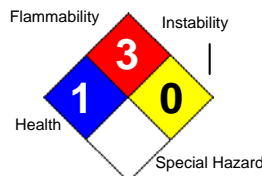


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| | | |
|--------------|--|---|
| HEALTH | | 1 |
| FLAMMABILITY | | 3 |
| PHYSICAL | | 0 |
| PPE | | B |



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Date Created: 08/31/2004

1. Product and Company Identification

Product Code: CATACLEAN

Product Name: Cataclean Cleaning Agent for catalytic converters

Trade Name: Cataclean Cleaner blend

Manufacturer Information

Company Name: Fas-Pak, Inc.
411 Fairfield Avenue
Michigan City, IN 46360

Phone Number: (219)874-7990

Fax Number: (219)874-7991

Information: EHS Manager (219)874-7990

Web site address: www.fas-pak.com

Preparer Name: RTW

Chemical Family: Petroleum Hydrocarbon Solvent

CAS Number: 1330-20-7

RTECS #: ZE2100000

Synonyms
Xylol; Mixed Xylenes

2. Hazards Identification

| GHS Classification | Placard | Key word | GHS hazard phrase |
|--|-------------------|----------|---|
| Flammable Liquids, Category 2 | Flame | Danger | Highly flammable liquid and vapor |
| Acute Toxicity: Inhalation, Category 4 | Exclamation point | Warning | Harmful if inhaled |
| Acute Toxicity: Skin, Category 4 | Exclamation point | Warning | Harmful in contact with skin |
| Skin Corrosion/Irritation, Category 2 | Exclamation point | Warning | Causes skin irritation |
| Serious Eye Damage/Eye Irritation, Category 1 | Corrosive | Danger | Causes serious eye damage |
| Target Organ Systemic Toxicity (single exposure), Category 3 | Exclamation point | Warning | May cause respiratory irritation, or may cause drowsiness and dizziness |
| Aspiration Toxicity, Category 1 | Health hazard | Danger | May be fatal if swallowed and enters airways. |

GHS Hazard Phrases

H225: Highly flammable liquid and vapor.
H332: Harmful if inhaled.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H336: May cause drowsiness or dizziness.
H304: May be fatal if swallowed and enters airways.
H303: May be harmful if swallowed.

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GHS Precaution Phrases

- P233: Keep container tightly closed.
- P210: Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.
- P280: Wear {protective gloves/protective clothing/eye protection/face protection}.
- P240: Ground/bond container and receiving equipment.
- P241: Use explosion-proof electrical/ventilating/lighting/{.../} equipment.
- P243: Take precautionary measures against static discharge.
- P242: Use only non-sparking tools.
- P271: Use only outdoors or in a well-ventilated area.
- P261: Avoid breathing {dust/fume/gas/mist/vapours/spray}.
- P264: Wash {hands} thoroughly after handling.
- P362+364: Take off contaminated clothing and wash it before reuse.

GHS Response Phrases

- P370+378: In case of fire, use {...} to extinguish.
- P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312: Call a {POISON CENTER/doctor/...} if you feel unwell.
- P302+352: IF ON SKIN: Wash with plenty of soap and water.
- P322: Specific measures {see ... on this label}.
- P363: Wash contaminated clothing before reuse.
- P321: Specific treatment {see ... on this label}.
- P332+313: If skin irritation occurs, get medical advice/attention.
- P362: Take off contaminated clothing.
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310: Immediately call a {POISON CENTER/doctor/...}.
- P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
- P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P331: Do NOT induce vomiting.

GHS Storage and Disposal Phrases

- P403+235: Store in cool/well-ventilated place.
- P501: Dispose of contents/container to {...}.
- P405: Store locked up.
- P403+233: Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere.

Potential Health Effects (Acute and Chronic)

EYES: May cause mild irritation.

SKIN: Can cause skin irritation. Prolonged or repeated contact may dry the skin.

SWALLOWING: Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts (1/8 of a cup or more), may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung injury and chemical pneumonia, including possible death.

INHALATION: breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts and repeated exposure over time may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits.

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TARGET ORGAN EFFECTS: Over exposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: testis damage, kidney damage, liver damage, and effects on hearing. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: Central Nervous System effects.

DEVELOPMENTAL INFORMATION: This material, or a component, may be harmful to the human fetus based on positive test results with laboratory animals.

LD 50 / LC 50

Causes eye irritation.

Medical Conditions Generally Aggravated By Exposure

Skin, lungs (for example, asthma-like conditions), liver, kidney, central nervous system, male reproductive system, and auditory system. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

3. Composition/Information on Ingredients

| Hazardous Components (Chemical Name) | CAS # | Concentration |
|--|------------|---------------|
| 1. Hydrotreated light distillate (petroleum) | 64742-47-8 | 5.0 -10.0 % |
| 2. Xylene (mixed isomers) | 1330-20-7 | 30.0 -60.0 % |
| 3. 1-Propanol | 71-23-8 | 10.0 -30.0 % |
| 4. Acetone | 67-64-1 | 10.0 -30.0 % |

4. First Aid Measures

Emergency and First Aid Procedures

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid.

EYES: Check for and remove contact lenses.

If irritation or redness develops, flush eyes with cool, clean, low pressure water for at least 15 minutes.

Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue.

Do not use eye ointment.

Seek medical attention immediately.

SKIN: Remove contaminated shoes and clothing. Flush exposed areas with large amounts of water.

If skin is damaged, apply a clean dressing and seek immediate medical attention. do not use ointments.

If skin is not visibly damaged (blistering, redness), clean the affected area thoroughly with mild soap and water.

Seek medical attention if tissue appears damaged or if pain or irritation persists.

SWALLOWING: Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees.

If victim is drowsy or unconscious, place on left side with head down.

Never give anything by mouth to a person who is not fully conscious.

Do not leave victim unattended.

Seek medical attention immediately.

INHALATION: Immediately move victim to fresh air.

If victim is not breathing, immediately begin CPR.

If breathing is difficult, 100% humidified oxygen should be administered by a qualified individual.

Seek medical attention immediately.

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In Case of Inhalation

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

In Case of Skin Contact

Rinse cautiously with water for several minutes.

In Case of Eye Contact

Flush eye with water for 15 minutes. Get medical attention.

In Case of Ingestion

IF SWALLOWED: Do not induce vomiting. Give milk or water. Get immediate medical attention. Careful evacuation of stomach by medical personnel imperative.

Note to Physician

Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or breathing difficulty develops, evaluate for upper respiratory inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required.

This material sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other Sympatomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. Administration of sympathomimetic drugs should be avoided.

INGESTION: This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Also, signs of chemical pneumonia may be delayed up to 48 hours, presenting only after moderate physical exertion. Induction of emesis is not recommended. Consider activated charcoal and/ or gastric lavage. If patient is outbound, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

Signs and Symptoms Of Exposure

EYES: stinging, tearing, redness and blurred vision.

SKIN: redness, burning, drying and cracking of skin, chemical burns, blistering, and other skin damage.

Signs and symptoms of exposure through skin absorption, swallowing, or inhalation may include: redness of the face and neck, mouth and throat irritation, (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation of the nose, throat, and airways, tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light headed feeling), followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects; effects on memory; respiratory depression (slowing of breathing rate); shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

5. Fire Fighting Measures

Flammability Classification:

Flammable Liquid

Flash Pt:

80.00 F (26.7 C) Method Used: TAG Closed Cup

Explosive Limits:

LEL: 1.0 UEL: 6.6

Autoignition Pt:

980.00 F (526.7 C)

Fire Fighting Instructions

Wear a SCBA with a full facepiece operated in positive pressure demand mode with appropriate turn out gear and chemical resistant personal protective equipment. Refer to the PPE section (#8) of this MSDS.

Flammable Properties and Hazards

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGE, OR OTHER IGNITION SOURCES AT

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LOCATIONS DISTANT FROM THE MATERIAL HANDLING POINT.

NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT, VAPORS, OR RESIDUE CAN IGNITE EXPLOSIVELY.

Hazardous Combustion Products

Carbon dioxide, carbon monoxide, and various hydrocarbons.

Suitable Extinguishing Media

Regular foam, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media

No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

SMALL SPILL: Absorb liquid with vermiculite, Oil-Dri, or sand.

LARGE SPILL: Eliminate all ignition sources (flares, flames, pilot lights, electrical sparks).

Persons not wearing respirators and other required protective equipment should be excluded from the area of spill until clean up has been completed.

Turn off all valves and pumps to stop spill at source.

Prevent from entering drains, sewers, streams, or other bodies of water. Prevent from spreading by diking or berming.

If runoff occurs, notify the EHS Manager immediately.

Pump or vacuum transfer (make sure grounded!) spilled product to clean, labelled containers for recovery.

Absorb unrecoverable product with inert material such as Oil-dri. Transfer contaminated absorbent and other materials to SPILLS OF 100 LBS. (or 725 Gallons) OR MORE MUST BE REPORTED TO LOCAL, STATE, AND FEDERAL AGENCIES UNDER CERCLA.

7. Handling and Storage

Hazard Label Information:

Do not reuse this container. Do not get on skin and clothing. Keep away from heat and flame. Keep away from sources of ignition.

Precautions To Be Taken in Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residue (vapor/ liquid/ and/or solid), all hazard precautions given in the data sheet must be observed.

All 5-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/ or bonded when material is transferred. Hydrocarbon solvents are non-conductors of electricity and as such can become electrostatically charged during mixing, filtering, or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids.

WARNING: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and/ or pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "Autoignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Precautions To Be Taken in Storing

Keep away from oxidizers, heat and flames. May attack some plastics, rubber and coating. Keep in tightly closed containers in a cool, dry, ventilated storage area. Ground container and transfer equipment to eliminate static sparks. This product should be stored away from any incompatible materials (see Section 10).

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8. Exposure Controls/Personal Protection

| Hazardous Components (Chemical Name) | CAS # | OSHA PEL | ACGIH TWA | Other Limits |
|--|------------|---------------|---------------------------------|--------------|
| 1. Hydrotreated light distillate (petroleum) | 64742-47-8 | No data. | TLV: 200 mg/m ³ | No data. |
| 2. Xylene (mixed isomers) | 1330-20-7 | PEL: 100 ppm | TLV: 100 ppm | No data. |
| 3. 1-Propanol | 71-23-8 | PEL: 200 ppm | TLV: 200 ppm STEL: (250 ppm) | No data. |
| 4. Acetone | 67-64-1 | PEL: 1000 ppm | TLV: 500 ppm STEL: 750 ppm | No data. |

Protective Equipment Summary - Hazard Label Information:

Chemical resistant apron Chemical resistant boots Clothes to prevent skin contact Eye wash station in work area
NIOSH/MSHA organic vapor respirator Safety shower in work area

Respiratory Equipment (Specify Type)

For Blending or Drum Filling, Respirator with Organic vapor cartridge is required.

Eye Protection

Chemical splash goggles are advised; however, OSHA regulations also permit other type of safety glasses, depending on the task at hand. If you are working in close proximity, such as filling drums or blending, wear splash goggles.

Protective Gloves

Chemical resistant gloves.

Other Protective Clothing

To prevent repeated or prolonged skin contact, wear impervious clothing and boots. REQUIRED AT FAS-PAK FOR ALL PERSONS DOING BLENDING/ FILLING OPERATIONS WITH THIS MATERIAL.

Engineering Controls (Ventilation etc.)

EXHAUST AND VENTILATION SHOULD KEEP LEVELS AT OR BELOW SAFE Threshold Limit Values ESTABLISHED BY OSHA.

Work/Hygienic/Maintenance Practices

Do no eat, drink, or smoke on the job.

Wash hands thoroughly before breaks and before going home.

9. Physical and Chemical Properties

| | |
|---|---|
| Physical States: | [] Gas [X] Liquid [] Solid |
| Melting Point: | -54.00 F (-47.8 C) |
| Boiling Point: | ~ 210.00 F (98.9 C) - 55.00 C (131.0 F) |
| Autoignition Pt: | 980.00 F (526.7 C) |
| Flash Pt: | 80.00 F (26.7 C) Method Used: TAG Closed Cup |
| Explosive Limits: | LEL: 1.0 UEL: 6.6 |
| Specific Gravity (Water = 1): | ~ 0.815 - 0.835 at 60.0 F (15.6 C) |
| Density: | 7.25 LB/GA at 60.0 F (15.6 C) |
| Vapor Pressure (vs. Air or mm Hg): | ~ 9.00 MM_HG at 68.0 F (20.0 C) |
| Vapor Density (vs. Air = 1): | ~ 3.66 |
| Evaporation Rate: | 0.66 |
| Solubility in Water: | ~ 55 % |
| Percent Volatile: | 100.0 % by weight. |
| VOC / Volume: | 870.0000 G/L |
| Viscosity: | 0.80 CPS |

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Heat Value: 18445 BTU
Octanol/Water Partition Coefficient: 3.120-3.200
Formula: C6H4(CH3)2
Molecular Weight: 106.16
pH: NA

Appearance and Odor

Clear light blue liquid with characteristic alcohol like and sweet aromatic odor.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability

All sources of heat, flame, and potential ignition sources.

Incompatibility - Materials To Avoid

Strong oxidizing conditions and agents, strong acids, & alkalis such as liquid chlorine, hydrogen peroxide, and oxygen.

Hazardous Decomposition Or Byproducts

Carbon dioxide, carbon monoxide, and various hydrocarbons.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions

No data available.

11. Toxicological Information**Toxicological Information**

See Section #3, Hazards.

Carcinogenicity/Other Information

IARC has classified Ethylbenzene as a possible human carcinogen.

| Hazardous Components (Chemical Name) | CAS # | NTP | IARC | ACGIH | OSHA |
|--|------------|------|------|-------|------|
| 1. Hydrotreated light distillate (petroleum) | 64742-47-8 | n.a. | n.a. | A4 | n.a. |
| 2. Xylene (mixed isomers) | 1330-20-7 | n.a. | 3 | A4 | n.a. |
| 3. 1-Propanol | 71-23-8 | n.a. | n.a. | n.a. | n.a. |
| 4. Acetone | 67-64-1 | n.a. | n.a. | A4 | n.a. |

Carcinogenicity: NTP? No IARC Monographs? Yes OSHA Regulated? No

12. Ecological Information**General Ecological Information**

Xylene and Ethylebenzene have a low order of toxicity and biopersistance due to the high volatility of both compounds. Soil studies indicate 98% evaporation after 6 hours.

13. Disposal Considerations**Waste Disposal Method**

DISPOSE OF AS A SOLVENT WASTE. MUST BE RECYCLED.

RCRA Waste ID Code: U239

14. Transport Information**LAND TRANSPORT (US DOT)**

DOT Hazard Class: 3
DOT Hazard Label: FLAMMABLE LIQUID
UN/NA Number: UN1993

SAFETY DATA SHEET

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Packing Group: III

LAND TRANSPORT (Canadian TDG)

TDG Shipping Name: Flammable liquids, n.o.s.

LAND TRANSPORT (European ADR/RID)

ADR/RID Shipping Name: Flammable liquids, n.o.s.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name: Flammable liquids, n.o.s.

UN Number: 1993

Hazard Class: 3 - FLAMMABLE LIQUID

Packing Group: III

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name: Flammable liquids, n.o.s.

UN Number: 1993

Hazard Class: 3 - FLAMMABLE LIQUID

Packing Group: III

Marine Pollutant: Yes

Additional Transport Information

THE TRANSPORT INFORMATION MAY VARY WITH THE CONTAINER AND MODE OF SHIPMENT.

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. Hydrotreated light distillate (petroleum) | 64742-47-8 | No | No | No | No |
| 2. Xylene (mixed isomers) | 1330-20-7 | No | Yes 100 LB | Yes | Yes |
| 3. 1-Propanol | 71-23-8 | No | No | No | No |
| 4. Acetone | 67-64-1 | No | Yes 5000 LB | No | Yes |

US EPA CAA, CWA, TSCA

| Hazardous Components (Chemical Name) | CAS # | EPA CAA | EPA CWA NPDES | EPA TSCA | CA PROP 65 |
|--|------------|---------|---------------|-------------------|------------|
| 1. Hydrotreated light distillate (petroleum) | 64742-47-8 | No | No | Inventory | No |
| 2. Xylene (mixed isomers) | 1330-20-7 | HAP | Yes | Inventory | No |
| 3. 1-Propanol | 71-23-8 | No | No | Inventory | No |
| 4. Acetone | 67-64-1 | No | No | Inventory, 4 Test | No |

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

TSCA (Toxic Substances Control Act) Lists:

- Inventory:** Chemical Listed in the TSCA Inventory.
- 5A(2):** Chemical Subject to Significant New Rules (SNURS)

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| 6A: | Commercial Chemical Control Rules |
| 8A: | Toxic Substances Subject To Information Rules on Production |
| 8A CAIR: | Comprehensive Assessment Information Rules - (CAIR) |
| 8A PAIR: | Preliminary Assessment Information Rules - (PAIR) |
| 8C: | Records of Allegations of Significant Adverse Reactions |
| 8D: | Health and Safety Data Reporting Rules |
| 8D TERM: | Health and Safety Data Reporting Rule Terminations |
| 12(b): | Notice of Export |

Other Important Lists:

| | |
|--------------------|--|
| CWA NPDES: | EPA Clean Water Act NPDES Permit Chemical |
| CAA HAP: | EPA Clean Air Act Hazardous Air Pollutant |
| CAA ODC: | EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC) |
| CA PROP 65: | California Proposition 65 |

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

NOTICE: The information presented herein is based on data considered to be accurate as of the date of this Material Safety Data Sheet. However, an MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the material.

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