according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

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

Product name: Chromatography Solution C

Manufacturer/Supplier Article number: S25253

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

Manufacturer Details:

AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291

Supplier Details:

Fisher Science Education 6771 Silver Crest Road, Nazareth, PA 18064 800 955-1177

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:



Flammable

Flammable liquids, category 2



Irritant

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



Health hazard

Germ cell mutagenicity, category 1B Carcinogenicity, category 1B Aspiration hazard, category 1



Environmentally Damaging

Chronic hazards to the aquatic environment, category 2

Flam. Liq. 2.

Eye Irrit. 2A.

STOT SE 3.

Muta. 1B.

Carc. 1B.

Asp. Tox. 1.

Aquatic Acute 2.

Aquatic Chronic 2.

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapour. Causes serious eye irritation.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

May cause genetic defects.

May cause cancer.

Toxic to aquatic life with long lasting effects.

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.

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

Use personal protective equipment as required.

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.

Obtain special instructions before use.

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

Avoid release to the environment.

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

Wash skin thoroughly after handling.

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.

DO NOT induce vomiting.

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

Collect spillage.

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

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

Continue rinsing.

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

If eye irritation persists get medical advice/attention.

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

IF exposed or concerned: Get medical advice/attention.

Store in a well ventilated place. Keep container tightly closed.

Store in a well ventilated place. Keep cool.

Store locked up.

Protect from sunlight.

Dispose of contents and container to an approved waste disposal plant.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:				
CAS 67-64-1	Acetone	10 %		
CAS 8032-32-4	Petroleum ether	90 %		
Percentages are by weight				

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact:

Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact:

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

After swallowing:

Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Seek immediate medical assistance. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed:

burning sensation. Irritation. Headache. Nausea. Shortness of breath.

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

Extinguishing media

Suitable extinguishing agents:

Use Dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents:

Water may be ineffective.

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides. Vapors may form an explosive mixture with air. Vapors may cause flash back. Containers may explode when heated.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Use NIOSH-approved respiratory protection/breathing apparatus. Refer to Section 8.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure that air-handling systems are operational. Avoid contact with eyes, skin, and clothing. Remove all sources of ignition.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyeware, gloves, and clothing. Always obey local regulations. Containerize for disposal. Refer

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

to Section 13. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Refer to Section 8. If necessary use trained response staff or contractor.

Reference to other sections: None **SECTION 7: Handling and storage**

Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Ground and bond containers when transferring material. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not ingest or inhale. Prevent build- up of vapors to explosive concentration. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use under a chemical fume hood. Use explosion proof equipment.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Keep away from open flames, hot surfaces and sources of ignition. Provide ventilation for containers. Keep container tightly closed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection







67-64-1, Acetone, ACGIH TLV TWA 1,200 mg/m3. **Control parameters:** 67-64-1, Acetone, OSHA PEL TWA 2,400 mg/m3.

> 8032-32-4, Petroleum Ether., OSHA PEL TWA 350 mg/m3. 8032-32-4, Petroleum Ether., ACGIH TLV TWA 350 mg/m3.

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a chemical fume hood. Use adequate general or local explosion-proof ventilation.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Full face piece respirator with organic vapor cartridge should be worn if exposure limit is

exceeded.

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

proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wear

protective clothing.

Wear equipment for eye protection tested and approved under Eye protection:

appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses or goggles are appropriate eye protection.

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

of work. Before re-wearing, wash contaminated clothing. Avoid contact

with skin, eyes and clothing.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear Liquid	Explosion limit lower: Explosion limit upper:	approx. 1.1% approx. 5.9%
Odor:	Natural gas odor	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	2.5 (Pet. Ether)
pH-value:	Not determined	Relative density:	0,6 (Pet. Ether)
Melting/Freezing point:	-73 °C (Pet. Ether)	Solubilities:	Insoluble in water
Boiling point/Boiling range:	35-60 °C (Pet. Ether)	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	Acetone) -20 °C (CC) (Petroleum Ether) -18 °C (CC)	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	6.82 (Pet.Ether)	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Flammable	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions. Light sensitive.

Possible hazardous reactions:

Acetone reacts violently with phosphorous oxychloride. None under normal processing.

Conditions to avoid:

Incompatible materials. Heat, Sparks, Open Flames. Direct Sunlight. excess heat. Ignition sources.

Incompatible materials:

Strong oxidizing agents. Strong reducing agents. Strong Bases. Nitric acid. sulfur dichloride potassium tert-butoxide. hexachloromelamine. chloroform. alkali, sulfuric acid.

Hazardous decomposition products:

Carbon monoxide (CO), Carbon dioxide (CO2), Hydrocarbons.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 Rabbit: 20000 mg/kg 67-64-1 (acetone).

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

Rabbit: Mild Skin Irritation - 24 h. 67-64-1 (acetone).

Serious eye damage/irritation:

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

Rabbit: Mild Eye Irritation - 24 - h. 67-64-1 (acetone).

Respiratory or skin sensitization:

guinea pig - Does not cause skin sensitisation.

Carcinogenicity:

Confirmed carcinogen in animal tests.: 8032-32-4 (petroleum ether)

Germ cell mutagenicity:

In vivo tests showed mutagenic effects

Reproductive Toxicity: No additional information.

STOT-single and repeated exposure:

May cause drowsiness or dizziness.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Fish LC50 - Oncorhynchus mykiss (rainbow trout) - 5,540 mg/l - 96 h, 67-64-1 (acetone). Invertebrates EC50 - Daphnia magna (Water flea) - 8,800 mg/l - 48 h, 67-64-1 (acetone).

Persistence and degradability:

No information Available.

Bioaccumulative potential:

No information Available.

Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects:

None identified.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. 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.

SECTION 14: Transport information

US DOT

UN Number:

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

ADR, ADN, DOT, IMDG, IATA 1993

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Flammable Liquid, Proper shipping Name: Flammable Liquid,

n.o.s. (Petroleum Ether, Acetone). n.o.s. (Petroleum Ether, Acetone).

Hazard Class: 3
Packing Group: ||.
Packing Group: ||.

Marine Pollutant (if applicable): No Marine Pollutant (if applicable): No

additional information. additional information. **Comments:** None **Comments:** None





SECTION 15: Regulatory information

United States (USA)

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

Acute, Chronic, Fire

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

67-64-1 Acetone - U002.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

67-64-1 Acetone 5000 lb.

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:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.23.2015

Chromatography Solution C

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.

NFPA: 3-0-0 **HMIS**: 3-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

IATA International Air Transport Association.

ACGIH American Conference of Governmental Industrial Hygienists

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

NFPA National Fire Protection Association (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

DNEL Derived No-Effect Level (REACH).

HMIS Hazardous Materials Identification System (USA).

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).

PNEC. Predicted No-Effect Concentration (REACH).

TSCA. Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.