

SAFETY DATA SHEET

Preparation Date: 05/28/2015

Revision Date: 05/28/2015

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: B1070
Product Name: BENZENE, REAGENT, ACS

Other means of identification

Synonyms: (6)Annulene
 Benzin
 Benzine
 Benzol
 Benzol 90
 Benzole
 Benzolene
 Bicarburet of hydrogen
 Carbon oil
 Coal naphtha
 Cyclohexatriene
 Mineral naphtha
 Phene
 Phenyl hydride
 Polystream
 Pyrobenzol
 Pyrobenzole
 Benzène (French)

CAS #: 71-43-2
RTECS # CY1400000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Gasoline additive. Detergents. Dyes. Printing and Lithography. Adhesives. Coatings. Degreasing agent. Chemical intermediate. Rubber products.

Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 2

Label elements

Danger

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause genetic defects
May cause cancer
Causes damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways
Highly flammable liquid and vapor



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Toxic to aquatic life with long lasting effects
Toxic to aquatic life
May be harmful in contact with skin

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/ .? /equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see .? on this label)
 In case of fire: Use CO2, dry chemical, or foam to extinguish.
 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.
 If skin irritation occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting
 Rinse mouth

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS
--

Components	CAS-No.	Weight %	Trade Secret
Benzene 71-43-2	71-43-2	100	*

4. FIRST AID MEASURES

First aid measures**General Advice:**

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126).

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact:

Flush eyes with water for 15 minutes. Get medical attention.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms

Causes skin irritation. May cause dehydration, defatting, edema, burning and blistering of the skin. Causes serious eye irritation. Lacrimation. May cause irritation of respiratory tract. Coughing and wheezing. Dyspnea (Shortness of breath and difficulty breathing). Aspiration hazard if swallowed - can enter the lungs and cause damage. Aspiration into the lungs may cause chemical pneumonitis. Central nervous system effects. Headache. Drowsiness. Dizziness. Ataxia. May affect the cardiovascular system. Weak, rapid pulse or rapid heart rate (Tachycardia). Causes digestive (gastrointestinal) tract irritation. Burning sensation in the mouth and stomach. Ingestion may cause vomiting and nausea. May affect the blood. May affect the bone marrow. May affect the liver. It may affect the kidneys.

Indication of any immediate medical attention and special treatment needed

Notes to Physician:

Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

Dry chemical. Carbon dioxide (CO₂). Water spray mist or foam.

Unsuitable Extinguishing Media:

Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products:

carbon monoxide; carbon dioxide

Specific hazards:

Flammable
May be ignited by heat, sparks or flames
Vapor may travel considerable distance to source of ignition and flash back
Vapors may form explosive mixtures with air
Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks)
Container explosion may occur under fire conditions or when heated
Fire may produce irritating, corrosive and/or toxic gases

Special Protective Actions for Firefighters

Specific Methods:

Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment 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

Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use clean non-sparking tools to collect absorbed material. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. Take precautionary measures against static discharges. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents. Acids. Chlorine trifluoride. Nitric acid. Bromine pentafluoride. Diborane.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Benzene 71-43-2	10 ppm TWA 1 ppm TWA 25 ppm Ceiling 5 ppm STEL	0.1 ppm TWA 1 ppm STEL	2.5 ppm STEL 0.5 ppm TWA	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Benzene 71-43-2	0.5 ppm TWA 1.6 mg/m ³ TWA 2.5 ppm STEL 8 mg/m ³ STEL	0.5 ppm TWA 2.5 ppm STEL	0.5 ppm TWA	1 ppm TWAEV 3 mg/m ³ TWAEV 5 ppm STEV 15.5 mg/m ³ STEV

Australia and Mexico

Components	Australia	Mexico
Benzene 71-43-2	1.0 ppm//3.2 mg/m ³ TWA confirmed carcinogen	1 ppm TWA 3.2 mg/m ³ TWA 5 ppm STEL 16 mg/m ³ STEL

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles

Skin and body protection: Chemical resistant apron Long sleeved clothing Gloves

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.	Appearance: No information available	Color: Clear. Colorless. Light yellow.
Odor: Aromatic.	Taste No information available	Molecular/Formula weight: 78.11
Formula: C6-H6	Flammability: No information available	Flashpoint (°C/°F): -11 °C/12 °F
Flash point (°C): -11	Flash Point Tested according to: Closed cup	Autoignition Temperature (°C/°F): 497.78-562.2 °C/928-1044 °F
Lower Explosion Limit (%): 1.2%	Upper Explosion Limit (%): 7.8%	pH: No information available
Melting point/range(°C/°F): 5.5 °C/41.9 °F	Boiling point/range(°C/°F): 80.1 °C/176.2 °F	Decomposition temperature(°C/°F): No information available
Bulk density: No information available	Density (g/cm3): 0.8794 @ 20 °C	Specific gravity: 0.8787 @ 15 °C 0.8794 @ 20 °C
Vapor pressure @ 20°C (kPa): 10	Evaporation rate: 2.8 (ether = 1)	Vapor density: 2.8
VOC content (g/L): 879	Odor threshold (ppm): 4.68	Partition coefficient (n-octanol/water): 2.1
Viscosity: No information available	Miscibility: Miscible with alcohol Miscible with Chloroform Miscible with Ether Miscible with Acetone Miscible with Carbon disulfide Miscible with Carbon tetrachloride Miscible with oils Miscible with glacial Acetic Acid	Solubility: Sparingly soluble in water Solubility in Water: 1790 mg/L @ 25 °C

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents, acids, chlorine trifluoride, nitric acid, bromine pentafluoride, and diborane
Benzene ignites on contact with Sodium peroxide, Sodium peroxide + water, Dioxygenyl tetrafluoroborate, Iodine heptafluoride, and Dioxygen difluoride, Chromic anhydride
Benzene reacts violently with Iodine pentafluoride, Uranium hexafluoride
Benzene reacts explosively with Chlorine, Chlorine + light, fluorides, Bromine pentafluoride, Chlorine trifluoride, Arsenic pentafluoride + Potassium methoxide, Diborane, Nitric acid, Nitryl perchlorate, liquid oxygen, ozone, metal perchlorates, Silver perchlorate, pentafluoride + methoxide, Permanganic acid, Peroxydisulfuric acid, permanganates + Sulfuric acid
Benzene reacts violently or with incandescence in contact with hydrogen + Raney Nickel

Chemical stability

Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials.

Incompatible Materials: Oxidizing agents. Acids. Chlorine trifluoride. Nitric acid. Bromine pentafluoride. Diborane.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Skin. Eyes. Inhalation.

Acute Toxicity

Component Information

Benzene - 71-43-2

LD50/oral/rat = 1800 mg/kg (LOLI)

930-6400 mg/kg (RTECS)

810 mg/kg Oral LD50 Rat (LOLI)

LD50/oral/mouse = 4700 mg/kg

LD50/dermal/rat = No information available

LD50/dermal/rabbit = >9400 mg/kg Dermal LD50 Rabbit (RTECS)

>8200 mg/kg (LOLI)

LC50/inhalation/rat = 13050 - 16000 ppm Inhalation LC50 Rat 4 h (EU Commission IUCLID dataset)

44.66 mg/L Inhalation LC50 Rat 4 h (LOLI)

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = >9400 uL/kg LD50 Dermal Guinea Pig

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 810mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 4700mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = > 9400mg/kg

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = 44.66mg/l (4-hr)

VALUE-Gas = 13050-16000ppm (4-hr)

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Product code: B1070

Product name: BENZENE, REAGENT,
ACS

8 / 15

Symptoms

Skin Contact:	Causes skin irritation. Moderate skin irritation. May cause contact dermatitis. May cause dehydration, defatting, edema, burning and blistering of the skin.
Eye Contact:	Causes serious eye irritation. Moderately irritating to the eyes. Causes lacrimation.
Inhalation	Irritating to respiratory system. Symptoms may include coughing and wheezing. May cause respiratory arrest. Exposure to high concentrations may cause headache, nausea, vomiting. May cause muscle weakness. May affect behavior/central nervous system (dizziness, vertigo, lightheadedness, loss of coordination, delirium, tremors, inebriation, euphoria, convulsions, fatigue, drowsiness, narcosis, anesthesia, loss of consciousness, coma. May affect the brain. It may affect the urinary system. It may affect the blood (changes in white blood cell count, changes in other cell count).
Ingestion	May be harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. Symptoms may include a burning sensation in the mouth, and stomach. Ingestion may cause nausea, vomiting. May cause flushed skin. May cause pallor. Aspiration hazard if swallowed. Aspiration into the lungs can cause chemical pneumonitis. May affect respiration (dyspnea, respiratory depression). It may affect cardiovascular system (hypertension). May affect the cardiovascular system (weak rapid pulse, tachycardia). It may affect the blood (changes in white and red blood cell count). It may affect the bone marrow (changes in bone marrow). May affect the peripheral nervous system (recording from peripheral motor nerve). May affect peripheral nervous system (flaccid paralysis without anesthesia (usually neuromuscular blockage)). May affect behavior/central nervous system (Central Nervous System stimulation followed by Central Nervous System depression - headache, irritability, dizziness, ataxia, drowsiness, somnolence, delirium, tremor, weakness, convulsions).
Aspiration hazard	May be fatal if swallowed and enters airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	Prolonged or repeated inhalation may cause anorexia, diarrhea. Prolonged or repeated inhalation may affect metabolism (weight loss). Prolonged or repeated inhalation may affect the blood (changes in white and red blood cell count, leukopenia, leukemia, pigmented or nucleated red blood cells, thrombocytopenia, normocytic anemia, aplastic anemia). Prolonged or repeated inhalation may affect the bone marrow (changes in bone marrow). Prolonged or repeated inhalation may cause central nervous system effects. Prolonged or repeated inhalation may affect the liver. Prolonged or repeated inhalation may affect the urinary system. Prolonged or repeated inhalation may affect the spleen. Prolonged or repeated inhalation may affect the adrenal gland. Prolonged or repeated inhalation may affect the pituitary gland. Prolonged or repeated inhalation may affect the cardiovascular system. Prolonged or repeated ingestion may cause weight loss. Prolonged or repeated ingestion may affect the blood (changes in serum composition, changes white and red blood cell count, anemia, leukopenia, leukemia, lymphomas). Prolonged or repeated ingestion may affect the liver, and kidneys. Prolonged or repeated ingestion may affect the spleen. Prolonged or repeated ingestion may affect the thymus gland. Prolonged or repeated skin contact may cause dryness and scaling of the skin.
Sensitization:	No information available

Mutagenic Effects: May affect genetic material
 Mutations in microorganisms
 Experiments with bacteria and/or yeast have shown mutagenic effects
 Mutagenic effects in mammalian somatic cells
 Cytogenic analysis - hamster ovary
 Cytogenic analysis (hamster lung)
 Cytogenic Analysis: human lymphocyte
 DNA damage - hamster ovary

Carcinogenic effects: Carcinogenic.

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Benzene	Group 1 - Monograph 100F [2012] Supplement 7 [1987] Monograph 29 [1982]	A1 Confirmed Human Carcinogen	Known Human Carcinogen	Present Cancer hazard - see 29 CFR 1910.1028	Not listed	Present when used in feedstock containing more than 50% of Benzene by volume

ACGIH (American Conference of Governmental Industrial Hygienists)
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: May cause adverse reproductive effects
Developmental Effects: May cause adverse developmental effects based on animal data
 No information on developmental toxicity effects on humans was found
Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data
 There is limited evidence that Benzene is a teratogen in animals

Specific Target Organ Toxicity

STOT - single exposure No information available
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
Target Organs: Eyes. Skin. Blood. Bone Marrow. Central nervous system. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Toxic to aquatic organisms.

Benzene - 71-43-2

Freshwater Algae Data: 29 mg/L EC50 Pseudokirchneriella subcapitata 72 h
Freshwater Fish Species Data: 10.7-14.7 mg/L LC50 Pimephales promelas 96 h flow-through 1
 22330-41160 µg/L LC50 Pimephales promelas 96 h static 1
 70000-142000 µg/L LC50 Lepomis macrochirus 96 h static 1
 22.49 mg/L LC50 Lepomis macrochirus 96 h static 1
 28.6 mg/L LC50 Poecilia reticulata 96 h static 1
 5.3 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1

Benzene - 71-43-2

Water Flea Data: 8.76 - 15.6 mg/L EC50 Daphnia magna 48 h
10 mg/L EC50 Daphnia magna 48 h

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Benzene	None	None	None	U019 Ignitable waste, Toxic waste

14. TRANSPORT INFORMATION

DOT

UN-No: UN1114
Proper Shipping Name: Benzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
ERG No: 130
Marine Pollutant: No data available
DOT RQ (lbs): 10 lbs./4.54 kg

Symbol(s): R2

TDG (Canada)

UN-No: UN1114
Proper Shipping Name: Benzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: No information available

ADR

UN-No: UN1114
Proper Shipping Name: Benzene
Hazard Class: 3
Packing Group: II
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

Product code: B1070

Product name: BENZENE, REAGENT,
ACS

11 / 15

14. TRANSPORT INFORMATION

CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: UN1114
Proper Shipping Name: Benzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-E
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: UN1114
Proper Shipping Name: Benzene
Hazard Class: 3
Subsidiary Risk: 3
Packing Group: II
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN1114
Proper Shipping Name: Benzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: No information available

IATA

UN-No: UN1114
Proper Shipping Name: Benzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 3H
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Benzene</i>	Present	Present KE-02150	Present	Present (3)-1	Present	Present	Present 200-753-7

U.S. Regulations

Benzene

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0197
New Jersey (EHS) List: 0197 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present

Product code: B1070

Product name: BENZENE, REAGENT,
ACS

12 / 15

Benzene

Pennsylvania RTK: Environmental hazard
Special hazardous substance

Pennsylvania RTK - Environmental Hazard List Present

Pennsylvania RTK - Special Hazardous Substances Present

Michigan - Critical Materials List: Present

Minnesota - Hazardous Substance List: Present

New York Release Reporting - List of Hazardous Substances:

10 lb RQ

1 lb RQ

Connecticut - Carcinogenic Substances: Present

Louisiana Reportable Quantity List for Pollutants: 10lbfinal RQreceives an adjustable RQ of 10 lbs based on potential carcinogenicity in August 14, 1989 final rule

4.54kgfinal RQreceives an adjustable RQ of 10 lbs based on potential carcinogenicity in August 14, 1989 final rule

California Directors List of Hazardous Substances: Present

FDA - 21 CFR - Total Food Additives 172.560 175.105

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Benzene	carcinogen	developmental toxicity	male reproductive toxicity	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
<i>Benzene</i>	10 lb final RQ 4.54 kg final RQ	None	None	None	0.1 % de minimis concentration

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
<i>Benzene</i>	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

B2 Flammable liquid

D2A Very toxic materials

D2B Toxic materials

Benzene

B2 D2A D2B

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Benzene	0.1 %

Inventory

Product code: B1070

Product name: BENZENE, REAGENT,
ACS

Components	Canada (DSL)	Canada (NDSL)
Benzene	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Benzene	Present	Not listed

EU Classification

R-phrase(s)

R11 - Highly flammable.

R45 - May cause cancer.

R46 - May cause heritable genetic damage.

R65 - Harmful: may cause lung damage if swallowed.

R36/38 - Irritating to eyes and skin.

R48/23/24/25 - Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

S -phrase(s)

S53 - Avoid exposure - obtain special instructions before use.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Components	Classification	Concentration Limits:	Safety Phrases
Benzene	F; R11 Xi; R36/38 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65	No information	S53 S45

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant.

Xn - Harmful.

T - Toxic

F - Highly flammable.



16. OTHER INFORMATION

16. OTHER INFORMATION

C:\Program
Files\Wercs50\graphics\HMISFre
nch.zip\HMIS Translated\230.jpg

Preparation Date: 05/28/2015
Revision Date: 05/28/2015
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet