SAFETY DATA SHEET

Cleaner Fluid

Section 1. Identification

Product identifier : Cleaner Fluid

Chemical name : Naphtha (petroleum), hydrotreated light

CAS number : 64742-49-0

Synonyms

: Low boiling point hydrogen treated naphtha; Hydrotreated light straight run Other means of

(petroleum); Naphtha, petroleum, hydrotreated light; Hydrotreated light, straight run, identification

petroleum; Hydrotreated light naphta (petroleum)

Product code 98-942

Product use : Industrial use

Supplier's details : Patch Rubber Company

100 Patch Rubber Road Weldon, NC 27890 USA

Telephone (General): (252) 536-2574

e-mail address of person responsible for this SDS

: roa-coa@patchrubber.com

Emergency telephone number (with hours of

operation)

: CHEMTREC: USA and Canada: 1-800-424-9300

CHEMTREC: Outside of USA and Canada: 001-703-527-3887 (collect calls

accepted)

Section 2. Hazard identification

This material is considered hazardous by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200) and Health Canada Hazardous Product Regulations - WHMIS 2015

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms







Signal word : Danger

: Highly flammable liquid and vapor. **Hazard statements**

Causes skin irritation.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Precautionary statements

Prevention : Wear protective gloves: > 8 hours (breakthrough time): neoprene, butyl rubber,

nitrile rubber. Wear eye or face protection. Wear protective clothing.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

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Section 2. Hazard identification

Take precautionary measures against static discharge.

Use only outdoors or in a well-ventilated area.

Avoid breathing vapor.

Wash hands thoroughly after handling.

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a Response

POISON CENTER or physician if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT

induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing

and wash it before reuse.

If skin irritation occurs: Get medical attention.

: Store locked up. Storage

Store in a well-ventilated place. Keep cool.

Dispose of contents and container in accordance with all local, regional, national **Disposal**

and international regulations.

Other hazards which do not

: None known.

result in classification

Section 3. Composition/information on ingredients

: UVCB Substance/mixture

Chemical name : Naphtha (petroleum), hydrotreated light

Other means of identification

: Low boiling point hydrogen treated naphtha; Hydrotreated light straight run (petroleum); Naphtha, petroleum, hydrotreated light; Hydrotreated light, straight run,

petroleum; Hydrotreated light naphta (petroleum)

Product code 98-942

CAS number/other identifiers

CAS number : 64742-49-0

Ingredient name	% (w/w)	CAS number
Naphtha (petroleum), hydrotreated light	100	64742-49-0
heptane	30 - 45	142-82-5
3-methylhexane	0 - 30	589-34-4
methylcyclohexane	0 - 20	108-87-2
2-methylhexane	0 - 15	591-76-4
2,3-dimethylpentane	0 - 5	565-59-3
3-ethylpentane	0 - 5	617-78-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

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Section 4. First-aid measures

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : May cause eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Causes skin irritation.

ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed

and enters airways.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : Adverse symptoms may include the following:

nausea or vomiting

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

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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Section 4. First-aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

: Use dry chemical, CO2, water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.

: Do not use water jet.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors may form explosive mixtures with air. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide carbon monoxide smoke

fumes or vapor

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Ensure that the equipment is adequately grounded. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Ensure that the equipment is adequately grounded. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Estore in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits		
United States Occupationa	l Exposure Limits			
heptane		ACGIH TLV (United States, 3/2016). TWA: 400 ppm 8 hours. TWA: 1640 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 85 ppm 10 hours. TWA: 350 mg/m³ 10 hours. CEIL: 440 ppm 15 minutes. CEIL: 1800 mg/m³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 500 ppm 8 hours. TWA: 2000 mg/m³ 8 hours.		
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Section 8. Exposure controls/personal protection

3-methylhexane

ACGIH TLV (United States, 3/2016).

TWA: 400 ppm 8 hours. TWA: 1640 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m³ 15 minutes.

methylcyclohexane

ACGIH TLV (United States, 3/2016).

TWA: 400 ppm 8 hours. TWA: 1610 mg/m³ 8 hours.

NIOSH REL (United States, 10/2016).

TWA: 400 ppm 10 hours. TWA: 1600 mg/m³ 10 hours. OSHA PEL (United States, 6/2016).

TWA: 500 ppm 8 hours. TWA: 2000 mg/m³ 8 hours.

2-methylhexane

ACGIH TLV (United States, 3/2016).

TWA: 400 ppm 8 hours. TWA: 1640 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m³ 15 minutes.

3-ethylpentane

ACGIH TLV (United States, 3/2016).

TWA: 400 ppm 8 hours. TWA: 1640 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m³ 15 minutes.

2,3-dimethylpentane

ACGIH TLV (United States, 3/2016).

TWA: 400 ppm 8 hours. TWA: 1640 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m³ 15 minutes.

Canada Occupational Exposure Limits

heptane

CA Alberta Provincial (Canada, 4/2009).

15 min OEL: 2050 mg/m³ 15 minutes. 8 hrs OEL: 1640 mg/m³ 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes.

CA British Columbia Provincial (Canada,

2/2015).

TWA: 400 ppm 8 hours. STEL: 500 ppm 15 minutes.

CA Ontario Provincial (Canada, 1/2013).

TWA: 400 ppm 8 hours. TWA: 1640 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m³ 15 minutes.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 400 ppm 8 hours. TWAEV: 1640 mg/m³ 8 hours. STEV: 500 ppm 15 minutes. STEV: 2050 mg/m³ 15 minutes.

3-methylhexane

CA Alberta Provincial (Canada, 4/2009).

15 min OEL: 2050 mg/m³ 15 minutes. 8 hrs OEL: 1640 mg/m³ 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes.

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Section 8. Exposure controls/personal protection

Methylcyclohexane CA Alberta Provincial (Canada, 4/2009).

8 hrs OEL: 400 ppm 8 hours. 8 hrs OEL: 1610 mg/m³ 8 hours.

CA British Columbia Provincial (Canada,

2/2015).

TWA: 400 ppm 8 hours.

CA Ontario Provincial (Canada, 1/2013).

TWA: 400 ppm 8 hours. TWA: 1610 mg/m³ 8 hours.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 400 ppm 8 hours. TWAEV: 1610 mg/m³ 8 hours.

2-Methylhexane CA Alberta Provincial (Canada, 4/2009).

15 min OEL: 2050 mg/m³ 15 minutes. 8 hrs OEL: 1640 mg/m³ 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes.

2,3-dimethylpentane CA Alberta Provincial (Canada, 4/2009).

15 min OEL: 2050 mg/m³ 15 minutes. 8 hrs OEL: 1640 mg/m³ 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes.

3-Ethylpentane CA Alberta Provincial (Canada, 4/2009).

15 min OEL: 2050 mg/m³ 15 minutes. 8 hrs OEL: 1640 mg/m³ 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

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Section 8. Exposure controls/personal protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

> 8 hours (breakthrough time): neoprene, butyl rubber, nitrile rubber

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: 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. Ensure an MSHA/NIOSHapproved respirator or equivalent is used (applicable for the United States).

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. Color : Clear.

: Hydrocarbon. Odor : Not available. **Odor threshold** pН : Not available.

Melting point : -140 to -70°C (-220 to -94°F)

Boiling point : 90.5556 to 98.8889°C (195 to 210°F)

: Closed cup: -9.4444°C (15°F) Flash point

: 4.2 (butyl acetate = 1) **Evaporation rate**

Flammability (solid, gas) : Not available. Lower and upper explosive (flammable) limits

: Lower: 1% Upper: 6.7%

Vapor pressure : 6 kPa (45 mm Hg) [room temperature] 47.7 kPa (357.48 mm Hg) [50°C]

Vapor density : 3.5 [Air = 1] **Relative density** : 0.696 [Water = 1]

: 0.72 g/cm³ [20°C (68°F)] **Density**

Solubility : Insoluble in the following materials: cold water and hot water.

Solubility in water : Not available. Partition coefficient: n-: 2.1 to 5

octanol/water

Auto-ignition temperature : 246.1111°C (475°F)

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): 0.32 mPa·s (0.32 cP)

> Kinematic (room temperature): 0.0055 cm²/s (0.55 cSt) Kinematic (40°C (104°F)): 0.0083 cm²/s (0.83 cSt)

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Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not

Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials

: Reactive or incompatible with the following materials: oxidizing materials strong acids

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	103 g/m³	4 hours
methylcyclohexane	LD50 Oral	Rat	>3200 mg/kg	-

Conclusion/Summary

: Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
3-methylhexane	Skin - Moderate irritant	Rabbit	-	-	-
Methylcyclohexane	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-
	Skin - Moderate irritant	Rabbit	-	-	-
2-Methylhexane	Skin - Moderate irritant	Rabbit	-	-	-
heptane	Skin - Moderate irritant	Rabbit	-	24 hours	-
3-Ethylpentane	Skin - Moderate irritant	Rabbit	-	-	-

Conclusion/Summary

: Not available.

Sensitization

Conclusion/Summary

: Not available.

Mutagenicity

Conclusion/Summary

: Not available.

Carcinogenicity

Conclusion/Summary

: Not available.

Reproductive toxicity

Conclusion/Summary

: Not available.

Teratogenicity

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Section 11. Toxicological information

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
3-methylhexane	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Naphtha (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1
Heptane	ASPIRATION HAZARD - Category 1
3-Ethylpentane	ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation, Ocular.

Potential acute health effects

Eye contact : May cause eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed

and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : Adverse symptoms may include the following:

nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Repeated or prolonged contact with irritants may cause dermatitis.

Potential chronic health effects

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Section 11. Toxicological information

Not available.

Conclusion/Summary : Not available.

General
 Carcinogenicity
 No known significant effects or critical hazards.
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Fertility effects

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
heptane	Acute LC50 375000 μg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
methylcyclohexane	Acute LC50 5800 μg/l Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling)	96 hours

: No known significant effects or critical hazards.

Conclusion/Summary: Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Naphtha (petroleum), hydrotreated light	2.1 to 5	10 to 2500	high
heptane	4.66	552	high
methylcyclohexane	3.61	186.21	low

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

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Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any federal, state and regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	<u> </u>				
	TDG Classification	DOT Classification	ADR/RID	IMDG	IATA
UN number	UN1206	UN1206	-	UN1206	UN1206
UN proper shipping name	HEPTANES	Heptanes	-	HEPTANES	Heptanes
Transport hazard class(es)	3	3	-	3	3
Label					
		***		***	
Packing group	II	II	-	II	II
Environmental hazards	No.	Yes.	-	Marine Pollutant: Yes	No.

Additional information

TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

Explosive Limit and Limited Quantity Index 1
Passenger Carrying Road or Rail Index 5

DOT Classification

: This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. Limited quantity Yes.

Packaging instruction Exceptions: 150. Non-bulk: 202. Bulk: 242. Quantity limitation Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.

Special provisions IB2, T4, TP1

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules (EmS)

F-E, S-D

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IMDG

Section 14. Transport information

IATA

The environmentally hazardous substance mark may appear if required by other transportation regulations.

Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353.

Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities -

Passenger Aircraft: 1 L. Packaging instructions: Y341.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and

: Not available.

the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) PAIR: heptane; methylcyclohexane

: Listed

: Not listed

: Not listed

: Not listed

TSCA 8(a) CDR Exempt/Partial exemption: All components are listed or exempted.

Clean Water Act (CWA) 307: toluene; ethylbenzene; benzene Clean Water Act (CWA) 311: toluene; ethylbenzene; benzene

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602

Class II Substances

DEA List I Chemicals

(Precursor Chemicals)

DEA List II Chemicals

(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 2

SKIN IRRITATION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

: Not applicable.

ASPIRATION HAZARD - Category 1

State regulations

Massachusetts : The following components are listed: HEPTANE; N-HEPTANE; 3-METHYLHEXANE;

METHYLCYCLOHEXANE; ISOHEPTANE; 2,3-DIMETHYLPENTANE

New York : None of the components are listed.

New Jersey : The following components are listed: n-HEPTANE; HEPTANE; 3-METHYLHEXANE;

HEXANE, 3-METHYL-; METHYLCYCLOHEXANE; CYCLOHEXANE, METHYL-; 2,

3-DIMETHYLPENTANE; PENTANE, 2,3-DIMETHYL-

Pennsylvania : The following components are listed: HEPTANE; HEXANE, 3-METHYL-;

CYCLOHEXANE, METHYL-; HEXANE, 2-METHYL-; PENTANE, 2,3-DIMETHYL-

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Section 15. Regulatory information

California Prop. 65



WARNING: This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including ethylbenzene, which is known to the State of California to cause cancer, and toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Canadian lists

Canadian NPRI: The following components are listed: Heptane (all isomers); Heptane (all isomers);

Heptane (all isomers); Heptane (all isomers); Heptane (all isomers)

CEPA Toxic substances: None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I. II & III Chemicals

Not listed.

Montreal Protocol (Annexes A. B. C. E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : Japan inventory (ENCS):

All components are listed or exempted.

Japan inventory (ISHL):

All components are listed or exempted.

Malaysia : All components are listed or exempted.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Turkey : All components are listed or exempted.

United States : All components are listed or exempted.

Section 16. Other information

History

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Section 16. Other information

Key to abbreviations

: ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor DOT = Department of Transportation

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods

by Rail

TDG = Transportation of Dangerous Goods

UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	On basis of test data Calculation method Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

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