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EPL-EMG-24-2L-LED-D-V2

0-10V Dimmable Explosion Proof Emergency LED Light - Class 1, Class 2 Div 1 - Paint Spray Booth

Product ID: 147794



Image: EPL-EMG-24-2L-LED-D-V2

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

EPL-EMG-24-2L-LED-D-V2 Explosion Proof Emergency Dimmable LED Light Fixture
NRTL Listed for United States & Canada
Dimensions: 11.25"W x 27.5"L x 8.5"H
Weight: 32 lbs
Total Watts: 30 Watts
Voltage (Input): Universal - 120/277V AC, 50/60Hz
Voltage (Light Output): 12-24V DC
LED Lamp Life Expectancy: 50,000+ Hours
Total Lumens: 3,500
Luminous Efficacy: 116.67 Lm/W
Emergency Lumens: 1,750
Emergency Runtime: 90 Minutes
Operating Temp Range: T6 Rated -30°C to +70°C
Beam Angle: 150°
Color Temp: 5300K
Dimming: 0-10V
Mounting: Bracket Standard - Pendant Optional
Wiring Hub: 1/2" Threaded

Ratings/Approvals
Class I Division 1, Groups C and D
Class I Division 2, Group A,B,C,D
Class II, Division 1 & 2, Groups E, F G
NRTL Certified to UL 844, 924
NRTL Certified to UL 1598 Marine Type
NRTL Certified to UL 595 Outdoor Marine Type (Saltwater)
90 Minute Emergency Runtime

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-765-7664
E-mail: sales@larsonelectronics.com

Made in the USA

The EPL-EMG-24-2L-LED-D-V2 from Larson Electronics is an Explosion Proof Dimmable Emergency LED Light Fixture is NRTL listed for United States and Canada Class 1 Division 1

& 2, Class 2 Division 1 & 2, has a T6 temperature rating and is a superior lighting solution for areas where flammable chemical/petrochemical vapors or pulverized dust exist or have the potential to exist. This explosion proof failsafe light is 0-10V capable.

Click here for dimensional drawings for this explosion proof light.

This 2 foot long, 2 lamp dimmable emergency LED explosion proof light fixture is ideal for use in locations requiring powerful yet compact hazardous location lighting that will improve overall illumination levels and light quality while reducing operating costs. The EPL-EMG-24-2L-LED is equipped with specially designed LED T-series bulbs which produce 15% more illumination at 8 feet distance as compared to standard T8 lamps when measured with an Extech light meter. Our LED-T series bulbs are visibly brighter than standard T8s and have consistently surprised many of our customers with their unexpectedly high light output levels. This 2 LED bulb explosion proof fixture is lighter in weight, has a slimmer profile, and produces more light than traditional explosion proof fluorescent fixtures. The 2 foot long T17 LED tube design bulbs included with this unit are rated at 50,000+ hours of service life, which is nearly twice as long as standard T8 bulbs.

With an integrated emergency ballast, this explosion proof LED light will continue to illuminate one bulb at for 90 minutes at 1350 lumens once the main electrical power to the light is severed. Once standard electrical power is restored, the emergency battery pack will be recharged.

This fixture carries a T6 temperature rating and is Class 1 Division 1, Groups C and D, Class 1 Division 2, Group A,B,C and D, and Class II, Division 1 and 2, Groups E, F and G.

This emergency backup LED light works, mounts and is wired like our EPL-24-2L-LED explosion proof integrated LED light fixtures. The main difference is that we add a battery backup unit that adds emergency light functionality to the fixture. With an integrated emergency ballast, this explosion proof LED light will continue to operate one LED lamp for 90 minutes at 1,750 lumens after the main electrical power to the light is severed. Once standard electrical power is restored, the emergency battery pack will be recharged. The battery backup unit includes a switched leg for turning the light fixture on/off without kicking the unit into emergency mode.



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge

The included dimmable LED lamps have a 50,000+ hour service life, both of which result in extreme efficiency and greatly reduced maintenance costs. These fluorescent style LED lamps have internal drivers, eliminating external power components. The solid state design of the LED lamps give this fixture superior resistance to damage from vibration, extremes in temperature and a lamp service

life over twice that of standard fluorescent bulbs. This second generation lamp is offered in 5600K cool white, 4500K natural white, and 3000K warm white. Our standard unit ships with 5600K unless different color temperature is specified.

These dimmable 14 watt LED tubes work with standard 0-10 dimming controllers. Lumen output is 125 lumens per watt for a total of 1,750 lumens per bulb. While fluorescent lamps are omni-directional and illuminate 360°, the LED style replacement lamps are directional and offer a 160° beam spread. This allows for directed illumination where it is needed and not wasting light via reflectors or or over illuminating areas. This dimming LED tube uses electronic silicon control dimming. We have tested these lamps on all Lutron and Leviton electronic dimmers, such as the Leviton 6633-PLW. Please note: the dimmer switch must be installed outside the hazardous environment or use an explosion proof dimmer switch. Larson Electronics offers an explosion proof dimmer switch that can be installed within the hazardous location.

LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life.

LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.

Additional Mounting Options: Unless otherwise specified, our standard, most popular configuration is the bracket end mounting shown above. We also offer a pendant mount for those needing to suspend the fixture away from the ceiling surface (i.e. suspend from pipe or conduit).



SURFACE MOUNT (STANDARD)

Click Photo to Enlarge



PENDANT MOUNT (OPTIONAL)

Click Photo to Enlarge

Standard Bracket Mounts: Each bracket is cinched to the bracket mounting peg on each side of the light. The angle of the bracket is set by tightening two cap screws on either side of the bracket. The cap screws act as a set screw. The bracket itself is mounted via a single bolt hole at the top of the bracket. There are two brackets, one on each end of the light. Once the brackets are mounted to

a surface (ceiling, floor or wall), the light fixture can be removed from the brackets by loosening the cap screws that hold the bracket to the mounting peg. The pictures shown above illustrate the side brackets. The third picture enlarged below also shows the brackets at the both ends of the light.

Suggested Applications: Paint spray booths, Aircraft maintenance, Oil drilling rigs, Refineries, Solvent and cleaning areas, Gas processing plants, Chemical manufacturing, Waste treatment plants, Gas processing plants.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

Made in USA Quality

1. Each unit dialectrically tested.
2. Fixture arrives assembled and lamped to reduce installation time and cost. Adjustable mounting brackets enable the operator to choose any mounting angle for the fixture.
3. Fixture constructed of extruded corrosion resistant copper free aluminum alloy
4. No ballast box. No ballast to replace. We simply run the black wire to one end of the bulb and white wire to the other.
5. Heavy gauge extruded aluminum reflectors with high gloss reflective finish. Resists dents and corrosion.
6. A wrench is used to unscrew the end caps for relamping the fixture, while some competitive models require the "tap and knock off" method to loosen the end cap.
7. Explosion proof, impact and heat resistant Pyrex tubes provide lamp protection.

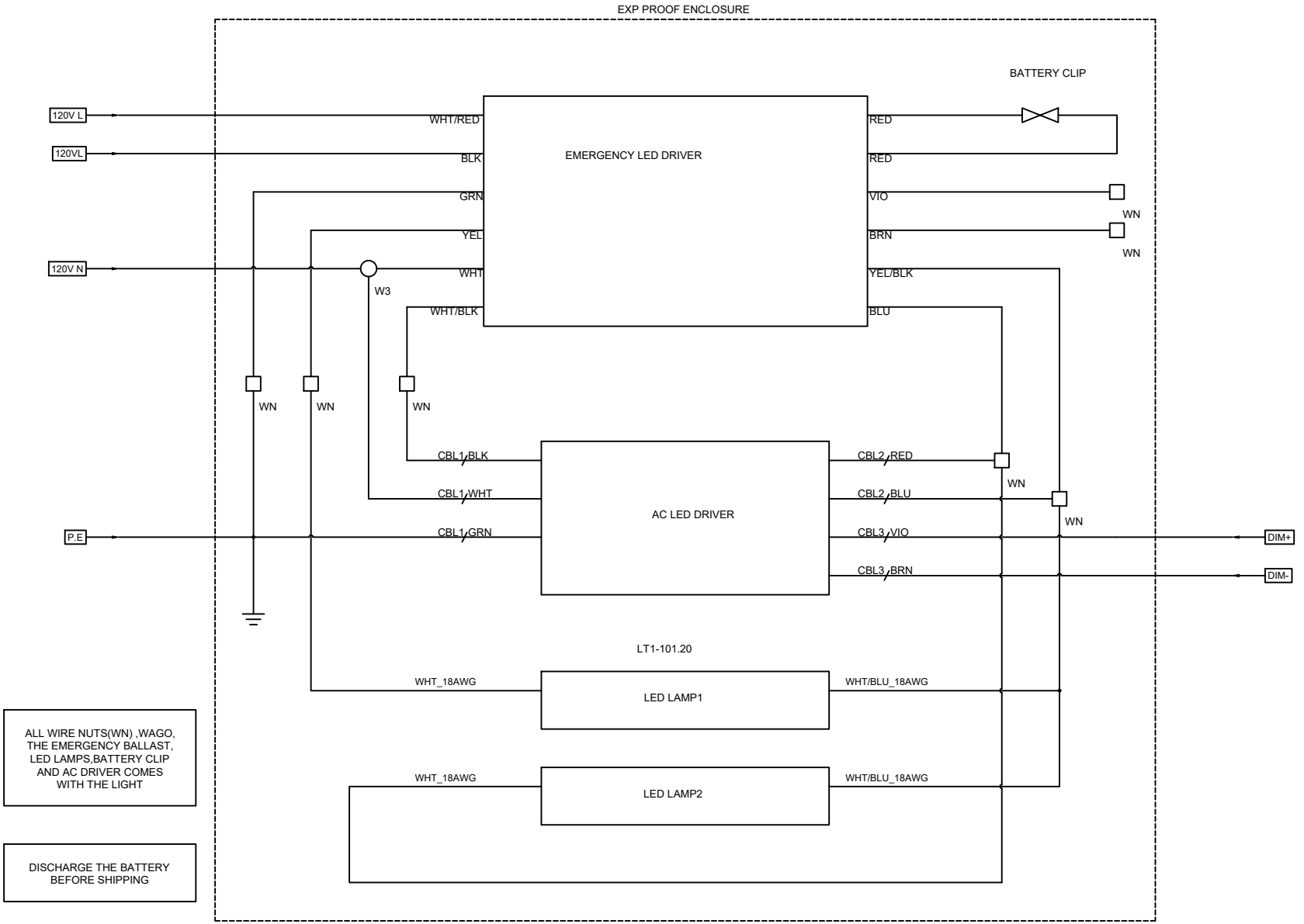
Superior LED Benefits

1. 50,000 hour lifespan.
2. Can SAVE 50% or more on energy.
3. Qualifies retrofit projects for financial incentives, including utility rebates, tax credits and energy loan programs.
4. Reduces energy use and prolongs life-spans of peripheral cooling units (A/C, refrigeration)
5. 100% recyclable.
6. No toxins-lead, mercury.
7. No UV light, infrared radiation or CO2 emissions.
8. Qualifies buildings for LEED and other sustainable business certifications.
9. Bright, even light maintains consistent color over time.
10. Instant on/off - No flickering, delays or buzzing.
11. Very good color rendering.
12. Vibration/impact resistant.
13. Significantly cooler operation.
14. Less frequent outages, higher output improves workplace safety.
15. California Title 24 Compliant

REV	DESCRIPTION	DATE
A	PRODUCTION RELEASE	10/11/2021

EPL-EMG-24-2L-LED-D-V2-PND

LARSON ELECTRONICS®



TAGS	QTY	CATALOG	DESCRIPTION
LT1-101.20	1	UNV00004439	2 FT 120V EMERGENCY LED LIGHT WITH 90MIN BACKUP

LARSON ELECTRONICS
9419 E US HWY 175,
KEMP, TX 75143

TITLE			
EPL-EMG-24-2L-LED-D-V2-PND			
DRAWN BY	DATE	REV	
S.DESAI	10-11-2021	A	
CHECKED BY	SHEET #	DRAWING #	
R.BLACK	1 OF 1	101	

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SAFETY DATA SHEET

HCS-2012 APPENDIX D TO §1910.1200

Version 1 **Issue Date** 21-Jan-2015
Product Name Nickel Cadmium Battery **Revision date** 21-Jan-2015

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name	Nickel Cadmium Battery
Chemical Name	Nickel Cadmium Battery

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended Use	Used in electric tools
Uses advised against	No information available

Details of the supplier of the safety data sheet

Supplier	Jiangsu Highstar Battery Manufacturing Co.,Ltd.
Address	No.306 Heping Road(s), Qidong City, Jiangsu, China
Postal Code	226200
Phone	0086-513-80795666
FAX	0086-513-83312306
E-mail	chenj@highstar.net.cn

Emergency telephone number

0086-513-80795666

2. HAZARDS IDENTIFICATION

GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Symbols/Pictograms	None
Signal word	None
Hazard Statements	None
Precautionary Statements	
Prevention	None
Response	None
Storage	None
Disposal	None

Hazards not otherwise classified (HNOC)

No information available

Unknown acute toxicity

.?% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature Mixture

Chemical Name	CAS No	Weight-%
Nickel	7440-02-0	10 - 25
Cadmium and compounds (as Cd)	7440-43-9	10 - 25
Cadmium hydroxide (Cd(OH)2)	21041-95-2	12 - 23
Nickel hydroxide	12054-48-7	6 - 14

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Iron	7439-89-6	10 - 13

4. FIRST AID MEASURES

Description of first aid measures

General advice	Remove contaminated clothing and shoes. If symptoms persist, call a physician.
Inhalation	Not an expected route of exposure. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact	Wash hands thoroughly after handling. .
Eye contact	Not an expected route of exposure. .
Ingestion	Rinse mouth Get medical attention Never give anything by mouth to an unconscious person

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas
Ensure adequate ventilation, especially in confined areas
Remove all sources of ignition
Use personal protection recommended in Section 8

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so
Pick up and transfer to properly labeled containers

Avoid release to the environment

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice
Ensure adequate ventilation, especially in confined areas
Avoid creating dust
Avoid contact with eyes
Wash thoroughly after handling
Use personal protection recommended in Section 8

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Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place
Keep away from heat

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Denmark	European Union
Nickel (CAS #: 7440-02-0)	TWA: 1.5 mg/m^3 inhalable fraction	TWA: 1 mg/m^3 (vacated) TWA: 1 mg/m^3	IDLH: 10 mg/m^3 IDLH: 10 mg/m^3 Ni TWA: 0.015 mg/m^3 TWA: 0.015 mg/m^3 except Nickel carbonyl Ni	TWA: 0.05 mg/m^3	-
Cadmium and compounds (as Cd) (CAS #: 7440-43-9)	TWA: 0.01 mg/m^3 TWA: 0.002 mg/m^3 respirable fraction TWA: 0.01 mg/m^3 Cd TWA: 0.002 mg/m^3 Cd respirable fraction	TWA: 0.1 mg/m^3 fume applies to any operations or sectors for which the Cadmium standard is stayed or otherwise not in effect TWA: 0.2 mg/m^3 dust applies to any operations or sectors for which the Cadmium standard is stayed or otherwise not in effect TWA: 5 µg/m^3 (vacated) STEL: 0.3 ppm fume Ceiling: 0.3 mg/m^3 fume applies to any operations or sectors for which the Cadmium standard is stayed or otherwise not in effect Ceiling: 0.6 mg/m^3 dust applies to any operations or sectors for which the Cadmium standard is stayed or otherwise not in effect	IDLH: 9 mg/m^3 dust IDLH: 9 mg/m^3 Cd dust and fume	TWA: 0.005 mg/m^3	-
Cadmium hydroxide (Cd(OH)2) (CAS #: 21041-95-2)	TWA: 0.01 mg/m^3 Cd TWA: 0.002 mg/m^3 Cd respirable fraction	-	-	TWA: 0.005 mg/m^3	-
Nickel hydroxide (CAS #: 12054-48-7)	TWA: 0.2 mg/m^3 Ni inhalable fraction	TWA: 1 mg/m^3 Ni (vacated) TWA: 1 mg/m^3 Ni	IDLH: 10 mg/m^3 Ni TWA: 0.015 mg/m^3 except Nickel carbonyl Ni	TWA: 0.05 mg/m^3	-

Chemical Name	Latvia	France	Finland	Germany	Italy
Nickel (CAS #: 7440-02-0)	TWA: 0.05 mg/m^3	TWA: 1 mg/m^3	TWA: 1 mg/m^3 TWA: 0.1 mg/m^3	Skin	-
Cadmium and compounds (as Cd) (CAS #: 7440-43-9)	TWA: 0.01 mg/m^3 STEL: 0.05 mg/m^3	TWA: 0.05 mg/m^3	TWA: 0.02 mg/m^3 Skin	Skin	-
Nickel hydroxide (CAS #: 12054-48-7)	TWA: 0.05 mg/m^3	TWA: 1 mg/m^3	TWA: 0.1 mg/m^3	Skin	-

Chemical Name	Poland	Portugal	Spain	Switzerland	Netherlands
Nickel (CAS #: 7440-02-0)	TWA: 0.25 mg/m^3	TWA: 1.5 mg/m^3	TWA: 1 mg/m^3	TWA: 0.5 mg/m^3	-
Cadmium and compounds (as Cd) (CAS #: 7440-43-9)	TWA: 0.01 mg/m^3 TWA: 0.002 mg/m^3	TWA: 0.01 mg/m^3 TWA: 0.002 mg/m^3	TWA: 0.01 mg/m^3 TWA: 0.002 mg/m^3	Skin TWA: 0.015 mg/m^3	-
Nickel hydroxide (CAS #: 12054-48-7)	TWA: 0.25 mg/m^3	TWA: 0.2 mg/m^3	TWA: 0.2 mg/m^3	TWA: 0.05 mg/m^3	-

Chemical Name	Norway	United Kingdom	Australia	Austria	Belgium
Nickel (CAS #: 7440-02-0)	TWA: 0.05 mg/m^3 STEL: 0.15 mg/m^3	STEL: 1.5 mg/m^3 TWA: 0.5 mg/m^3	1 mg/m^3	-	-

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Cadmium and compounds (as Cd) (CAS #: 7440-43-9)	TWA: 0.05 mg/m^3 STEL: 0.15 mg/m^3	STEL: 0.075 mg/m^3 TWA: 0.025 mg/m^3	0.01 mg/m^3	-	-
Cadmium hydroxide (Cd(OH)2) (CAS #: 21041-95-2)	-	-	0.01 mg/m^3	-	-
Nickel hydroxide (CAS #: 12054-48-7)	TWA: 0.05 mg/m^3 STEL: 0.15 mg/m^3	TWA: 0.5 mg/m^3	-	-	-

Appropriate engineering controls

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hand Protection	Wear protective gloves.
Eye/face protection	No special technical protective measures are necessary.
Skin and body protection	Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Solid
Color	No information available
Odor	Odorless
Odor Threshold	Not determined
pH	Not determined
Melting point/freezing point	Not determined
Boiling point / boiling range	Not determined
Flash point	Not applicable
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Flammability Limit in Air	Not determined
Vapor Pressure	Not applicable
Vapor density	Not determined
Density	Not determined
Relative density	Not determined
Bulk density	Not determined
Specific gravity	Not determined
Water solubility	Not determined
Partition coefficient (LogPow)	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Explosive properties	Not an explosive
Oxidizing properties	Not determined

Other information

No information available

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage and handling conditions (see SECTION 7, handling and storage).

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Chemical stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Strong heating. Incompatible materials

Incompatible materials

Strong acids Strong bases Strong oxidizing agents

Hazardous Decomposition Products

None known based on information supplied

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system
Eye contact	Contact with eyes may cause irritation
Skin Contact	Substance may cause slight skin irritation
	Ingestion may cause irritation to mucous membranes

Information on toxicological effects

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nickel (CAS #: 7440-02-0)	> 9000 mg/kg (Rat)	-	-
Cadmium and compounds (as Cd) (CAS #: 7440-43-9)	= 2330 mg/kg (Rat)	-	= 25 mg/m^3 (Rat) 30 min
Nickel hydroxide (CAS #: 12054-48-7)	-	-	= 1200 mg/m^3 (Rat) 4 h
Iron (CAS #: 7439-89-6)	98.6 g/kg bw (rat)	-	-

Skin corrosion/irritation

Non-irritating to the skin

Serious eye damage/eye irritation

No eye irritation

Sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Chemical Name	ACGIH	IARC	NTP	OSHA
Nickel (CAS #: 7440-02-0)	-	Group 2B	Known Reasonably Anticipated	X
Cadmium and compounds (as Cd) (CAS #: 7440-43-9)	A2	Group 1	Known	X
Cadmium hydroxide (Cd(OH)2) (CAS #: 21041-95-2)	A2	-	-	-
Nickel hydroxide (CAS #: 12054-48-7)	A1	Group 1	Known	X

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Reproductive toxicity
No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Aspiration hazard
No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Nickel (CAS #: 7440-02-0)	0.18 mg/L/72h Pseudokirchneriella subcapitata 0.174 - 0.311 mg/L/96h Pseudokirchneriella subcapitata static	100 mg/L/96h Brachydanio rerio 1.3 mg/L/96h Cyprinus carpio semi-static 10.4 mg/L/96h Cyprinus carpio static	100 mg/L/48h Daphnia magna 1 mg/L/48h Daphnia magna Static
Cadmium and compounds (as Cd) (CAS #: 7440-43-9)	-	0.003: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.006: 96 h Oncorhynchus mykiss mg/L LC50 static 0.002: 96 h Cyprinus carpio mg/L LC50 4.26: 96 h Cyprinus carpio mg/L LC50 semi-static 0.24: 96 h Cyprinus carpio mg/L LC50 static 21.1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.016: 96 h Oryzias latipes mg/L LC50 0.0004 - 0.003: 96 h Pimephales promelas mg/L LC50	0.0244: 48 h Daphnia magna mg/L EC50 Static
Iron (CAS #: 7439-89-6)	-	-	> 100 mg/L/48h (Daphnia magna)

Persistence and degradability
No information available

Bioaccumulative potential
No information available

Mobility in soil
No information available

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations

Contaminated packaging: Dispose of in accordance with federal, state and local regulations

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes

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Nickel 7440-02-0	-	Included in waste streams: F006, F039	-	-
Cadmium and compounds (as Cd) 7440-43-9	-	Included in waste streams: F006, F039, K061, K069, K100	1.0 mg/L regulatory level	-

Chemical Name	California Hazardous Waste Status
Nickel 7440-02-0	Toxic powder Ignitable powder

14. TRANSPORT INFORMATION

It is considered as non-dangerous good by the ICAO, IATA, IMDG and TDG.

According to IATA DGR 56th Edition for transportation and International Maritime Dangerous Goods (IMDG Code 36th) and the Recommendation on the Transportation of Dangerous Goods-Model Regulation (18th)
The products are not subjects/subject to dangerous.

DOT / IMDG / IATA

UN/ID No. Not regulated
Proper shipping name Not regulated
Hazard Class Not regulated
Packing Group Not regulated
Special precautions No information available
Marine pollutant Not applicable

15. REGULATORY INFORMATION

International Inventories

Component	AICS	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	TSCA
Nickel 7440-02-0 (10 - 30)	X	X	X	-	X	X	X	X
Cadmium and compounds (as Cd) 7440-43-9 (10 - 30)	X	X	X	-	X	X	X	X
Cadmium hydroxide (Cd(OH)2) 21041-95-2 (10 - 30)	X	X	-	-	X	-	-	-
Nickel hydroxide 12054-48-7 (10 - 30)	X	X	X	X	X	X	X	X
Iron 7439-89-6 (10 - 30)	X	X	X	-	X	X	X	X

"-" Not Listed
"X" Listed

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Nickel - 7440-02-0	0.1
Cadmium and compounds (as Cd) - 7440-43-9	0.1
Nickel hydroxide - 12054-48-7	0.1

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www.cti-cert.com E-mail:info@cti-cert.com
Hotline 400-6788-333

SARA 311/312 Hazard Categories

Does not apply

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Nickel 7440-02-0	-	X	X	-
Cadmium and compounds (as Cd) 7440-43-9	-	X	X	-
Cadmium hydroxide (Cd(OH)2) 21041-95-2	-	X	-	-
Nickel hydroxide 12054-48-7	-	X	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Nickel 7440-02-0	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Cadmium and compounds (as Cd) 7440-43-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Nickel hydroxide 12054-48-7	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Nickel - 7440-02-0	Carcinogen
Cadmium and compounds (as Cd) - 7440-43-9	Carcinogen Developmental Male Reproductive
Cadmium hydroxide (Cd(OH)2) - 21041-95-2	Carcinogen
Nickel hydroxide - 12054-48-7	Carcinogen

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Nickel 7440-02-0	X	X	X
Cadmium and compounds (as Cd) 7440-43-9	X	X	X
Nickel hydroxide 12054-48-7	X	X	X

16. OTHER INFORMATION

Revision Note

Issue Date	21-Jan-2015
Revision date	21-Jan-2015
Revision Note	Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

-------- End of Safety Data Sheet --------

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Frequently Asked Questions (FAQ)

There are no Faqs