Safety Data Sheet

Hydrofire

1. IDENTIFICATION

Product identifier

Product Name: HYDRO FIRE

Other means of identification PETROLEUM ETHER, B.R. 35 DEG -60 DEG C, REAGENT, ACS

Synonyms:
Benzine (light petroleum distillate)
Benzoline
Canadol
Ligroin
Painters naphtha
Refined solvent naphtha

CAS #: 8032-32-4

Recommended use of the chemical and restrictions on use

Recommended use: Fire accelerate for professional Special Effects use only. Use of this material is at the sole risk of the purchaser.

Uses advised against

Supplier:

Roger George Special Effects
14525 Bessemer St
Van Nuys, CA 91411
(818) 994-3049

Emergency telephone number (800) 535-5053 #85740

2. HAZARDS IDENTIFICATION

Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Inhalation (Gases)	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 2

Label elements

Danger

Hazard statements
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause drowsiness or dizziness
May cause 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
Not available

Precautionary Statements - Prevention
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
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 container and receiving equipment
Use explosion-proof equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response
Get medical attention if you feel unwell
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 attention.
If skin irritation occurs: Get medical attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
IF SWALLOWED: Immediately call a POISON CENTER or physician
Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Petroleum Ether	8032-32-4	100

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing 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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms

Irritating to eyes and skin
Central nervous system effects
May cause headache
Drowsiness
Narcosis
Inhalation of vapors may cause dizziness or suffocation
Aspiration hazard if swallowed - can enter the lungs and cause damage
May cause nausea, headache, vomiting
May cause diarrhea

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: Carbon dioxide (CO_2). Dry chemical. 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 Extremely flammable. May be ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated. 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). Fire may produce irritating, corrosive and/or toxic gases.

Special Protective Actions for Firefighters

Specific Methods: No information available

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. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. 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. Prevent product from entering drains. Do not let this chemical enter the environment. 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 only non-sparking tools. 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. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not ingest. 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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Petroleum Ether	8032-32-4	None	350 mg/m³ TWA 1800 mg/m³ Ceiling 15 min	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Petroleum Ether	8032-32-4	300 ppm TWA 1400 mg/m³ TWA	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Petroleum Ether	8032-32-4	None	None

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

Physical state:
Liquid

Appearance:
No information available.

Color:
Clear. Colorless.

Odor:
Slight. Gasoline-like.

Taste
No information available.

Formula
No information available

Molecular/Formula weight (g/mole):
No information available

Flammability (solid, gas)
no data available

Flash point (°C):
< -18

Flashpoint (°C/°F):
< -18 °C/ < 0 °F
< -17 °C/< 1.4 °F
-7 °C/19.4 °F

Flash Point Tested according to:
Closed cup

Autoignition Temperature (°C/°F):
287-288 °C/548.6-550 °F

Lower Explosion Limit (%):
1.1%

Upper Explosion Limit (%):
5.9%

Melting point/range(°C/°F):
< -73 °C/< - 99.4 °F

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F):
20-90 °C/68-194 °F

Bulk density:
No information available

Density (g/cm3):
No information available

Specific gravity:
0.6-0.75

pH
No information available

Vapor pressure @ 20°C (kPa):
5.3

Evaporation rate:
No information available

Vapor density:
2.5

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

Partition coefficient (n-octanol/water):
No information available

Viscosity:
No information available

Miscibility:
Immiscible with water
Miscible with alcohol
Miscible with Chloroform
Miscible with Ether
Miscible with Benzene
Miscible with Carbon tetrachloride
Miscible with Carbon disulfide
Miscible with oils, except castor oil

Solubility:
Insoluble in water

10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents

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

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. Inhalation.

Acute Toxicity

Component Information

Petroleum Ether	
CAS No	8032-32-4

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = 3400 ppm Inhalation LC50 Rat 4 h
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
Value - Acute Toxicity = No information available

LD50/oral/mouse =
Value - Acute Tox = No information available

LD50/dermal/rabbit
Value - Acute Toxicity = No information available

LD50/dermal/rat
VALUE - Acute Tox = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = 3400 ppm (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

Symptoms

Skin Contact: Causes skin irritation.

Eye Contact: Causes eye irritation.

Inhalation May cause irritation of respiratory tract. Can cause dyspnea (shortness of breath and difficulty breathing). It may affect behavior/central nervous system (ataxia, general anesthetic, drowsiness). Inhalation of high concentrations of vapor may cause anesthetic effects. Inhalation of high concentrations of vapors may cause dizziness or suffocation. It may affect behavior/central nervous system (convulsions/seizures). It may affect behavior/central nervous system (euphoria, central nervous system depression - headache, vertigo, fatigue, lethargy, poor concentration, symptoms of intoxication, impaired memory, loss of coordination and judgement, unconciousness, coma).

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may cause coughing, choking, gagging. Aspiration hazard if swallowed. Aspiration into the lungs can cause chemical pneumonitis. Aspiration may lead to pulmonary edema. It may cause central nervous system depression. May cause central nervous system effects similar to those of inhalation.

Aspiration hazard 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 loss of appetite. Prolonged or repeated inhalation may affect the peripheral nervous system (weakness, peripheral neuropathy with paresthesia - a tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles) generally of the hands and feet (extremities)). Prolonged or repeated inhalation may affect the kidneys. Prolonged or repeated skin contact may cause dermatitis and defatting, dryness, and cracking of the skin. Prolonged or repeated inhalation may cause impairment of motor action.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not classifiable as to its carcinogenicity to humans.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Petroleum Ether	8032-32-4	Group 3 (listed under petroleum solvents)	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available
Teratogenic Effects: According the the Registry of Toxic Effects of Chemical Substances (RTECS):
May cause birth defects (teratogenic effects) based on animal test data
It has not been shown to cause teratogenic effects in humans

Specific Target Organ Toxicity

STOT - single exposure central nervous system.
STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.
Target Organs: Central nervous system. Peripheral nervous system. Skin. Eyes. Lungs. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Petroleum Ether - 8032-32-4
Algae/aquatic plants EC50: =4700mg/L (72h, Pseudokirchneriella subcapitata)

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

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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Petroleum Ether	8032-32-4	None	None	None	None

14. TRANSPORT INFORMATION

DOT
UN-No: Not Regulated
Proper Shipping Name: Petroleum distillates, n.o.s. (ligroin)
Hazard Class 3
Subsidiary Class No information available
Packing group: No information available
Emergency Response Guide Number No information available
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): No information available

Description:	UN1268,Petroleum distillates, n.o.s. ,3,,PG II

TDG (Canada)

UN-No:	UN1268
Proper Shipping Name:	Petroleum distillates, n.o.s. (mineral spirits)
Hazard Class	3
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No Information available
Description:	PETROLEUM DISTILLATES, N.O.S.,3,UN1268,PG II

ADR

UN Number	UN1268
Proper Shipping Name:	Petroleum distillates, n.o.s. (mineral spirits)
Transport hazard class(es)	3
Packing group	II
Subsidiary Risk:	No information available
Description:	UN1268 Petroleum distillates, n.o.s.,3,II

IMDG

UN-No:	UN1268
Proper Shipping Name:	Petroleum distillates, n.o.s. (mineral spirits)
Hazard Class:	3
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No information available
EMS:	F-E

RID

UN Number	UN1268
Proper Shipping Name:	Petroleum distillates, n.o.s. (mineral spirits)
Transport hazard class(es)	3
Subsidiary Risk:	3
Packing group	II
Description:	UN1268 Petroleum distillates, n.o.s.,3,II,RID

ICAO (air)

UN-No:	UN1268
Proper Shipping Name:	Petroleum products, n.o.s.
Hazard Class	3
Subsidiary Risk:	No information available
Packing Group:	II
Description:	Petroleum products, n.o.s.,3,UN1268,PG II

IATA

UN Number	UN1268
Proper Shipping Name:	Petroleum products, n.o.s.
Transport hazard class(es)	3
Subsidiary Risk:	No information available
Packing group	II
Precautionary Statements - Response	3H
Special Provisions	No information available
Description:	UN1268,Petroleum products, n.o.s.,3,PG II

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Petroleum Ether	8032-32-4	PresentACTIVE	Present KE-21994	Present	Not present	Present	Present	Present 232-453-7

U.S. Regulations

Petroleum Ether

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0206
Pennsylvania RTK: Present
Minnesota - Hazardous Substance List: Present

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

Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Petroleum Ether	8032-32-4	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	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 de minimis
Petroleum Ether	8032-32-4	None	None	None	None	None

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Petroleum Ether	8032-32-4	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: .

Component
Petroleum Ether
8032-32-4 (100)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Acute toxicity - Inhalation - Category 4: H332 Harmful if inhaled.; Aspiration hazard - Category 1: H304 May be fatal if swallowed and enters airways.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Petroleum Ether	8032-32-4	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Petroleum Ether	8032-32-4	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Petroleum Ether	8032-32-4	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Petroleum Ether	8032-32-4	Germ cell mutagenicity - Muta. 1B: H340 May cause genetic defects.; Carcinogenicity - Carc. 1B: H350 May cause cancer.; Aspiration hazard - Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.649-263-00-9

EU - CLP (1272/2008)

R-phrase(s)
R45 - May cause cancer
R46 - May cause heritable genetic damage
R65 - Also harmful: may cause lung damage 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)

Component	CAS No	**Classification**	**Concentration Limits:**	**Safety Phrases**
Petroleum Ether	8032-32-4	Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	No information	

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

Indication of danger:
Xn - Harmful
T - Toxic

16. OTHER INFORMATION

Revision date	9/23/2020

Disclaimer:

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