

AROMATIC CONCENTRATE

Section 1. Identification

Common name: AROMATIC CONCENTRATE

Product Code: 8531

Synonym: Reformer recycle, reformer concentrate

Material uses: Refinery feedstock

Supplier / Manufacturer:

Énergie Valero Inc.

1801 McGill College, 13e étage

Montréal

Québec, Canada, H3A 2N4

Phone: 800-295-0391

In case of emergency:

CANUTEC: (613) 996-6666

Quebec Poison Control Center: 800-463-5060

Ontario Regional Poison Information Center (Toronto): 416-813-5900

Ontario Regional Poison Information Center (toll-free): 800-268-9017

Newfoundland Poison Information Center: 709-722-1110

Nova Scotia / PEI Poison Control Center: 800-565-8161

Or call your local Emergency Health Services Center.

Section 2. Hazards identifications

Classification:



Flammable liquid, Category 2

Acute toxicity (oral), Category 4

Acute toxicity (inhalation), Category 4

Skin irritation, Category 2

Eye irritation, Category 2A

Germ cell mutagenicity, Category 1B

Carcinogenicity, Category 1A

Reproductive toxicity, Category 2

Specific target organ toxicity - Single exposure (Narcotic effects), Category 3

Specific target organ toxicity - Single exposure (Respiratory tract irritation), Category 3

Specific target organ toxicity - Repeated exposure, Category 1

Aspiration hazard, Category 1

Signal word: Danger

Hazard statements:

H225: Highly flammable liquid and vapor.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H340: May cause genetic defects.
H350: May cause cancer.
H361: Suspected of damaging fertility or the unborn child.
H372: Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/light equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P260: Do not breathe dust/fumes/gas/mist/vapors/spray.
P264: Wash exposed and/or contaminated area thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or a doctor.
P302+P352: IF ON SKIN: Wash with plenty of water and soap.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P308+P313: If exposed: Call a POISON CENTER or doctor/physician.
P312: Call a POISON CENTER or doctor if you feel unwell.
P314: Get medical advice/attention if you feel unwell.
P321: Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
P330: Rinse mouth.
P331: Do NOT induce vomiting.
P337+P313: If eye irritation persists get medical advice/attention.
P370+P378: In case of fire: See section for extinguishing medias.
P403+P233+P235: Store in a well ventilated place. Keep container tightly closed. Keep cool.

Section 3. Composition and information on ingredients

| Name | CAS | Concentration % |
|---|------------|-----------------|
| Extracts (petroleum), reformer, recycle | 68477-63-4 | 0 - 100 |
| Benzene | 71-43-2 | 25 - 70 |
| 2-Methylpentane | 107-83-5 | 0 - 5 |
| 3-Methylpentane | 96-14-0 | 0 - 5 |
| Isopentane | 78-78-4 | 0 - 3 |
| n-Pentane | 109-66-0 | 0 - 3 |

Note:

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 4. First aid measures

Description of first aid if required:

Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

Eye contact:

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Seek medical attention if irritation develops and persists.

Skin contact:

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Seek medical advice/attention. Wash contaminated clothing before reuse.

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Ingestion:

Call a physician or poison control centre immediately. Rinse mouth. DO NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Indication of immediate medical attention and special treatment needed, if necessary:

Treat according to symptoms. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

Most important acute symptoms and effects:

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.

Most important delayed symptoms and effects:

Aspiration may cause pulmonary oedema and pneumonitis.

Section 5. Firefighting measures

Flammability of the product:

Extremely flammable liquid and vapor.

Flash point:

-20°C / -4°F

Auto-ignition temperature:

Data not available

Products of combustion:

Data not available

Special protective actions for firefighters:

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Move away immediately if the whistling sound from the safety devices increases or the discoloration of the tanks caused by a fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapors may form explosive air mixtures even at room temperature. Prevent buildup of vapors or gasses to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed. In the event of fire and/or explosion do not breathe fumes.

Suitable extinguishing media:

Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂). Do not use a solid water stream as it may scatter and spread fire.

Specific hazard arising from the chemical:

Vapor may cause flash fire. Vapors can flow along surfaces to distant ignition source and cause flashback. Sensitive to static discharge.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

For non emergency personnel: Evacuate the area.

For emergency personnel: Keep unnecessary personnel away. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 for personal protective equipment. Local authorities should be advised according to applicable regulatory requirements.

Environmental precautions:

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up:

Eliminate all sources of ignition (no cigarettes, torches, sparks or flames in the immediate area). Keep combustible materials (wood, paper, oil, etc.) away from the spilled product. Take precautionary measures against electrostatic discharge. Use tools that do not produce sparks. Prevent entry into waterways, sewers, basements or confined areas.

For large spills: Stop flow of substance if it can be done without risk. Dike spilled material, where possible. Use a non-combustible material such as vermiculite, sand or earth to absorb the product and place it in a container for later disposal. After collecting the product, rinse the area with water.

For small spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (eg, cloth, woolen). Clean the surface thoroughly to remove residual contamination.

Never put the spilled product back into its original container for reuse. Place the material in suitable, covered and labeled containers. For waste disposal, see section 13 of the safety data sheet.

Section 7. Handling and storage

Precautions in Handling:

Obtain instructions before use. Do not handle until you have read and understood all the safety precautions. Do not handle, store or open near an open flame, source of heat or other sources of ignition. Protect the product from direct sunlight. Do not smoke during use. Use local and general explosion-proof exhaust ventilation. Take precautionary measures against electrostatic discharge. All equipment used in handling this product must be earthed. Use non-sparking tools and explosion-proof equipment. Do not breathe mists or vapors. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only outdoors or in a well ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release into the environment. Observe good industrial hygiene practices.

Precautions in Storage:

Storage of flammable liquids. Do not handle or store near an open flame, heat source or other sources of ignition. This product can accumulate static charges which can cause sparks and become a source of ignition. Pressure in sealed containers may increase under the influence of heat. Keep the container in a cool, well-ventilated place. Keep away from food, drink and animal feed. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protections

Control parameters:

| Component | CAS | Value | Control parameters | Basis |
|------------|---------|-------|------------------------|--|
| Benzene | 71-43-2 | STEL | 8 mg/m ³ | Canada - Alberta |
| | | STEL | 2.5 ppm | Canada - Alberta |
| | | TWA | 1.6 mg/m ³ | Canada - Alberta |
| | | TWA | 0.5 ppm | Canada - Alberta |
| | | STEL | 2.5 ppm | Canada - British Columbia |
| | | TWA | 0.5 ppm | Canada - British Columbia |
| | | STEL | 2.5 ppm | Canada - Manitoba |
| | | TWA | 0.5 ppm | Canada - Manitoba |
| | | STEL | 2.5 ppm | Canada - Ontario |
| | | TWA | 0.5 ppm | Canada - Ontario |
| | | STEL | 15.5 mg/m ³ | Canada - Québec |
| | | STEL | 5 ppm | Canada - Québec |
| | | TWA | 3 mg/m ³ | Canada - Québec |
| | | TWA | 1 ppm | Canada - Québec |
| | | STEL | 5 ppm | USA - OSHA (Specifically Regulated Substances) |
| | | TWA | 1 ppm | USA - OSHA (Specifically Regulated Substances) |
| | | STEL | 2.5 ppm | USA - ACGIH |
| | | TWA | 0.5 ppm | USA - ACGIH |
| Isopentane | 78-78-4 | TWA | 1000 ppm | USA - ACGIH |
| | | TWA | 1770 mg/m ³ | Canada - Alberta |
| | | TWA | 600 ppm | Canada - Alberta |
| | | TWA | 600 ppm | Canada - British Columbia |
| | | TWA | 1000 ppm | Canada - Manitoba |
| | | TWA | 600 ppm | Canada - Ontario |

Control parameters (continued):

| Component | CAS | Value | Control parameters | Basis |
|-----------------|----------|---------|------------------------|---------------------------|
| n-Pentane | 109-66-0 | TWA | 1000 ppm | USA - ACGIH |
| | | TWA | 1770 mg/m ³ | Canada - Alberta |
| | | TWA | 600 ppm | Canada - Alberta |
| | | TWA | 600 ppm | Canada - British Columbia |
| | | TWA | 1000 ppm | Canada - Manitoba |
| | | TWA | 600 ppm | Canada - Ontario |
| | | TWA | 350 mg/m ³ | Canada - Québec |
| | | TWA | 120 ppm | Canada - Québec |
| | | PEL | 2950 mg/m ³ | USA - OSHA |
| | | PEL | 1000 ppm | USA - OSHA |
| | | Ceiling | 1800 mg/m ³ | USA - NIOSH |
| | | Ceiling | 610 ppm | USA - NIOSH |
| | | TWA | 350 mg/m ³ | USA - NIOSH |
| | | TWA | 120 ppm | USA - NIOSH |
| 2-Methylpentane | 107-83-5 | STEL | 1000 ppm | USA - ACGIH |
| | | TWA | 500 ppm | USA - ACGIH |
| | | STEL | 3500 mg/m ³ | Canada - Alberta |
| | | STEL | 1000 ppm | Canada - Alberta |
| | | TWA | 1760 mg/m ³ | Canada - Alberta |
| | | TWA | 500 ppm | Canada - Alberta |
| | | TWA | 200 ppm | Canada - British Columbia |
| | | STEL | 1000 ppm | Canada - Manitoba |
| | | TWA | 500 ppm | Canada - Manitoba |
| | | STEL | 1000 ppm | Canada - Ontario |
| | | TWA | 500 ppm | Canada - Ontario |
| | | STEL | 3500 mg/m ³ | Canada - Québec |
| | | STEL | 1000 ppm | Canada - Québec |
| | | TWA | 1760 mg/m ³ | Canada - Québec |
| | | TWA | 500 ppm | Canada - Québec |
| | | Ceiling | 1800 mg/m ³ | USA - NIOSH |
| | | Ceiling | 510 ppm | USA - NIOSH |
| | | TWA | 350 mg/m ³ | USA - NIOSH |
| | | TWA | 100 ppm | USA - NIOSH |

Control parameters (continued):

| Component | CAS | Value | Control parameters | Basis |
|-----------------|---------|---------|------------------------|---------------------------|
| 3-Methylpentane | 96-14-0 | Ceiling | 1800 mg/m ³ | USA - NIOSH |
| | | Ceiling | 510 ppm | USA - NIOSH |
| | | TWA | 350 mg/m ³ | USA - NIOSH |
| | | TWA | 100 ppm | USA - NIOSH |
| | | STEL | 1000 ppm | USA - ACGIH |
| | | TWA | 500 ppm | USA - ACGIH |
| | | STEL | 3500 mg/m ³ | Canada - Québec |
| | | STEL | 1000 ppm | Canada - Québec |
| | | TWA | 1760 mg/m ³ | Canada - Québec |
| | | TWA | 500 ppm | Canada - Québec |
| | | STEL | 1000 ppm | Canada - Ontario |
| | | TWA | 500 ppm | Canada - Ontario |
| | | STEL | 1000 ppm | Canada - Manitoba |
| | | TWA | 500 ppm | Canada - Manitoba |
| | | TWA | 200 ppm | Canada - British Columbia |
| | | STEL | 3500 mg/m ³ | Canada - Alberta |
| | | STEL | 1000 ppm | Canada - Alberta |
| | | TWA | 1760 mg/m ³ | Canada - Alberta |
| | | TWA | 500 ppm | Canada - Alberta |

Engineering controls:

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.

Personal protective equipment:

Eyes: Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

Skin/body: Wear chemical-resistant, impervious gloves. Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended. Wear appropriate thermal protective clothing, when necessary.

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.

Hands: Avoid exposure - obtain special instructions before use. Wear protective gloves.

Other: Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practices.

Section 9. Physical and chemical properties

Physical state: Liquid

Color: Clear

Odor: Gasoline

Melting point/Freezing point: Data not available

Boiling point: From 65°C / 149°F to 100°C / 212°F

Appearance: Liquid

Lower explosion limit: 1.4 %

Upper explosion limit: 7.6 %

Flash point: -20°C / -4°F

Auto-ignition temperature: Data not available

pH: Data not available

Kinematic viscosity: 0.002 cm²/s

Solubility: Not available

Vapor pressure: 10 kPa

Density: 0.77 g/cm³ (15 °C)

Relative vapor density: 2.69

Section 10. Stability and reactivity

Chemical reactivity: The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under normal temperature conditions and recommended use.

Possibility of hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Avoid contact with incompatible materials.

Incompatible materials: Strong oxidising agents.

Hazardous decomposition products: No hazardous decomposition products are known.

Section 11. Toxicological information

Acute toxicity:

| Component | CAS | Value |
|------------|----------|--|
| Benzene | 71-43-2 | DL ₅₀ Oral: Rat = 930 mg/kg DL ₅₀ Cutaneous: Rabbit = 8300 mg/kg CL ₅₀ Inhalation: Rat = 42.3 mg/L - 4h |
| Isopentane | 78-78-4 | CL ₅₀ Inhalation: Mouse - = 450 mg/L 2h |
| n-Pentane | 109-66-0 | DL ₅₀ Oral: Rat > 2000 mg/kg CL ₅₀ Inhalation: Rat = 364 mg/m ³ - 4h |

Skin corrosion/irritation:

Benzene: Causes skin irritation

Serious eye damage/irritation:

Benzene: Causes serious eye irritation

Respiratory or skin sensitisation:

Not applicable

Germ cell mutagenicity:

Benzene: May cause genetic defects

Carcinogenicity:

Benzene: May cause cancer

Reproductive toxicity:

Not applicable

STOT- Single exposure:

Isopentane: May cause drowsiness or dizziness.

STOT- repeated exposure:

Benzene: Causes damage to organs through prolonged or repeated exposure cause the hazard

Aspiration hazard:

Benzene: May be fatal if swallowed and enters airways.

2-Methylpentane: May be fatal if swallowed and enters airways.

3-Methylpentane: May be fatal if swallowed and enters airways.

Isopentane: May be fatal if swallowed and enters airways.

n-Pentane: May be fatal if swallowed and enters airways.

Information on likely route of exposure:

Not applicable

Section 12. Ecological information

Ecological data for aquatic environments:

| Component | CAS | Value |
|------------|---------|--|
| Benzene | 71-43-2 | CL ₅₀ - Pimephales promelas (fathead minnow) 15 mg/L - 96h CE ₅₀ - Water flea 17.2 mg/L - 48h |
| Isopentane | 78-78-4 | CL ₅₀ - Pimephales promelas (fathead minnow) 12.8 mg/L - 96h CE ₅₀ - Daphnia magna 2.3 mg/L - 48h |

Persistence and degradability:

No data available.

Bioaccumulative potential:

Data not available

Mobility in soil:

Data not available

Other adverse effects:


Isopentane: Very toxic to aquatic life.


Section 13. Disposal considerations


Waste disposal:


Dispose of this material and its container to hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations. Waste codes should be assigned by the user based on the application for which the product was used. Dispose of in accordance with local regulations. Offer rinsed packaging material to local recycling facilities.

Section 14. Transportation information

| TDG | | |
|--------------|--|---|
| UN #: UN1993 | Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Extracts (petroleum), reformer, recycle) |  |
| Class: 3 | Packing group: I | |

| DOT | | |
|--------------|--|---|
| UN #: UN1993 | Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Extracts (petroleum), reformer, recycle) |  |
| Class: 3 | Packing group: I | |

| IMDG | | | |
|--------------|--|--|---------|
| UN #: UN1993 | Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Extracts (petroleum), reformer, recycle) |  | EMS-No: |
| Class: 3 | Packing group: I | | |

| IATA | | |
|--------------|--|---|
| UN #: UN1993 | Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Extracts (petroleum), reformer, recycle) |  |
| Class: 3 | Packing group: I | |

Section 15. Regulatory information

NFPA Classification:



Health : 2
Flammable : 3
Stability : 0
Special hazards : 0

Legend: 4: Severe, 3: High, 2: Moderate, 1: Slightly, 0: Not hazardous

General product information:

Canada: This product has been classified in accordance with the hazard criteria of the hazard product regulations and the safety data sheet contains all the information required by the hazard product regulations.

Section 16. Additional information

Date of issue:

2021-09-15

Version:

1.00

Elaborated by:

Toxyscan Inc.

Notice to reader:

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