

MSDS

(Posted 9/20/2012)

The attached MSDS sheets supersede all other MSDS sheets. Please file accordingly.

VENDOR: **PARKER A480**

| <u>STOCK#</u> | <u>MFG# DESCRIPTION</u> |
|---------------|-------------------------|
|---------------|-------------------------|

| | |
|---------|--------------------------------------|
| B82-741 | CKIAQ20 EVAPORATOR COIL CLEANER IAQ+ |
|---------|--------------------------------------|



Evap Coil Klean IAQ

CKIAQ20 (P/N 475255)

MSDS Revision Date (mm/dd/yyyy): 06/13/2012

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MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier : **Evap Coil Klean IAQ**

Product Code(s) : CKIAQ20 (P/N 475255)

Product Use : Specialty aerosol spray cleaner. Coil cleaner and disinfectant.

Chemical Family : Mixture.

Supplier's name and address:

Manufacturer's name and address:

Parker Hannifin Corporation - Sporlan Division

Refer to Supplier

206 Lange Drive
Washington, MO, U.S.A.
63090

Information Telephone # : (636) 239-1111

24 Hr. Emergency Tel # : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

SECTION 2 - HAZARDS IDENTIFICATION

Classification : WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:
Class A (Pressurized containers);
Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200). Hazardous classification:
Acute Health Hazard;
Chronic Health Hazard;
Non-flammable aerosol.

Emergency Overview : Clear liquid in pressurized container. Citrus odour.
WARNING!
Contents under pressure. Containers may explode if heated. May be harmful if inhaled or swallowed. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. Can cause cyanosis. May cause respiratory irritation. Causes severe eye irritation. May cause skin irritation. Prolonged overexposure may cause liver and kidney effects.

POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

Inhalation : Inhalation of vapours or mists may cause irritation to the nose, throat and upper respiratory tract. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue and unconsciousness.

Skin : May cause mild to moderate irritation. If product is sprayed directly on skin, symptoms of frostbite may be experienced including numbness, prickling and itching. Can be absorbed through skin.

Eyes : Direct eye contact may produce severe irritation with possible eye damage. If product is sprayed directly into the eyes, could cause freezing of the eye.

Ingestion : Swallowing large amounts may be harmful. May cause irritation of mouth, throat, and stomach. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Could cause cyanosis (bluish discoloration of the skin due to deficient oxygenation of the blood). Ingestion may result in abnormal liver and kidney function.



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Effects of long-term (chronic) exposure

: Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin.

Carcinogenic status

: See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards

: See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects

: See ECOLOGICAL INFORMATION, Section 12.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Ingredients</u> | <u>CAS #</u> | <u>Wt.%</u> |
|--|--------------|-------------|
| Isobutane | 75-28-5 | 1.00 - 5.00 |
| Diethylene glycol monobutyl ether | 112-34-5 | 1.00 - 5.00 |
| Tetrasodium ethylenediamine tetraacetate | 64-02-8 | 1.00 - 5.00 |

SECTION 4 - FIRST AID MEASURES

Inhalation

: Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. Keep warm and in a quiet place. If breathing is difficult, give oxygen by qualified medical personnel only. Get medical attention.

Skin contact

: Remove contaminated clothing. Wash contaminated area with soap and lukewarm (not hot), gently running water. If irritation persists, seek prompt medical attention. Wash contaminated clothing before re-use.

Eye contact

: Immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention/advice.

Ingestion

: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

Notes For Physician

: Treat symptomatically. This product is a CNS depressant.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability

: Non-flammable aerosol. Closed containers are contained under pressure and may explode if exposed to excess heat for a prolonged period of time. Product may float, and be re-ignited at the water's surface.

Flammability classification (OSHA 29 CFR 1910.1200)

: Non-flammable aerosol.

Oxidizing properties

: None known.

Explosion data: Sensitivity to mechanical impact / static discharge

: Not sensitive to static discharge or mechanical impact under normal conditions of use and handling. Aerosols are sensitive to mechanical impact. Contents under pressure.

Suitable extinguishing media : Dry chemical, foam, carbon dioxide and water fog.

Special fire-fighting procedures/equipment

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water spray used for cooling purposes. Shield personnel to protect from venting or rupturing containers.

Hazardous combustion products

: Carbon oxides; Nitrogen oxides (NOx); Sodium oxides; Ammonia; Hydrogen chloride gas; Other unidentified organic compounds.



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NFPA Rating 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious
: *Health:* 2 *Flammability:* 1 *Instability:* 1 *Special Hazards:* None.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. Keep all other personnel upwind and away from the spill/release. Individuals involved in the cleanup must wear appropriate personal protective equipment. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.
- Spill response/cleanup** : Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Notify the appropriate authorities as required.
- Prohibited materials** : None known or reported by the manufacturer.
- Special spill response procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).
US CERCLA Reportable quantity (RQ): None reported.

SECTION 7 - HANDLING AND STORAGE

- Safe Handling procedures** : Wear chemically resistant protective equipment during handling. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with eyes, skin and clothing. Keep away from extreme heat and flame. Avoid contact with strong oxidizing agents. Always replace cap after use. Wash thoroughly after handling. Do not puncture or incinerate containers. Keep out of the reach of children.
- Storage requirements** : Store in a cool, dry, well ventilated area, away from heat and ignition sources. Store away from incompatibles and out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. No smoking in the area. Inspect periodically for damage or leaks.
- Incompatible materials** : Acids; Halogenated compounds; Strong oxidizers (e.g. Chlorine, Peroxides, etc.).
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

| <u>Exposure Limits</u> | | | | |
|--|------------------|-------------|-----------------|-------------|
| <u>Ingredients</u> | <u>ACGIH TLV</u> | | <u>OSHA PEL</u> | |
| | <u>TWA</u> | <u>STEL</u> | <u>PEL</u> | <u>STEL</u> |
| Isobutane | *1000 ppm | N/Av | N/Av | N/Av |
| Diethylene glycol monobutyl ether | N/Av | N/Av | N/Av | N/Av |
| Tetrasodium ethylenediamine tetraacetate | N/Av | N/Av | N/Av | N/Av |

*Note: The ACGIH TLV listed above for Isobutane, is for 'Aliphatic hydrocarbon gases'.

Ventilation and engineering measures

- : Do not use in closed or confined space. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection

- : Use NIOSH/MSHA approved full-face respirator with an organic vapour cartridge if the recommended exposure limit is exceeded. Advice should be sought from respiratory protection specialists.

Skin protection

- : Solvent-resistant gloves. Advice should be sought from glove suppliers.



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- Eye / face protection** : Chemical splash goggles are recommended. Do not wear contact lenses.
- Other protective equipment** : An eyewash station and safety shower should be made available in the immediate working area. Depending on conditions of use, an impervious apron should be worn. Remove and wash contaminated clothing before re-use.

General hygiene considerations

- : Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|-------------------|---|--|
| Physical state | : Liquid aerosol. | Appearance | : Clear liquid in pressurized container. |
| Odour | : Citrus odour. | Odour threshold | : N/Av |
| pH | : N/Av | | |
| Boiling point | : N/Av | Specific gravity | : 1.005 (concentrate) |
| Melting/Freezing point | : N/Av | Coefficient of water/oil distribution | : N/Av |
| Vapour pressure (mmHg @ 20° C / 68° F) | : N/Av | Solubility in water | : N/Av |
| Vapour density (Air = 1) | : N/Av | Evaporation rate (n-Butyl acetate = 1) | : N/Av |
| Volatile organic Compounds (VOC's) | : N/Av | Volatiles (% by weight) | : 12% |
| Flash point | : N/Av | | |
| Flash point Method | : N/Av | Auto-ignition temperature | : N/Av |
| Lower flammable limit (% by vol.) | : N/Av | Upper flammable limit (% by vol.) | : N/Av |
| Flame Projection Length | : None. | Flashback observed | : NO |
| Viscosity | : N/Av | | |
| Absolute pressure of container | : N/Av | | |

Section 10: Stability And Reactivity

- Stability and reactivity** : Stable at ambient temperatures and pressures. Closed containers may build up pressure when exposed to heat and flame.
- Hazardous polymerization** : Hazardous polymerisation does not occur.
- Conditions to avoid** : Keep out of direct sunlight. Keep away from excessive heat, open flames, sparks and other possible sources of ignition.
- Materials To Avoid And Incompatibility** : See Section 7 (Handling and Storage) for further details.
- Hazardous decomposition products** : None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

- Target organs** : Eyes, skin, respiratory system, central nervous system, blood system, liver, brain and kidneys.
- Routes of exposure** : *Inhalation:* YES *Skin Absorption:* YES *Skin & Eyes:* YES *Ingestion:* YES



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Toxicological data : There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

| <u>Ingredients</u> | <u>LC₅₀(4hr)</u> | <u>LD₅₀</u> | |
|--|-----------------------------|------------------------|-------------------------|
| | <u>inh, rat</u> | <u>(Oral, rat)</u> | <u>(Rabbit, dermal)</u> |
| Isobutane | 368,000 ppm (mouse) | N/Ap (gas) | N/Ap (gas) |
| Diethylene glycol monobutyl ether | N/Av | 5600 mg/kg | 2700 mg/kg |
| Tetrasodium ethylenediamine tetraacetate | N/Av | > 2000 mg/kg | N/Av |

Carcinogenic status : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Reproductive effects : Not expected to cause reproductive effects.
Teratogenicity : Not expected to be a teratogen.
Mutagenicity : Not expected to be mutagenic in humans.
Epidemiology : Not available.
Sensitization to material : Not expected to be a skin or respiratory sensitizer.
Synergistic materials : N/Av
Irritancy : Severe eye irritant. Mild to moderate skin irritant.
other important hazards : CNS depression may result from extreme exposures.
Conditions aggravated by overexposure : Pre-existing eye, skin, respiratory, liver, kidney and central nervous system disorders.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. May cause long-term adverse effects in the aquatic environment. Contains: Tetrasodium ethylenediamine tetraacetate.
The long-term toxicity of Tetrasodium ethylenediamine tetraacetate is (OECD SIDS):
Toxicity to fish
LC50/96h/Lepomis macrochirus = 41 mg/L
NOEC/35d = > 26.8 mg/L
Toxicity to daphnia - NOEC/21d = 22 mg/L

All other ingredients in these products are not considered acutely toxic for the environment, or are at such low levels they do not affect environmental toxicity.

Mobility : No data is available on the product itself.
Persistence : No data is available on the product itself. Contains: Tetrasodium ethylenediamine tetraacetate. Tetrasodium ethylenediamine tetraacetate is not considered readily biodegradable.
Bioaccumulation potential : No data is available on the product itself. Contains: Tetrasodium ethylenediamine tetraacetate. The log Pow for Tetrasodium ethylenediamine tetraacetate is 5.01.
Other Adverse Environmental effects : No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle waste according to recommendations in Section 7. Do not puncture or incinerate containers.
Methods of Disposal : Improper disposal can cause damage to the environment. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.



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RCRA

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14: TRANSPORT INFORMATION

| Regulatory Information | UN Number | Shipping Name | Class | Packing Group | Label |
|---|---|---------------------------|-------|---------------|-------|
| TDG | N/Av | No information available. | N/Av | N/Av | N/Av |
| TDG Additional information | Refer to the Supplier for shipping information. | | | | |
| 49CFR/DOT | N/Av | No information available. | N/Av | N/Av | N/Av |
| 49CFR/DOT Additional information | Refer to the Supplier for shipping information. | | | | |
| ICAO/IATA | N/Av | No information available. | N/Av | N/Av | N/Av |
| ICAO/IATA Additional information | Refer to the Supplier for shipping information. | | | | |

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Pressurized gas hazard; Acute Health Hazard. Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

US State Right to Know Laws:

California Proposition 65: This product contains a chemical known to the State of California to cause developmental harm. This product contains trace amounts of: Toluene.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Isobutane (MA, MN, NJ, PA).



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International Information:

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

SECTION 16 - OTHER INFORMATION

| | | | | | | |
|--------------------|---|---------------------------|--------------------|------------------------|---------------------|----------------------|
| HMIS Rating | : | * - Chronic hazard | 0 - Minimal | 1 - Slight | 2 - Moderate | 3 - Serious |
| | | <i>Health:</i> *2 | | <i>Flammability:</i> 1 | | <i>Reactivity:</i> 1 |

Legend :

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- CNS: Central Nervous System
- DOT: Department of Transportation
- HMIS: Hazardous Materials Identification System
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- LC: Lethal Concentration
- LD: Lethal Dose
- MA: Massachusetts
- MN: Minnesota
- MSHA: Mine Safety and Health Administration
- N/Ap: Not Applicable
- N/Av: Not Available
- NFPA: National Fire Protection Association
- NIOSH: National Institute of Occupational Safety and Health
- NJ: New Jersey
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PA: Pennsylvania
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- RTECS: Registry of Toxic Effects of Chemical Substances
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TDG: Canadian Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values
- TWA: Time Weighted Average
- WHMIS: Workplace Hazardous Materials Identification System

References :

1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2012.
2. International Agency for Research on Cancer Monographs, searched 2012.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2012 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheet from manufacturer.
5. US EPA Title III List of Lists - October 2006 version.
6. California Proposition 65 List - March 16, 2012 version.



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| <p><u>Prepared by:</u> ICC The Compliance Center Inc. http://www.thecompliancecenter.com</p> |  |

DISCLAIMER OF LIABILITY

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This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Parker Hannifin Corp.

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: 06/06/2011

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: 06/13/2012

Revision No.

: 2

Revision Information

: (M)SDS sections updated:
1. PRODUCT AND COMPANY IDENTIFICATION;
9. PHYSICAL AND CHEMICAL PROPERTIES;
12. ECOLOGICAL INFORMATION;
14. TRANSPORT INFORMATION;
15. REGULATORY INFORMATION

END OF DOCUMENT