according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

Diphenylcarbazide Indicator

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Diphenylcarbazide Indicator

Manufacturer/Supplier Article number: DC2005SS

Recommended uses of the product and restrictions on use: Laboratory chemicals

Manufacturer Details:

AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:



Flammable

Flammable solids, category 2



Irritant

Eye irritation, category 2A Specific target organ toxicity following single exposure, category 3

Flammable liquids - Flam. Liq. 2.

Serious Eye Damage/Eye Irritation - Eye Irrit. 2.

Specific target organ toxicity - Single exposure - STOT SE 3.

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary statements:

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

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

Wash skin thoroughly after handling.

Keep container tightly closed.

Ground/bond container and receiving equipment.

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

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

Use only outdoors or in a well-ventilated area.

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

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In case of fire, use agents recommended in section 5 for extinction.

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

Call a POISON CENTER or doctor/physician if you feel unwell.

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

If eye irritation persists get medical advice/attention.

Store in a well ventilated place. Keep cool.

Store locked up.

Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 140-22-7	1,5-Diphenylcarbazide	0.63 %
CAS 67-64-1	Acetone	99.37 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. If breathing is difficult give oxygen. Immediately get medical assistance.

After skin contact:

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Remove contact lens(es) if able to do so during rinsing. Rinse or flush exposed eye gently using water for 15-20 minutes. Immediately get medical assistance.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Dilute mouth with water or milk after rinsing. Immediately get medical assistance.

Most important symptoms and effects, both acute and delayed:

Irritation. Ingestion. May cause irritation of the digestive tract, central nervous system depression. Advanced stages may cause collapse, unconsciousness, coma and possible death. Inhalation. High concentrations may cause nausea, headache, dizziness, unconsciousness, and coma. May cause respiratory tract irritation, speech abnormalities, and motor skill coordination issues. Nausea. Headache. Shortness of breath. Dizziness, lightheadedness. Eyes. May cause burning and stinging irritation, redness, tearing, inflammation, and possible damage to cornea and conjunctiva. Skin. Prolonged or repeated exposure may cause dry skin and cracking.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

according to 29CFR1910/1200 and GHS Rev. 3

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Extinguishing media

Suitable extinguishing agents:

Water spray can keep containers cool. Dry chemical, alcohol foam, carbon dioxide.

Unsuitable extinguishing agents:

Water may be ineffective on fire.

Special hazards arising from the substance or mixture:

Moderate explosion hazard. Dangerous fire hazard when exposed to heat, sparks, and open flames.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Use spark-proof and explosion proof equipment. Prevent accumulation of static charge.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Ethanol has a slight acute and chronic toxicity to aquatic life.

Methods and material for containment and cleaning up:

If necessary use trained response staff or contractor. Refer to Section 8. Wear protective eyeware, gloves, and clothing. Remove all sources of ignition. Contain spill. Absorb with suitable material and place in chemical waste container. Ventilate area of spill. Use non-sparking equipment. Dispose of empty containers as unused product. Refer to Section 13.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Wear protective eyeware, gloves, and clothing. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Empty containers can still be hazardous since they retain product residue. Use non-sparking equipment/tools. Ground/bond container and receiving equipment. Use only in well ventilated area. Take precautionary measures against static discharge.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Store in a secure flammable storage area away from sources of ignition. Store locked up. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Keep container tightly closed. Store with like hazards. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection







Control parameters:

67-64-1, Acetone, OSHA - Final PELs - Time Weighted Averages 1000 ppm TWA; 2400 mg/m3 TWA.

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Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use/handling. Ensure equipment is approved for use with flammable liquids. Ensure adequate ventilation to ensure the

Lower Explosive Limit (LEL) is not reached.

Respiratory protection: Use suitable respiratory protective device when high concentrations are

present. If exposure limit is exceeded, a full-face respirator with organic

cartridge may be worn.

Protection of skin: Select glove material impermeable and resistant to the substance. Select

glove material based on rates of diffusion and degradation. Wear protective gloves, and lab coat. Do not reuse contaminated personal

protective equipment.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: Wash hands before breaks and at the end of work. Perform routine

housekeeping to prevent dust generation. Before re-wearing, wash contaminated clothing. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear colorless liquid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Characteristic odor, sweet, mint - like	Vapor pressure at 20°C:	231 mm Hg @ 25C (Acetone)
Odor threshold:	Not determined	Vapor density:	2.0 (air = 1) (Acetone)
pH-value:	4	Relative density:	Not determined
Melting/Freezing point:	-94.7 °C (Acetone)	Solubilities:	Miscible with water (at 20 C).
Boiling point/Boiling range:	56.05 °C at 1013.25 hPa (Acetone)	Partition coefficient (noctanol/water):	Log Kow - 0.24 (Acetone)
Flash point (closed cup):	53C (Acetone)	Auto/Self-ignition temperature:	465 °C (Acetone)
Evaporation rate:	1.0 (Acetone)	Decomposition temperature:	Not available
Flammability (solid, gaseous):	Flammable	Viscosity:	a. Kinematic: Not available b. Dynamic: Not available
Density at 20°C:	0.7845 g/cm3 at 25 °C (Acetone)		

SECTION 10: Stability and reactivity

Reactivity: None Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

Vapours may form explosive mixture with air.

Conditions to avoid:

Excessive heat. Incompatible materials. Ignition sources.

Incompatible materials:

Strong oxidizers, heat, sparks, open flames, platinum, sodium, bromine pentafluoride, potassium dioxide, acetyl bromide, and acetyl chloride.

Hazardous decomposition products:

according to 29CFR1910/1200 and GHS Rev. 3

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Carbon oxides (CO, CO2). Acrid and irritating fumes. Nitrogen oxides.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD-50 15800 mg/kg (rabbit).

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information. **Serious eye damage/irritation**: No additional information. **Respiratory or skin sensitization**: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Fish (acute 67-64-1): , 96 Hr LC50 Oncorhynchus mykiss: 4.74 - 6.33 mL/L; 96 Hr LC50 Pimephales promelas: 6210 - 8120 mg/L; 96 Hr LC50 Lepomis macrochirus: 8300 mg/L.

Persistence and degradability: No additional information.

Bioaccumulative potential:

BCF (67-64-1) 0.69 species: fish.

Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed hazardous waste disposal company for disposal. Acetone has a RCRA Waste Code of U002. Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262 11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of in accordance with federal, state, and local regulations.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

UN1193

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

Diphenylcarbazide Indicator

Limited Quantity Exception:

RQ (if applicable): None

Proper shipping Name: Flammable Liquid,

N.O.S., (Acetone Solution).

Hazard Class: 3
Packing Group: II.

Bulk:

Marine Pollutant (if applicable): No

additional information. **Comments:** None

Non Bulk:

None

RQ (if applicable): None

Proper shipping Name: Flammable Liquid,

N.O.S., (Acetone Solution).

Hazard Class: 3
Packing Group: II.

Marine Pollutant (if applicable): No

additional information. **Comments:** None





SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute,Fire

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

67-64-1 Acetone 5000 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

64-17-5 Ethanol.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other information

according to 29CFR1910/1200 and GHS Rev. 3

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This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0 **HMIS**: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA)

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA. Resource Conservation and Recovery Act (USA).

TSCA. Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

ACGIH American Conference of Governmental Industrial Hygienists

CAS Chemical Abstracts Service (division of the American Chemical Society).

NFPA National Fire Protection Association (USA).

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).