

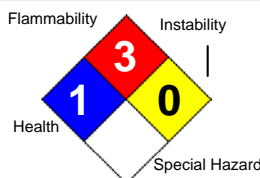
MATERIAL SAFETY DATA SHEET

Cataclean Fuel and Exhaust System Cleaner

(120007)



HEALTH	1
FLAMMABILITY	3
PHYSICAL	0
PPE	B



Printed: 01/27/2017
Revision: 11/17/2015
Supersedes Revision: 12/19/2013
Date Created: 08/31/2004

1. Product and Company Identification

Product Code: CATACLEAN

Product Name: Cataclean Fuel and Exhaust System Cleaner (120007)

Manufacturer Information

Company Name: Fas-Pak
401 Darlington St
La Porte, IN 46350

Phone Number: (219)325-3455

Emergency Contact: CHEMTREC (800)424-9300

Alternate Emergency Contact: CHEMTREC International (703)527-3882

Information: EH&S Manager (219)325-3455 298

Web site address: <http://www.fas-pak.com>

Preparer Name: CRR

Intended Use: Fuel & Exhaust System Cleaner

Product Category: Fuel Additive

Chemical Family: Mixed Xylenes

CAS Number: 1330-20-7

Synonyms
Petroleum Hydrocarbon Solvent

Revision Date: 11/17/2015

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TWA	Other Limits
1. Xylene (mixed isomers)	1330-20-7	45.0 -50.0 %	100 ppm	100 ppm	No data.
2. Acetone	67-64-1	20.0 %	1000 ppm	500 ppm	No data.
3. Isopropyl alcohol	67-63-0	18.0 -20.0 %	400 ppm	200 ppm	No data.
4. Ethylbenzene	100-41-4	5.0 -15.0 %	100 ppm	20 ppm	No data.
5. Kerosene	8008-20-6	10.0 %	No data.	200 mg/m3	No data.
6. Ethyl alcohol	64-17-5	0.02 -0.2 %	1000 ppm	1000 ppm	No data.
7. Naphthalene	91-20-3	0.001 -0.05 %	10 ppm	10 ppm	No data.
Hazardous Components (Chemical Name)	CAS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. Xylene (mixed isomers)	1330-20-7	No data.	No data.	No data.	No data.
2. Acetone	67-64-1	No data.	No data.	750 ppm	No data.
3. Isopropyl alcohol	67-63-0	No data.	No data.	400 ppm	No data.
4. Ethylbenzene	100-41-4	No data.	No data.	125 ppm	No data.
5. Kerosene	8008-20-6	No data.	No data.	No data.	No data.
6. Ethyl alcohol	64-17-5	No data.	No data.	1000 ppm	No data.
7. Naphthalene	91-20-3	No data.	No data.	15 ppm	No data.

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3. Hazards Identification

Emergency Overview

No data available.

Route(s) of Entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes

Potential Health Effects (Acute and Chronic)

Acute: Headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue.

Delayed: Dry skin and possible irritation with repeated or prolonged exposure.

Inhalation

Breathing high concentrations may be harmful. May cause central nervous system depression or effects.

Symptoms may include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure. Overexposure to this material may cause systemic damage including target organ effects listed under "Toxicological Information."

Skin Contact

Contact may cause reddening, itching and inflammation. Effects may become more serious with repeated or prolonged contact. Skin contact may cause harmful effects in other parts of the body.

Eye Contact

Contact may cause pain and severe reddening and inflammation of the conjunctiva. Effects may become more serious with repeated or prolonged contact.

Ingestion

Swallowing this material may be harmful. May cause irritation of the mouth, throat and gastrointestinal tract.

Symptoms may include salivation, pain, nausea, vomiting and diarrhea. Aspiration into lungs may cause chemical pneumonia and lung damage. Exposure may also cause central nervous system symptoms similar to those listed under "Inhalation" (see Inhalation section).

Signs and Symptoms Of Exposure

No data available.

Medical Conditions Generally Aggravated By Exposure

No data available.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

4. First Aid Measures

Emergency and First Aid Procedures

In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible). Do not leave the victim unattended.

In Case of Inhalation

Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

In Case of Skin Contact

Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. May be absorbed through the skin in harmful amounts. Get medical attention if irritation persists.

Place contaminated clothing in closed container until cleaned or discarded. If clothing is to be laundered, inform the person performing the operation of contaminant's hazardous properties. Destroy contaminated, non-chemical resistant footwear.

In Case of Eye Contact

Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. GET IMMEDIATE MEDICAL ATTENTION.

In Case of Ingestion

Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

Note to Physician

This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Symptoms of poisoning may appear several hours later.

5. Fire Fighting Measures

Flammability Classification:	Class IB Flammable Liquid
Flash Pt:	24.00 C (75.2 F) Method Used: Pensky-Marten Closed Cup
Explosive Limits:	LEL: 1.0% UEL: 7.1%
Autoignition Pt:	No data available.

Fire Fighting Instructions

Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Keep run-off water out of sewers and water.

Flammable Properties and Hazards

Flammable liquid and vapor. Vapors may travel a distance to an ignition source and then flash back to a leak or open container.

Hazardous Combustion Products

Combustion produces smoke, carbon monoxide, carbon dioxide, aldehydes, aromatic and other hydrocarbons.

Extinguishing Media

For small fires, Class B fire extinguishing media such as CO₂, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

Unsuitable Extinguishing Media

Do not use straight water streams to avoid spreading fire.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Large Spill:

Stop leak if without risk. Eliminate all ignition sources. Move containers from spill area. 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). Use spark-proof tools and explosion-proof equipment. 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.

Small Spill:

Stop leak if without risk. Eliminate all ignition sources. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof

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equipment. Dispose of via a licensed waste disposal contractor.

Protective Precautions, Protective Equipment and Emergency Procedures

Protective chemical-resistant gloves and eye protection should be worn. See Section 8 for more information on recommended personal protective equipment.

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).

7. Handling and Storage

Precautions To Be Taken in Handling

Isolate from sources of heat, sparks, and open flame. Open container in a well ventilated area. Avoid breathing vapors and thermal decomposition products. Keep containers closed when not in use. Vapors are heavier than air and will tend to accumulate in low areas. Avoid use in confined areas without adequate ventilation. Areas of inadequate ventilation could contain concentrations high enough to cause eye irritation, headaches, respiratory discomfort or nausea. Carefully evaluate processes using this product at elevated temperatures to ensure safe operating conditions. Electrostatic buildup may occur when pouring or transferring this product from its container.

Precautions To Be Taken in Storing

Store 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. 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.

Other Precautions

Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)

Use an approved organic vapor chemical cartridge or supplied air respirators when material produces vapors that exceed permissible exposure limits or excessive vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

Eye Protection

Where splashing is possible, wear safety glasses with side shields or chemical safety goggles.

Protective Gloves

Wear gloves that cannot be penetrated by chemicals or oil. Neoprene, nitrile, polyvinyl alcohol (PVA), polyvinyl chloride and polyurethane gloves may prevent skin contact. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures).

Other Protective Clothing

No special protective clothing is normally required. Select protective clothing depending on industrial operations.

Engineering Controls (Ventilation etc.)

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 or vapor concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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Work/Hygienic/Maintenance Practices

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.

Environmental Exposure Controls

Local or general exhaust required when using at elevated temperatures that generate vapors or mists.

9. Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid
Melting Point:	-25.00 C (-13.0 F)
Boiling Point:	55.00 C (131.0 F) - 250.00 C (482.0 F)
Autoignition Pt:	No data.
Flash Pt:	24.00 C (75.2 F) Method Used: Pensky-Marten Closed Cup
Explosive Limits:	LEL: 1.0% UEL: 7.1%
Specific Gravity (Water = 1):	0.815 - 0.835 at 20.0 C (68.0 F)
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Evaporation Rate:	No data.
Solubility in Water:	Partial
Percent Volatile:	100.0 % by weight.
Viscosity:	0.94 MM2/S at 20.0 C (68.0 F)
pH:	NP

Appearance and Odor

Clear, colorless liquid with a strong solvent/hydrocarbon odor.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Reactivity

Under normal conditions of storage and use, hazardous reactions are not expected to occur.

Conditions To Avoid - Instability

Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame).

Incompatibility - Materials To Avoid

Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis, halogenated compounds.

Hazardous Decomposition or Byproducts

Combustion produces smoke, carbon monoxide, carbon dioxide, aldehydes, aromatic and other hydrocarbons.

Hazardous Polymerization: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Polymerization

Under normal conditions of storage and use, hazardous polymerization is not expected to occur.

11. Toxicological Information

Toxicological Information

XYLENE: Dermal absorption of xylene in animals causes narcosis. Toxic effects described in animals by inhalation include upper respiratory irritation; central nervous system effects; behavioral effects; decreased weight gain; hearing loss; and effects on the blood, liver, kidneys, heart, spleen, lungs and bone marrow. By ingestion, xylene caused central nervous system effects; decreased body weight and liver effects. Tests of xylene in animals demonstrate no carcinogenic activity. Xylene does not produce heritable genetic damage in animals or genetic damage in bacterial or mammalian cell cultures. Although abnormal sperm were observed after an interperitoneal

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injection in rats, xylene did not produce reproductive effects. Developmental toxicity was observed in animals exposed to xylene but only at concentrations that were maternally toxic.

MIDDLE DISTILLATES, PETROLEUM: Long-term repeated (lifetime) skin exposure to similar materials has been reported to result in an increase in skin tumors in laboratory rodents. The relevance of these findings to humans is not clear at this time.

ISOPARAFFINS: Studies in laboratory animals have shown that long-term exposure to similar materials (isoparaffins) can cause kidney damage and kidney cancer in male laboratory rats. However, in-depth research indicates that these findings are unique to the male rat, and that these effects are not relevant to humans.

NAPHTHALENE: Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from overexposure to naphthalene. Persons with glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have been reported in persons overexposed to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect. Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) in vitro. Naphthalene has been classified as Possibly Carcinogenic to Humans (2B) by IARC, based on findings from studies in laboratory animals.

DIESEL EXHAUST: The combustion of diesel fuels produces gases including carbon monoxide, carbon dioxide, oxides of nitrogen and/or sulfur, and hydrocarbons that can be irritating and hazardous with overexposure. Long-term occupational overexposure to diesel exhaust and diesel exhaust particulate matter has been associated with an increased risk of respiratory disease, including lung cancer, and is characterized as a “known human carcinogen” by the International Agency for Research on Cancer (IARC), as “a reasonably anticipated human carcinogen” by the National Toxicology Program, and as “likely to be carcinogenic to humans” by the EPA, based upon animal and occupational exposure studies. However, uncertainty exists with these classifications because of deficiencies in the supporting occupational exposure/epidemiology studies, including reliable exposure estimates. Lifetime animal inhalation studies with pulmonary overloading exposure concentrations of diesel exhaust emissions have produced tumors and other adverse health effects. However, in more recent long-term animal inhalation studies of diesel exhaust emissions, no increase in tumor incidence and in fact a substantial reduction in adverse health effects along with significant reductions in the levels of hazardous material emissions were observed and are associated with fuel composition alterations coupled with new technology diesel engines.

CAS# 1330-20-7:

Acute toxicity, LD50, Oral, Rat, 4300. MG/KG.

Result:

Liver: Other changes.

Kidney, Ureter, Bladder: Other changes.

- AMA Archives of Industrial Health., For publisher information, see AEHLAU, Chicago, IL, Vol/p/yr: 14,387, 1956

CAS# 67-64-1:

Acute toxicity, LD50, Oral, Rat, 5800. MG/KG.

Result:

Behavioral: Altered sleep time (including change in righting reflex).

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Behavioral: Tremor.

- Journal of Toxicology and Environmental Health., Hemisphere Pub., 1025 Vermont Ave., NW, Washington, DC 20005, Vol/p/yr: 15,609, 1985

CAS# 67-63-0:

Acute toxicity, LD50, Oral, Rat, 5045. MG/KG.

Result:

Behavioral: Altered sleep time (including change in righting reflex).

Behavioral: Somnolence (general depressed activity).

- Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 43(1),8, 1978

Acute toxicity, LD50, Oral, Mouse, 3600. MG/KG.

Result:

Behavioral: Altered sleep time (including change in righting reflex).

Behavioral: Somnolence (general depressed activity).

- Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 43(1),8, 1978

CAS# 100-41-4:

Acute toxicity, LD50, Oral, Rat, 3500. MG/KG.

Result:

Liver: Other changes.

Kidney, Ureter, Bladder: Other changes.

- AMA Archives of Industrial Health., For publisher information, see AEHLAU, Chicago, IL, Vol/p/yr: 14,387, 1956

CAS# 64-17-5:

Acute toxicity, LD50, Oral, Mouse, 3450. MG/KG.

Result:

Lungs, Thorax, or Respiration: Other changes.

- Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 32(3),31, 1967

Chronic Toxicological Effects

No data available.

Irritation or Corrosion

Eye Irritation: Contact may cause pain and severe reddening and inflammation of the conjunctiva. Effects may become more serious with repeated or prolonged contact. Repeated overexposure to naphthalene may cause cataracts.

Skin Irritation: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. Occasional skin contact with this product is not expected to have serious effects, but good personal hygiene should be practiced and repeated skin contact avoided. This product can also be expected to produce skin irritation upon prolonged or repeated skin contact. Personal hygiene measures taken to prevent skin irritation are expected to be adequate to prevent risk of skin cancer.

Respiratory Irritation: Nose, throat and lung irritant. Based on data from similar materials. Exposure to a high concentration of vapor or mist may cause severe irritation to the nose and upper respiratory tract. Breathing of vapor or mist may aggravate asthma and inflammatory or fibrotic pulmonary disease.

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Carcinogenicity/Other Information

The International Agency for Research on Cancer (IARC) has determined that both ethylbenzene and naphthalene are possibly carcinogenic to humans (Group 2B).

IARC has determined that there is inadequate evidence for the carcinogenicity of diesel fuel/fuel oil in humans. IARC determined that there was limited evidence for the carcinogenicity of marine diesel fuel in animals. Distillate (light) diesel fuels were not classifiable as to their carcinogenicity to humans (Group 3A).

IARC has determined that there is sufficient evidence for the carcinogenicity in experimental animals of diesel engine exhaust and extracts of diesel engine exhaust particles. IARC determined that there is only limited evidence for the carcinogenicity in humans of diesel engine exhaust. However, IARC's overall evaluation has resulted in the IARC designation of diesel engine exhaust as probably carcinogenic to humans (Group 2A) because of the presence of certain engine exhaust components.

IARC has also determined that there is sufficient evidence for the carcinogenicity in experimental animals of light and heavy vacuum distillates, of light and heavy catalytically cracked distillates and of cracked residues (including heavy thermocracked distillates/residues) derived from the refining of crude oil.

IARC has classified xylene as not classifiable to its carcinogenicity to humans (Group 3) This IARC classification was based on inadequate evidence for the carcinogenicity of petroleum solvents in humans and in experimental animals.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Xylene (mixed isomers)	1330-20-7	n.a.	3	A4	n.a.
2. Acetone	67-64-1	n.a.	n.a.	A4	n.a.
3. Isopropyl alcohol	67-63-0	n.a.	3	A4	n.a.
4. Ethylbenzene	100-41-4	n.a.	2B	A3	n.a.
5. Kerosene	8008-20-6	n.a.	n.a.	A4	n.a.
6. Ethyl alcohol	64-17-5	n.a.	1	A4	n.a.
7. Naphthalene	91-20-3	Possible	2B	A4	n.a.

12. Ecological Information

General Ecological Information

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. This product should be considered harmful to aquatic organisms, with the potential to cause long lasting adverse effects in the aquatic environment.

CAS# 1330-20-7:

LC50, Water Flea (*Daphnia magna*), 100000. - 1000000. UG/L, 24 H, Mortality, Water temperature: 21.00 C (69.8 F) - 25.00 C (77.0 F) C.

Result:

Abnormal development.

- Toxicity of Selected Chemicals to Certain Animals, Dowden, B.F., and H.J. Bennett, 1965

LC50, Brine Shrimp (*Artemia salina*), 1830. UMOL/L, 24 H, Mortality.

Result:

Age Effects.

- Comparative Acute Toxicity of the First 50 Multicentre Evaluation of In Vitro Cytotoxicity Chemicals to Aquatic Non-vertebrates, Calleja, M.C., G. Persoone, and P. Geladi, 1994

CAS# 67-64-1:

LC50, Water Flea (*Daphnia magna*), 12600000. UG/L, 48 H, Mortality; Reproducibility of Short-Term and Reproduction Toxicity Experiments with *Daphnia magna* and Comparison of the Sensitivity of *Daphnia magna*

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with *Daphnia pulex* and *Daphnia cucullata* in Short-Term Experiments, Canton, J.H., and D.M.M. Adema, 1978

CAS# 67-63-0:

LC50, Water Flea (*Daphnia magna*), 10000. MG/L, 24 H, Intoxication., Water temperature: 20.00 C (68.0 F) - 22.00 C (71.6 F) C, pH: 7.70, Hardness: 16.00 dH.

Result:

Age Effects.

- Results of the Damaging Effect of Water Pollutants on *Daphnia magna* (Befunde der Schadwirkung Wassergefährdender Stoffe Gegen *Daphnia magna*), Bringmann, G., and R. Kuhn, 1977

CAS# 100-41-4:

LC50, Fathead Minnow (*Pimephales promelas*), 12100. UG/L, 96 H, Mortality, Water temperature: 26.10 C (79.0 F) C, pH: 7.40, Hardness: 45.60 MG/L.

Result:

Behavioral Effects.

- Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*) Volume III, Geiger, D.L., S.H. Poirier, L.T. Brooke, and D.J. Call, 1986

LC50, Water Flea (*Daphnia magna*), 75000. UG/L, 48 H, Mortality, Water temperature: 22.00 C (71.6 F) C, pH: 8.10, Hardness: 72.00 MG/L.

Result:

Age Effects.

- Acute Toxicity of Priority Pollutants to Water Flea (*Daphnia magna*), LeBlanc, G.A., 1980

CAS# 64-17-5:

LC50, Water Flea (*Daphnia magna*), neonate, 11853000. UG/L, 48 H, Mortality, Water temperature: 20.00 C (68.0 F) - 20.80 C (69.4 F) C, pH: 8.30, Hardness: 159.60 MG/L.

Result:

Age Effects.

- Comparison of Ethanol Toxicity to *Daphnia magna* and *Ceriodaphnia dubia* Tested at Two Different Temperatures: Static Acute Toxicity Test Results, Takahashi, I.T., U.M. Cowgill, and P.G. Murphy, 1987

Results of PBT and vPvB assessment

No data available.

Persistence and Degradability

Expected to be inherently biodegradable.

Bioaccumulative Potential

No data available.

Mobility in Soil

May partition into air, soil and water. Adsorbs on soil.

Other adverse effects

No data available.

13. Disposal Considerations

Waste Disposal Method

When this product is discarded or disposed of, it may meet the criteria of a hazardous waste due to its flammability and the xylene content. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present.

Use personal protection measures as required. Use appropriate grounding and bonding practices. Use only non-sparking tools. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. The user is

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responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

RCRA Waste ID Code: D001

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name

Flammable Liquids, n.o.s. (Xylenes)

DOT Hazard Class: 3

DOT Hazard Label: FLAMMABLE LIQUID

UN/NA Number: UN1993

Packing Group: III

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name Flammable Liquids, n.o.s. (Xylenes)

UN Number: 1993

Hazard Class: 3 - FLAMMABLE LIQUID

Packing Group: III

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name Flammable Liquids, n.o.s. (Xylenes)

UN Number: |Y|

Hazard Class: 3 - FLAMMABLE LIQUID

Packing Group: III

IMDG MFAF Number: |

IMDG EMS Page: |

Additional Transport Information

No data available.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Xylene (mixed isomers)	1330-20-7	No	Yes 100 LB	Yes	Yes
2. Acetone	67-64-1	No	Yes 5000 LB	No	Yes
3. Isopropyl alcohol	67-63-0	No	No	Yes	No
4. Ethylbenzene	100-41-4	No	Yes 1000 LB	Yes	Yes
5. Kerosene	8008-20-6	No	No	No	No
6. Ethyl alcohol	64-17-5	No	No	No	No
7. Naphthalene	91-20-3	No	Yes 100 LB	Yes	Yes

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CA PROP.65	CA TAC, Title 8
1. Xylene (mixed isomers)	1330-20-7	No	TAC, Title 8
2. Acetone	67-64-1	No	Title 8
3. Isopropyl alcohol	67-63-0	No	TAC, Title 8
4. Ethylbenzene	100-41-4	Yes: Canc.	TAC, Title 8
5. Kerosene	8008-20-6	No	No
6. Ethyl alcohol	64-17-5	No	Title 8
7. Naphthalene	91-20-3	Yes: Canc.	TAC, Title 8

MATERIAL SAFETY DATA SHEET
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(120007)

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SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

- Sec.302:** EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
- Sec.304:** EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
- Sec.313:** EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
- Sec.110:** EPA SARA 110 Superfund Site Priority Contaminant List

Other Important Lists:

- CA PROP 65:** California Proposition 65
- CA TAC:** California AB 1807 - Toxic Air Contaminants
- CA Title 8:** California Hazardous Substances List: Title 8, Sec. 339

International Regulatory Lists:

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- Yes No Acute (immediate) Health Hazard
- Yes No Chronic (delayed) Health Hazard
- Yes No Fire Hazard
- Yes No Sudden Release of Pressure Hazard
- Yes No Reactive Hazard

16. Other Information

Company Policy or Disclaimer

The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.