 2;H361d Asp. Tox. 1;H304 STOT RE 2;H373 Skin Irrit. 2;H315 STOT SE 3;H336 | [1][2] |

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3. COMPOSITION / INFORMATION ON INGREDIENTS

| Xylene CAS Number: 0001330-20-7 | 25 - 50 | Flam. Liq. 3;H226 Acute Tox. 4;H332 Acute Tox. 4;H312 Skin Irrit. 2;H315 | [1][2] |
|--|---------|---|--------|
| Modified Alkyd Resin CAS Number: Proprietary | 1 - 5 | Not Provided | [1] |

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give

artificial respiration. If unconscious place in the recovery position and obtain immediate

medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and

seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

recognized skin cleanser.

Ingestion Do not induce vomiting, give plenty of water. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Overview Avoid contact with eyes and skin. Chronic overexposure to solvents may cause permanent

brain or nervous system damage. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme

cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation

and soreness with possible reversible damage. See section 2 for further details.

Inhalation Harmful if inhaled. May cause drowsiness or dizziness. May be fatal if swallowed and

enters airways.

Eyes Causes serious eye irritation.

Skin May be harmful in contact with skin. Causes skin irritation.

Ingestion Harmful if swallowed.

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^[1] Substance classified with a health or environmental hazard.

^[2] Substance with a workplace exposure limit.

^[3] PBT-substance or vPvB-substance.

^{*}The full texts of the phrases are shown in Section 16.



5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

CO2, Dry Chemical, Foam, Sand.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

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

5.3. Advice for fire-fighters

Keep away from heat, sparks and open flame. Do not smoke. Vapors may spread long distances and accumulate in low areas. Vapors may ignite. USE ONLY WITH ADEQUATE VENTILATION. Refer to OSHA regulations 29 CFR 1910.94, 1910.107, 1910.108 for details.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Absorb and dispose of in accordance with local applicable regulations. Refer to OSHA storage requirements, 29 CFR 1910.106.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Keep closures tight and upright to prevent leakage. Keep container closed when not in use. Store below 100 degrees F. Do not incinerate closed containers as they may explode when exposed to extreme heat or fire. Ground and bond drum when transferring product.

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7. HANDLING AND STORAGE (CONTINUED)

Incompatible materials: Explosives, UN class 2.3 gasses, oxidizing substances, organic peroxides, and toxic/biohazardous substances.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|----------------------------------|------------|--|--|
| 0000108-88-3 Toluene | oluene | OSHA | TWA (OSHA) 200 ppm C 300 ppm 500 ppm (10-minute maximum peak) STEL 150 ppm |
| | ACGIH | TWA: 20 ppm R | |
| | NIOSH | TWA 100 ppm (375 mg/m3) ST 150 ppm (560 mg/m3) | |
| | | Supplier | No Established Limit |
| 0001330-20-7 Xylene | OSHA | STEL 150 ppm | |
| | ACGIH | TWA: 100 ppm STEL: 150 ppm | |
| | NIOSH | No Established Limit | |
| | Supplier | No Established Limit | |
| Proprietary Modified Alkyd Resin | OSHA | No Established Limit | |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

Carcinogen Data

| CAS No. | Ingredient | Source | Value | |
|----------------------------------|----------------------|--------|---|--|
| 0000108-88-3 | 0000108-88-3 Toluene | | Select Carcinogen: No | |
| | | | Known: No; Suspected: No | |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No; | |
| 0001330-20-7 Xylene | | OSHA | Select Carcinogen: No | |
| | | NTP | Known: No; Suspected: No | |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No; | |
| Proprietary Modified Alkyd Resin | | OSHA | Select Carcinogen: No | |
| | | NTP | Known: No; Suspected: No | |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; | |

8.2. Exposure controls

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONTINUED)

Respiratory Avoid breathing of vapor or spray mist. Use paint spray mask and approved chemical-

mechanical filter. In enclosed or confined areas use NIOSH/MSHA approved air respirators. Refer to OSHA Personal Protective Equipment Standards, 29 CFR 1910

Subpart 1.

Eyes Wear splash-proof goggles to prevent eye contact.

SkinWear impervious clothing, footwear and equipment including gloves to avoid skin contact.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to

maintain concentrations of particulates and any vapor below occupational exposure limits

suitable respiratory protection must be worn.

using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Liquid
Odor Solvent

Odor threshold

PH

Not Measured

Melting point / freezing point

Not Measured

Initial boiling point and boiling range

Flash Point

Not Measured

Not Measured

Evaporation rate (Ether = 1)

Not Measured

Not Applicable

Upper/lower flammability or explosive limits Lower Explosive Limit: Not Measured

Upper Explosive Limit: Not Measured

Vapor pressure (Pa) Not Measured Vapor Density Not Measured **Specific Gravity** Not Measured Solubility in Water Not Measured Partition coefficient n-octanol/water (Log Kow) Not Measured Auto-ignition temperature Not Measured **Decomposition temperature** Not Measured Not Measured Viscosity (cSt)

9.2. Other information

No other relevant information.

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10. STABILITY AND REACTIVITY

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid high temperatures, heating, etc.

10.5. Incompatible materials

Explosives, UN class 2.3 gasses, oxidizing substances, organic peroxides, and toxic/biohazardous substances.

10.6. Hazardous decomposition products

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

2-butoxyethanol and its acetate are readily absorbed through the skin and will cause harmful effects on the blood.

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|--------------------------------------|--------------------------------|---------------------------------------|---------------------------------------|---|--------------------------------|
| Toluene - (108-88-3) | 636.00, Rat - Category: 4 | 8,400.00, Rabbit - Category: NA | No data available | No data available | No data available |
| Xylene - (1330-20-7) | 4,299.00, Rat - Category: 5 | 1,548.00, Rabbit - Category: 4 | No data available | 20.00, Rat - Category: NA | 5,000.00, Rat - Category: 4 |
| Modified Alkyd Resin - (Proprietary) | No data available | No data available | No data available | No data available | No data available |

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

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11. TOXICOLOGICAL INFORMATION (CONTINUED)

| Classification | Category | Hazard Description | |
|-------------------------------|----------|--|--|
| Acute toxicity (oral) | 4 | Harmful if swallowed. | |
| Acute toxicity (dermal) | 5 | May be harmful in contact with skin. (Not adopted by US OSHA) | |
| Acute toxicity (inhalation) | 4 | Harmful if inhaled. | |
| Skin corrosion/irritation | 2 | Causes skin irritation. | |
| Serious eye damage/irritation | 2 | Causes serious eye irritation. | |
| Respiratory sensitization | | Not Applicable | |
| Skin sensitization | | Not Applicable | |
| Germ cell mutagenicity | | Not Applicable | |
| Carcinogenicity | | Not Applicable | |
| Reproductive toxicity | 2 | Suspected of damaging the unborn child. | |
| STOT-single exposure | 3 | May cause drowsiness or dizziness. | |
| STOT-single exposure | | Not Applicable | |
| STOT-repeated exposure | 2 | May cause damage to organs through prolonged or repeated exposure. | |
| Aspiration hazard | 1 | May be fatal if swallowed and enters airways. | |

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxic to aquatic life

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|--------------------------------------|---------------------------|-------------------------------|--------------------------------|
| Toluene - (108-88-3) | 5.80, Oncorhynchus mykiss | 19.60, Daphnia magna | Not Available |
| Xylene - (1330-20-7) | 3.30, Oncorhynchus mykiss | 8.50, Palaemonetes pugio | 100.00 (72 hr), Chlorococcales |
| Modified Alkyd Resin - (Proprietary) | Not Available | Not Available | Not Available |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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12. ECOLOGICAL INFORMATION (CONTINUED)

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Destroy by liquid incineration. Use absorbent material and deposit in toxic landfill in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

See product label.

15. REGULATORY INFORMATION

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA

Inventory.

WHMIS Classification

D2A

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs (lbs):

Toluene (1,000.00) Xylene (100.00)

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Ethyl Benzene

Toluene

Xylene

Proposition 65 - Carcinogens (>0.0%):

Ethyl Benzene

Proposition 65 - Developmental Toxins (>0.0%):

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15. REGULATORY INFORMATION (CONTONUED)

Toluene

Proposition 65 - Female Repro Toxins (>0.0%):

Toluene

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Toluene

Xylene

Pennsylvania RTK Substances (>1%):

Toluene

Xylene

16. OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness and dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

The information contained herein is furnished without warranty of any kind. The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide. Users should make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

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