



# SAFETY DATA SHEET

Preparation Date: 4/1/2014

Revision Date: 4/1/2014

Revision Number: G1

## 1. IDENTIFICATION

### Product identifier

**Product code:** P1045, NC-0351, NC-10409  
**Product Name:** PETROLEUM ETHER, B.R. 35 DEG -60 DEG C, REAGENT, ACS

### Other means of identification

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

**CAS #:** 8032-32-4  
**RTECS #** OI6180000  
**Cl#:** Not available

### Recommended use of the chemical and restrictions on use

**Recommended use:** Solvent.  
**Uses advised against** No information available

**Distributor:** Science Company  
 7625 W Hampden Ave, Unit 14  
 Lakewood, CO 80227  
 (303) 777-3777

**Order Online At:** <https://www.sciencecompany.com>

**Emergency telephone number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

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

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/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/./? /equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

#### **Precautionary Statements -Response**

Specific treatment (see .? on this label)  
Get medical advice/attention if you feel unwell  
In case of fire: Use CO<sub>2</sub>, 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 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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting

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**Precautionary Statements - Storage**

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

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Petroleum Ether 8032-32-4	8032-32-4	100	*

### 4. FIRST AID MEASURES

**First aid measures****General Advice:**

Poison information centres 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 eye 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 and 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<sub>2</sub>). 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:** 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. 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. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

### **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).

**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**

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Petroleum Ether - 8032-32-4	None	350 mg/m <sup>3</sup> TWA 1800 mg/m <sup>3</sup> Ceiling 15 min	None	None

##### **Canada**

Components	Alberta	British Columbia	Ontario	Quebec
Petroleum Ether - 8032-32-4	300 ppm TWA 1400 mg/m <sup>3</sup> TWA	None	None	300 ppm TWAEV 1370 mg/m <sup>3</sup> TWAEV

##### **Australia and Mexico**

Components	Australia	Mexico
Petroleum Ether 8032-32-4	None	300 ppm TWA 1350 mg/m <sup>3</sup> TWA 400 ppm STEL 1800 mg/m <sup>3</sup> 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. Safety glasses with side-shields.
- 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**

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<b>Physical state:</b> Liquid.	<b>Appearance:</b> No information available	<b>Color:</b> Clear. Colorless.
<b>Odor:</b> Slight. Gasoline-like.	<b>Taste</b> No information available	<b>Molecular/Formula weight:</b> No information available
<b>Flash point (°C):</b> < -18	<b>Flashpoint (°C/°F):</b> < -18 °C/ < 0 °F < -17 °C/ < 1.4 °F -7 °C/19.4 °F	<b>Flash Point Tested according to:</b> Closed cup
<b>Lower Explosion Limit (%):</b> 1.1%	<b>Upper Explosion Limit (%):</b> 5.9%	<b>Autoignition Temperature (°C/°F):</b> 287-288 °C/548.6-550 °F
<b>pH:</b> No information available	<b>Melting point/range(°C/°F):</b> < -73 °C/ < - 99.4 °F	<b>Boiling point/range(°C/°F):</b> 20-90 °C/68-194 °F
<b>Decomposition temperature(°C/°F):</b> No information available	<b>Specific gravity:</b> 0.6-0.75	<b>Density (g/cm3):</b> No information available
<b>Bulk density:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> 5.3	<b>Evaporation rate:</b> No information available
<b>Vapor density:</b> 2.5	<b>VOC content (g/L):</b> No information available	<b>Odor threshold (ppm):</b> No information available
<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available	<b>Miscibility:</b> 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
<b>Solubility:</b> Insoluble in water		

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents

### Chemical stability

**Stability:** Stable at normal 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

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**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 - 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 LC50 information** = No information available

### Product Information

**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = No information available

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

**LD50/dermal/rabbit**  
**VALUE-Acute Tox Dermal** = No information available

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

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = 3400ppm (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). 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, unconsciousness, coma).

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. 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.

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Petroleum Ether	Not listed	Group 3 (listed under petroleum solvents)	Not listed	Not listed	Not listed	Not listed

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available  
**Developmental Effects:** No information available  
**Teratogenic Effects:** According to 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

#### Ecotoxicity effects:

*Petroleum Ether - 8032-32-4*

**Freshwater Algae Data:** 4700 mg/L EC50 *Pseudokirchneriella subcapitata* 72 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
Petroleum Ether	None	None	None	None

## 14. TRANSPORT INFORMATION

### DOT

**UN-No:** UN1268  
**Proper Shipping Name:** Petroleum distillates, n.o.s. (ligroin)  
**Hazard Class:** 3  
**Subsidiary Risk:** Not applicable  
**Packing Group:** II  
**Marine Pollutant:** No data available  
**ERG No:** 128  
**DOT RQ (lbs):** No information available

### TDG (Canada)

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

### ADR

**UN-No:** UN1268

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## 14. TRANSPORT INFORMATION

**Proper Shipping Name:** Petroleum distillates, n.o.s.  
**Hazard Class:** 3  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Classification Code:** No information available  
**Description:** No information available  
**CEFIC Tremcard No:** No information available

### IMO / IMDG

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

### ICAO

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

### IATA

**UN-No:** UN1268  
**Proper Shipping Name:** Petroleum products, n.o.s.  
**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>Petroleum Ether</i>	Present	Present KE-21994	Present	Not present	Present	Present	Present 232-453-7

## U.S. Regulations

### Petroleum Ether

New Jersey RTK Hazardous Substance List: Present

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)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Petroleum Ether	Not Listed	Not Listed	Not Listed	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>
Petroleum Ether	None	None	None	None	None

## U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Petroleum Ether	Not Applicable	Not Applicable

## Canada

### WHMIS hazard class:

B2 Flammable liquid

### Petroleum Ether

B2

### 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 -
Petroleum Ether	1 %

## Inventory

Components	Canada (DSL)	Canada (NDSL)
Petroleum Ether	Present	Not Listed

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

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## EU Classification

### 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).

Components	Classification	Concentration Limits:	Safety Phrases
Petroleum Ether	Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	No information	S53 S45

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

### Indication of danger:

Xn - Harmful.

T - Toxic

Xn



T



## 16. OTHER INFORMATION

**16. OTHER INFORMATION**

NFPA

HMIS

Personal Protective Equipment



Health Hazard	2
Fire Hazard	3
Reactivity	0



See Section 8.

Preparation Date: 4/1/2014  
Revision Date: 4/1/2014  
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. The Science Company 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, The Science Company assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Material Safety Data Sheet**