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MATERIAL SAFETY DATA SHEET

| Product identifier | FLEETCOOL EX-PG 41/59 PREMIX (Propylene glycol based coolant) |
|--|--|
| Product Code(s) | : CC8934E (1 Gallon / 3.785 L Jug); CC8935E (5 Gallon / 18.93 L Pail); CC8936E (55 Gallon / 208 L Drum). |
| Product Use | : Antifreeze / coolant. |
| Chemical Family | : Mixture. |
| Supplier's name and address: | Manufacturer's name and address: |
| Cummins Filtration 1200 Fleetguard Road Cookeville, TN, U.S.A. 38506 | Refer to Supplier |
| Information Telephone # | : (931) 526-9551 (Hours of operation: 24 Hours per day, 7 days per week) |
| 24 Hr. Emergency Tel # | : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.). |

: WHMIS classification: This product is not a WHMIS controlled product in Canada. It Classification does not meet any of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR). OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200). Hazardous classification: Acute Health Hazard; Chronic Health Hazard. Pink liquid. Little or no odour. Caution! Ingestion of large amounts may be harmful. Ingestion of **Emergency Overview** • large amounts may cause nausea, vomiting, diarrhea, as well as depression of the central nervous system. Prolonged or repeated skin contact may cause drying and irritation. May cause minor eye irritation.

POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

| Inhalatio | <i>n</i> : None expected, when used as intended. If product is heated or mists are formed, inhalation may cause irritation to the nose, throat and respiratory tract. | |
|------------------|---|---|
| Skin | : Direct skin contact may result in little or no irritation. Prolonged contact, such as when trapped agains the skin under clothing or jewelry, may be more irritating. | t |
| Eyes | : May cause mild eye irritation. Symptoms may include stinging and tearing. | |
| Ingestio | : May cause irritation of mouth, throat, and stomach. Ingestion of large amounts may cause nausea, vomiting, diarrhea, as well as depression of the central nervous system. | |
| Effects of long- | erm (chronic) exposure | |
| Carcinogenic st | Prolonged or repeated contact may cause drying, cracking and defatting of the skin. See TOXICOLOGICAL INFORMATION, Section 11. | |

- Carcin
 - : See TOXICOLOGICAL INFORMATION, Section 11.
- Potential environmental effects

Additional health hazards

: See ECOLOGICAL INFORMATION, Section 12.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS # | Wt.% |
|------------------|-----------|---------------|
| Propylene glycol | 57-55-6 | 30.00 - 60.00 |
| Sodium nitrite | 7632-00-0 | 0.10 - 0.30 |



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| Inhalation | : Immediately remove person to fresh air. If breathing has stopped, give artificial | | | | |
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| | respiration. Obtain medical attention if symptoms develop and persist. | | | | |
| Skin contact | : Remove contaminated clothing. Wash off immediately with plenty of water. If irritation persists, seek prompt medical attention. Launder clothing before reuse. | | | | |
| Eye contact | Immediately flush eye(s) with plenty of water. After initial flushing, remove any contact lenses if worn, and continue flushing for at least 5 to 10 minutes. If irritation persists, seek prompt medical attention. | | | | |
| Ingestion | Do NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person. | | | | |
| Notes For Physician | : This product is a CNS depressant. Treat symptomatically. | | | | |
| SECTION 5 - FIRE FIGHT | ING MEASURES | | | | |
| Fire hazards/conditions of flam | mability | | | | |
| | Not flammable under normal conditions of handling. However, may ignite if exposed to extreme heat and flame. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. | | | | |
| Flammability classification (OS | HA 29 CFR 1910.1200) | | | | |
| | : Combustible Liquid Class III B. | | | | |
| Oxidizing properties | : None known. | | | | |
| Explosion data: Sensitivity to n | nechanical impact / static discharge | | | | |
| | : Not expected to be sensitive to mechanical impact or static discharge. | | | | |
| Suitable extinguishing media | Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical. | | | | |
| 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. | | | | |
| Hazardous combustion produc | | | | | |
| | Carbon oxides; nitrogen oxides (NOx); Phosphorus compounds; Sulphur oxides; other unidentified organic compounds. | | | | |
| NFPA Rating | 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe | | | | |
| | : Health: 1 Flammability: 1 Instability: 0 Special Hazards: None | | | | |
| SECTION 6 - ACCIDENTA | AL RELEASE MEASURES | | | | |
| Personal precautions | : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Wear suitable protective equipment. Refer to protective | | | | |

| | trained personnel only. Wear suitable 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. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. |
| Spill response/cleanup | : Remove all sources of ignition. Ventilate area of release. Stop spill or leak at source if safely possible. 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). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required. |
| Prohibited materials | : Use non-flammable absorbent only. |
| Special spill response procedures | |
| | In case of a transportation accident, contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887. 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: 1-800-424-8002). US CERCLA Reportable quantity (RQ): Sodium nitrite (100 lbs / 45.4 kg). |

SECTION 7 - HANDLING AND STORAGE



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| Safe Handling procedures | CONTROLS AND PERSONAL PROTEC ersonal protective equipment. Use with r mist. Avoid contact with eyes, skin an andling. Keep away from extreme hea noompatibles. Use caution when oper ot in use. Empty containers retain resid angerous. Keep out of the reach of ch | ildren. |
|-----------------------------|---|--|
| Storage requirements | pen flames, sparks, and other possible acompatibles. Storage area should be | . Store away from areas of excessive heat, sources of ignition. Keep away from clearly identified, clear of obstruction and d personnel. Inspect periodically for damage or |
| Incompatible materials | trong oxidizers (e.g. Chlorine, Peroxide austics. | es, etc.), acids (e.g. sulfuric acid, nitric acid), |
| Special packaging materials | lways keep in containers made of the s | same materials as the supply container. |

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

| | ACGIH TLV | | <u>OSH</u> | A PEL |
|------------------|-------------------------|-------------|------------|-------------|
| Ingredients | <u>TWA</u> | <u>STEL</u> | PEL | <u>STEL</u> |
| Propylene glycol | 10 mg/m³ (AIHA WEEL) | N/Av | N/Av | N/Av |
| Sodium nitrite | N/Av | N/Av | N/Av | N/Av |

Ventilation and engineering measures

| ventilation and engineering mea | 130103 | |
|---------------------------------|--------|---|
| | r | Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Local exhaust ventilation is preferred to prevent contaminant dispersion into work area. |
| Respiratory protection | 1 | Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Seek advice from respiratory protection specialists. |
| Skin protection | | Gloves impervious to the material are recommended. Advice should be sought from glove suppliers. |
| Eye / face protection | : (| Chemical splash goggles are recommended. |
| Other protective equipment | | Emergency showers and eyewash facilities should be nearby. Wear long sleeved shirt and pants to minimize exposed skin. |
| General hygiene considerations | | |
| | u H | Avoid breathing vapour or mist. Avoid contact with eyes, skin and clothing. When using do not eat or drink. When using do not smoke. Upon completion of work, wash nands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse. |

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| : Liquid. : Little or no odour. : 10.0 - 10.5 (50%) | Appearance Odour threshold | : Pink liquid. : N/Av |
|---|--|---|
| | Odour threshold | : N/Av |
| : 10.0 - 10.5 (50%) | | |
| | | |
| : 195°C (383°F) | Specific gravity | : 1.025 - 1.055 |
| : - 21 to - 27°C (-5.8 to - | Coefficient of water/oil d | istribution |
| 16.6°F) | | : N/Av |
| / 68° F) | Solubility in water | : Complete |
| : N/Av | | |
| : N/Av | Evaporation rate (n-Buty | l acetate = 1) |
| | | : N/Av |
| | : 195°C (383°F) : - 21 to - 27°C (-5.8 to - 16.6°F) / 68° F) : N/Av | : 195°C (383°F) : - 21 to - 27°C (-5.8 to - 16.6°F) / 68° F) Solubility in water : N/Av |

| FLEETCOOL EX-PG 41/59 PR | EMIX (| Propylene glycol base | ed coolant) | М | SDS No.:LT16581B |
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| Volatile organic Compounds (| VOC's |) | Volatiles (% by weight) | : N/Av | |
| | : | N/Av | | | |
| Flash point | : | > 99°C (210°F) | | | |
| Flash point Method | : | COC | Auto-ignition temperature | : N/Av | |
| Lower flammable limit (% by v | /ol.) | | Upper flammable limit (% by | vol.) | |
| | : | N/Ap | | : N/Ap | |
| Flame Projection Length | : | N/Ap | Flashback observed | : N/Ap | |
| Section 10: Stability And H | Reacti | vity | | | |
| Stability and reactivity | : | Stable under the reco | ommended storage and handling condi | itions prescribed. | |
| Hazardous polymerization | : | Will not occur. | | | |
| Conditions to avoid | : | Avoid excessive hea ventilation. | t, sparks and open flame. Do not use | in areas without ade | quate |
| Materials To Avoid And Incom | npatibi | lity | | | |
| | : | Incompatible materia | Ils (see Section 7). | | |
| Hazardous decomposition pro | oducts : | None known, refer to | hazardous combustion products in Se | ection 5. | |
| SECTION 11 - TOXICOL | OGIC | CAL INFORMATI | ON | | |
| Target organs | | Eves, skin, respirato | ry system, digestive system, central ne | rvous svstem. | |

| larget organs | | Eyes, skin, respirate | ory system, algestive | e syster | n, central nervou | s system | - | |
|--------------------|---|-----------------------|-----------------------|----------|-------------------|----------|-------------|-----|
| Routes of exposure | : | Inhalation: YES | Skin Absorption: | NO | Skin & Eyes: | YES | Ingestion: | YES |
| Toxicological data | : | | ble data for the pro- | | | e ingred | lients. See | |
| | | below for individu | al ingredient acute | toxicit | y data. | | | |

| | LC₅₀(4hr) | LD50 | D | | |
|-------------------------------|------------------------------------|--------------------------------|-------------------------|--|--|
| Ingredients | inh, rat | (Oral, rat) | <u>(Rabbit, dermal)</u> | | |
| Propylene glycol | N/Av | 21,800 mg/kg | 20,800 mg/kg | | |
| Sodium nitrite | 5500 mg/m³ | 85 mg/kg | N/Av | | |
| Carcinogenic status | : No components are listed as ca | arcinogens by ACGIH, IARC, OSI | HA or NTP. | | |
| Reproductive effects | : None known. | | | | |
| Teratogenicity | : None known. | | | | |
| Mutagenicity | : None known. | : None known. | | | |
| Epidemiology | : Not available. | | | | |
| Sensitization to material | : Not expected to be a skin or res | spiratory sensitizer. | | | |
| Synergistic materials | : Not available. | | | | |
| Irritancy | : Causes little or no irritation. | | | | |
| other important hazards | : CNS depression may result from | m extreme exposures. | | | |
| Conditions aggravated by over | erexposure | | | | |

Pre-existing skin, eye and respiratory disorders.

SECTION 12 - ECOLOGICAL INFORMATION

Filtration

| Ecotoxicity | No data is available on the product itself. The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. The product contains the following substances which are hazardous for the environment: Sodium nitrite. The acute toxicity of Sodium nitrite is (IUCLID): Toxicity to fish - LC50/96h/rainbow trout = 0.56 - 1.78 mg/L Toxicity to daphnia - EC50/48h/daphnia = 12.5 - 100 mg/L |
|---------------------------|--|
| Mobility | : No data is available on the product itself. |
| Persistence | : No data is available on the product itself. |
| Bioaccumulation potential | No data is available on the product itself. Contains sodium nitrite. The log Kow value for Sodium nitrite is < 4. Sodium nitrite is not expected to bioaccumulate. |



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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. | | | | |
| Methods of Disposal | Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules. | | | | |
| 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: TRANPORT INFORMATION

| Regulatory | UN Number | Shipping Name | Class | Packing Group | Label | |
|--|------------------------------------|---|--------------------|------------------|--------------|--|
| 49CFR/DOT | None | Not regulated. | Not regulated | none | \bigotimes | |
| 49CFR/DOT Additional information | applies: | Sodium nitrite is greater than 100 lbs. (45.4 kg) per package, th ally hazardous substances, liquid, n.o.s. (Contains: Sodium nitr | Ū | pping descri | ption | |
| TDG | None | Not regulated. Not regulated | | -None- | \bigotimes | |
| TDG Additional information | None. | | | | | |
| ICAO/IATA | None | Not regulated. | Not regulated | -None- | \bigotimes | |
| ICAO/IATA Additional information | None. | I | | | | |
| IMDG | None | Not regulated. Not regulated | | none | \bigotimes | |
| IMDG Additional information | This product was be not regulated. | classified using the hazard criteria found in Part 2 of the IMDG | Code, 2008 Edition | i, and was fo | ound to | |

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): sodium nitrite (100 lbs / 45.4 kg).

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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: Immediate (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:

New Jersey Labeling Requirements: This product contains the following substances required to be disclosed on product labeling: Water (CAS # 7732-18-5); Propylene glycol (CAS # 57-55-6); Dipotassium sebacate (CAS # 52457-55-3); Sodium mercaptobenzothiazole (CAS # 2492-26-4); Sodium molybdate (CAS # 7631-95-0); Sodium nitrate (CAS # 7631-99-4).

California Proposition 65: To the best of our knowledge, this product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

International Information:

SECTION 16 - OTHER 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.

| HMIS Rating | +- Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe |
|-------------|---|
| - | Health: *1 Flammability: 1 Reactivity: 0 |
| Legend | : ACGIH: American Conference of Governmental Industrial Hygienists |
| | AIHA: American Industrial Hygiene Association |
| | CAS: Chemical Abstract Services |
| | CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act |
| | of 1980 |
| | CFR: Code of Federal Regulations |
| | CNS: Central Nervous System |
| | COC: Cleveland Open Cup CSA: Canadian Standards Association |
| | DOT: Department of Transportation |
| | EPA: Environmental Protection Agency |
| | HMIS: Hazardous Materials Identification System |
| | HSDB: Hazardous Substances Data Bank |
| | IARC: International Agency for Research on Cancer |
| | IATA: International Air Transport Association |
| | ICAO: International Civil Aviation Organisation |
| | IMDG: International Maritime Dangerous Goods |
| | Inh: Inhalation |
| | LC: Lethal Concentration |
| | LD: Lethal Dose |
| | N/Ap: Not Applicable N/Av: Not Available |
| | NFPA: National Fire Protection Association |
| | NIOSH: National Institute of Occupational Safety and Health |
| | NTP: National Toxicology Program |
| | OSHA: Occupational Safety and Health Administration |
| | PEL: Permissible exposure limit |
| | RCRA: Resource Conservation and Recovery Act |
| | RTECS: Registry of Toxic Effects of Chemical Substances |



Cummins Filtration 1200 Fleetguard Road Cookeville, Tennessee, U.S.A., 38506 Telephone: (931) 526-9551

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| | SARA: Superfund Amendments and Reauthorization Act STEL: Short Term Exposure Limit TLV: Threshold Limit Values TWA: Time Weighted Average WEEL: Workplace Environmental Exposure Level WHMIS: Workplace Hazardous Materials Identification System |
|------------|---|
| References | 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2009. 2. International Agency for Research on Cancer Monographs, searched 2010. 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2010 (Chempendium and RTECs). 4. Previous version of the LT16581B MSDS, dated July 26, 2006. 5. US EPA Title III List of Lists - October 2006 version. 6. California Proposition 65 List - April 2, 2010 version. |

Prepared for: Filtration Cummins Filtration Cookeville, Tennessee, U.S.A., 38506 Telephone: (931) 526-9551 Filtration.com/html/en/index.html Please direct all enquiries to Cummins Filtration. Filtration Prepared by: ICC The Compliance Center Inc. http://www.thecompliancecenter.com Filtration Specialists

DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources, which we believe are reliable. However, since the conditions of handling and use are beyond our control, we assume no liability for damages incurred by use of this material. This MSDS was prepared, and is to be used, for this product only. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist. If the product is used as a component in another product, this information may not be applicable. Users of this product should satisfy themselves that the conditions and methods of use assure the product is used safely. No representations or warranties, either expressed or implied, of any nature are made hereunder with respect to the information contained herein. It is the responsibility of the user to comply with any and all federal, state, or local laws and regulations that may exist. Nothing contained herein is to be construed as a recommendation for use in violation of any applicable laws or regulations.

MSDS Preparation Date (dd/mm/yyyy)

: 26/07/2006

MSDS Reviewed Date (dd/mm/yyyy)

| Revision No. | : | 06/05/2010 |
|----------------------|---|--|
| Revision Information | - | Sections 2 and 3. switched. |
| | | (M)SDS sections updated: 2. HAZARDS IDENTIFICATION; 3. COMPOSITION/INFORMATION ON INGREDIENTS; 5. FIRE-FIGHTING MEASURES; 6. Accidental release measures; 8. EXPOSURE CONTROLS / PERSONAL PROTECTION; 9. PHYSICAL AND CHEMICAL PROPERTIES; 12. ECOLOGICAL INFORMATION; 11. TOXICOLOGICAL INFORMATION; 15. REGULATORY INFORMATION. |

END OF DOCUMENT