

Report No.: BLILPJAS48781716

# MSDS Report

Sample Description

CO<sub>2</sub> cylinder 43g

Applicant

NOW PRECISION ELECTRONICS CO.,LTD

Pony Testing International Group

[www.ponytest.com](http://www.ponytest.com)

No.: BLILPJAS48781716

Code: m413w14k

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# Material Safety Data Sheet (MSDS)

according to ISHA & MoLto Notice No.2012-14

CO<sub>2</sub> cylinder 43g

## Section 1 - Product and Company Identification

**Product Name:** CO<sub>2</sub> cylinder 43g

**Trade Name:** CO<sub>2</sub> cylinder

**Sample Code:** N/A

**Recommended Uses:** Life-saving appliance.

**Restrictions on use:** N/A

**Company Identification:** NOW PRECISION ELECTRONICS CO.,LTD

**Address:** NO. 16, Sanxing Street, Zhongbei Industrial Park, Xiqing District,  
Tianjin City, P.R.China.

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## Section 2 - Hazards Identification

### EMERGENCY OVERVIEW

**Physical and chemical hazards:** The liquefied gas is not combustible. But containers may explode when heated.

**Human health hazards:** Stable under normal storage and handling conditions. Contact with liquefied gas may be frostbite.

**UN Classification:** UN1013

**Hazard.Risk Classification:**

**Gases Under Pressure:** Press. Gas.

**Label elements including precautionary statements:**

**pictogram(s):**



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**Signal word:** Warning

**Hazard statement(s):**

H280 Contains gas under pressure; may explode if heated.

**Precautionary statement(s):**

**•Prevention:**

None.

**•Response:**

None.

**•Storage:**

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

**•Disposal:**

None.

Supplemental Hazard information (EU): Not applicable.

**Important symptoms:** See Section 11 for more information.

**An outline of an anticipated emergency:** In case of accident or if you feel unwell, seek medical advice immediately. See Section 4 for more information.

### Section 3 – Composition/Information on Ingredients

**General chemical description:** This chemical product is a mixture.

**Composition, Information on Ingredients:**

Chemical Name	CAS No.	Percent (% by weight)	EC#
Steel manufacture, chemicals	65997-19-5	68	266-048-1
Carbon dioxide (CO <sub>2</sub> )	124-38-9	28	204-696-9
Zinc	7440-66-6	4	231-175-3

### Section 4 - First Aid Measures

This product should not present a health hazard when used under reasonable conditions.

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**Inhalation:** If inhaled, remove victim to fresh air immediately. Administer oxygen if breathing is difficult. If victim is not breathing, give artificial respiration immediately. Get medical aid immediately if feel unwell.

**Skin contact:** In case of contact with liquefied gas, thaw frosted parts with lukewarm water. Clothing frozen to the skin should be thawed before being removed. Keep victim warm and quiet. Get medical aid immediately if feel unwell.

**Eye contact:** Get medical aid immediately IF IN EYES.

**Ingestion:** Ingestion of this material is unlikely. Get medical aid immediately IF SWALLOWED.

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically and supportively.

## Section 5 – Fire - Fighting Measures

**Suitable extinguishing media:** Use extinguishing agent suitable for type of surrounding fire.

**Unsuitable extinguishing media:** None.

**Specific Hazards:** Non-flammable gases. Containers may explode when heated. Ruptured cylinders may rocket.

**Specific Extinguishing Methods:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Move containers from fire area if this can be done without risk. Prevent run off from fire control dilution from entering streams or drinking water supply.

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

## Section 6 - Accidental Release Measures

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**Person-related Safety Precautions: Use proper personal protective equipment as indicated in Section 8. Avoid generating dusty conditions. Provide ventilation.**

**Measures for Environmental Protection: Avoid dispersal of spilled material and runoff and contact with soil, water ways, drains and sewers.**

**Measures for Cleaning/Collecting: Carefully collect remainder, then remove to suitable and closed container for disposal or recycle according to local regulations. Review Section 5 and Section 7 sections before proceeding with clean-up.**

**Methods and materials for containment and cleaning up: A Stop leak if this can be done without risk. Move containers from spill area. Carefully collect remainder, then remove to suitable and closed container for disposal or recycle according to local regulations. Review Section 5 and Section 7 sections before proceeding with clean-up.**

## Section 7 - Handling and Storage

**General Information: This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.**

**Storage: Store in a cool, dry, well-ventilated area away from incompatible substances (see section 10), feedstuffs, beverages and foods. Keep away from heat, sparks and flame. Treat carefully, avoid physical damage to containers. The storage area should be equipped with the corresponding species and quantity of emergency equipment, spills emergency treatment equipment and appropriate storage material.**

**Handling: Training should be provided to anyone working with or near this material. Training should cover potential health effects and proper handling techniques. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation.**

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## Section 8 - Exposure Controls & Personal Protection

Control parameters (occupational exposure limit values, biological limit value)

Exposure Limit:

CAS No.	ACGIH	NIOSH	OSHA
65997-19-5	N/A	N/A	N/A
124-38-9	TLV- TWA 5000 ppm TLV- STEL 30000 ppm	REL-TWA 5000 ppm (9000 mg/m <sup>3</sup> ) ST 30,000 ppm (54,000 mg/m <sup>3</sup> )	PEL-TWA 5000 ppm (9000 mg/m <sup>3</sup> )
7440-66-6	N/A	N/A	N/A

**Appropriate Engineering Controls:** Use adequate general or local exhaust ventilation. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Keep away from heat and fire.

**Personal Protective Equipment:**

- Ø **Respiratory Protection:** An appropriate respirator or mask should be used whenever workplace conditions warrant a respirator's use.
- Ø **Hand Protection:** No special requirement under normal conditions. Wear Cold-insulating gloves to reduce the contact when if CO<sub>2</sub> is liquid.
- Ø **Eyes Protection:** No special requirement under normal conditions. It is recommended to wear appropriate safety spectacles when work environment needed.
- Ø **Skin and Body Protection:** No special requirement under normal conditions. Wear protective clothing to prevent skin exposure if CO<sub>2</sub> is liquid.

**Other Protection:** Practice good health habits. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands, forearms and face thoroughly after handling products, before eating, smoking and using the lavatory and at the end of the working period. Do not allow this product to be released to the environment without proper treatment.

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## Section 9 - Physical and Chemical Properties

**Appearance:** Zinc plated silver cylinder containing compressed colourless liquefied gas.

**Odor:** Odorless.

**Odour threshold:** N/A

**pH:** N/A

**Melting point/freezing point:** N/A

**Boiling point or initial boiling point and boiling range:** N/A

**Flash Point:** N/A

**Explosive limits:** N/A

**Vapour pressure:** N/A

**Relative vapor density:** N/A

**Solubility in Water:** N/A

**Partition coefficient: n-octanol/water:** N/A

**Auto-ignition temperature:** N/A

**Decomposition temperature:** N/A

**Kinematic viscosity:** N/A

**Explosive properties:** N/A

**Oxidising properties:** N/A

**Particle characteristics:** N/A

**Flammability (solid, gas):** N/A

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of hazardous reactions:** Non-flammable gases. Containers may explode when heated.

**Conditions to Avoid:** Incompatible materials, any sources of ignition or heat (e.g. open flames, smoking, hot surfaces, excess heat).

**Incompatibilities with Other Materials:** None.

**Hazardous Decomposition Products:** Decomposition will not occur.

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## Section 11 - Toxicological Information

Information on the likely routes of exposure: Inhalation, ingestion, skin, eye.

Health hazards information: No data available.

Acute toxic:

CAS No.	LD50/LC50
65997-19-5	No data available
124-38-9	LC50: 470,000 ppm/30 min (inhalation, rat)
7440-66-6	LD50 >2000 mg/kg (oral, rat) LC50 > 5410 mg/m <sup>3</sup> (Inhalation: Dusts and mists, rat)

Skin irritation/corrosion: No data available

Eyes irritation/corrosion: No data available

Respiratory or Skin sensitisation: No data available

Reproductive Cell Mutagenicity: No data available

Carcinogenicity:

All compositions in this product are not listed as carcinogens by ACGIH, IARC, NTP, or CA Prop 65.

Reproductive Toxicity: No data available

Specific target organ toxicity-Single exposure: No data available

Specific target organ toxicity-Repeated exposure: No data available

Aspiration hazard: No data available.

Potential Health Effects:

Ø Eye: On contact with liquid: frostbite.

Ø Skin: On contact with liquid: frostbite.

Ø Ingestion: Ingestion is unlikely under normal using or storing conditions.

Ø Inhalation: May be dizziness, headache, elevated blood pressure, increased heart rate, suffocation, unconsciousness if inhaled.

## Section 12 - Ecological Information

Aquatic and terrestrial ecotoxicity:

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**CAS#7440-66-6:**

- 72h-ErC50 = 0.15 mg/L-algae (Pseudokirchneriella subcapitata)

**Persistence and degradability:** No data available

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

**Other adverse effects:** No data available.

**Water Pollution Classification, WGK:** No data available.

## Section 13 - Disposal Considerations

**Disposal method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Disposal should be in accordance with applicable regional, national and local laws and regulations. Contaminated packaging material should be treated equivalent to residual chemical.

**Disposal precaution (including the disposal method of contaminated container and packaging):** Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Refer to Section 7-Handling and Storage and Section 8-Exposure Controls/Personal Protection for additional handling information and protection of employees.

## Section 14 - Transport Information

**Sea transport (IMDG CODE 37-14 edition)**

**UN Number:** UN 1013

**UN Proper Shipping Name:** CARBON DIOXIDE

**Transport hazard class:** 2.2

**Subsidiary risk:** N/A

**Packaging group:** N/A

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**Packaging Sign:**



**Other Information:** N/A

**Special precautions for user:** Away from high temperature.

**Special provisions:** None

**Marine Pollutant (Y/N):** No.

**Land transport (TDG 19<sup>th</sup>)**

**UN Number:** UN 1013

**UN Proper Shipping Name:** CARBON DIOXIDE

**Transport hazard class:** 2.2

**Subsidiary risk:** None

**Packaging group:** None

**Packaging Sign:**



**Other Information:** None

**Special precautions for user:** Away from high temperature.

**Special provisions:** None

**Marine Pollutant (Y/N):** No.

## Section 15 - Regulatory Information

**Industrial Safety and Health Act:** Not applicable

**Toxic Chemical Control Act:** Not applicable

**Safety Management method of hazardous materials:** Not applicable

**Wastes Management Act:** Not applicable

**Domestic and foreign**

- **Domestic regulations:** Persistent organic pollutants control act: Not applicable.
- **Foreign regulations:** Not applicable.

**Other requirements in domestic and other countries:** Reference to the local, national, US, EU, CA and international regulations.

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CAS No.	KECL	TSCA	IECSC	DSL/NDSL	EINECS/ ELINCS/ NLP
65997-19-5	Listed	Listed	Unlisted	Listed in DSL	Listed
124-38-9	Listed	Listed	Listed	Listed in DSL	Listed
7440-66-6	Listed	Listed	Listed	Listed in DSL	Listed

## Section 16 - Additional Information

**Issue Time: 2017-02-15**

**Issue Department: Technical department**

**Data review unit: /**

**Modification record: /**

**Notice to reader**

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

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

**Other Information:**

CAS: (Chemical Abstracts Service);

EC: (European Commission);

ACGIH: (American Conference of Governmental Industrial Hygienists);

NIOSH: (US National Institute for Occupational Safety and Health);

OSHA: (US Occupational Safety and Health);

TLV: (Threshold Limit Value)

TWA: (Time Weighted Average);

STEL: (Short Term Exposure Limit);

PEL: (Permissible Exposure Level);

REL: (Recommended Exposure Limit);

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PC-STEL: (Permissible concentration-time weighted average);

PC-TWA: (Permissible concentration-short time exposure limit);

LC50: (Lethal concentration, 50 percent kill);

LD50: (Lethal dose, 50 percent kill);

IARC: (International Agency for Research on Cancer);

EC50: (Median effective concentration);

BCF: (Bioconcentration Factor);

BOD: (Biochemical oxygen demand);

NOEC: (No observed effect concentration);

NTP: (US National Toxicology Program);

RTECS: (Registry of Toxic Effects of Chemical Substances);

IATA: (International Air Transport Association);

IMDG: (International Maritime Dangerous Goods);

TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations);

TOC: (Total Organic Carbon);

TSCA: (Toxic Substances Control Act of USA);

DSL: (the Domestic Substances List of Canada);

NDSL: (the Non-domestic Substances List of Canada)

\*\*\*End of report \*\*\*

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