Pro-Tek PG-100

MSDS# SCM-129

April 2012 5 pages

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier: SCM-129 PROTEK-PG-100
Relevant identified uses of the mixture: Heat Transfer Fluid
Details of the supplier of the safety data sheet: Specialty Chemical Manufacturing
Address: 1633-B High Bridge Road, Quincy, FL 32351
Phone: 850-875-1716
Fax: 850-627-2699
Date Revised: 04/26/2012
Contact: A. Jernigan
Email: tjernigan@diversitech.com
Emergency telephone number: 1+ 800-255-3924 Chem-Tel (Chemical Emergencies Only)

2. HAZARDS IDENTIFICATION

Classification of the mixture: Non-toxic, con corrosive. May cause mild irritation after repeated or prolonged overexposure.
Potential Health Effects
Routes of Exposure: Inhalation, Ingestion, Skin Contact/Absorption, Eye Contact
Eyes: May cause minor eye irritation.
Skin: No significant adverse effects are expected under anticipated conditions of normal use. Repeated, prolonged exposure may cause slight flaking, tenderness, and softening of skin.
Ingestion: No significant adverse effects are expected under anticipated conditions of normal use. Excessive ingestion may cause central nervous system effects.
Inhalation: No significant adverse effects are expected under anticipated conditions of normal use. If effects do occur, refer to FIRST AID Section.
Signs and Symptoms of Overexposure: Same as above.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	% BY WT.	Hazard	Risk Phrases
Propylene Glycol	57-55-6	200-338-0	60-70	None	None
Dipotassium Phosphate	7758-11-4	231-834-5	1-3	Xi, C, T	R22,R35, R36
Water	109-86-4	231-791-2	30-40	None	None

See section 15 for full explanation of risk phrases

4. FIRST-AID MEASURES

Description of first aid measures
Eyes: Immediately flush eyes with large amounts of water for 15 minutes, lifting lower and upper lids. Obtain medical attention if pain, blinking, tears or redness persist.
Skin: Product is not expected to present a significant skin hazard under anticipated conditions of normal use.
Inhalation: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.
Ingestion: If large quantity is allowed, give a pint of lukewarm water if victim is completely conscious and alert. If large quantities are consumed, induce vomiting. Obtain emergency medical attention.
Most important symptoms and effects, both acute and delayed: Material and/or its emissions may aggravate preexisting eye disease.

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5. FIRE-FIGHTING MEASURES
Extinguishing media: Carbon dioxide, dry chemical, alcohol type foam, water spray, water fog.
Special hazards arising from the substance or mixture: Wear positive pressure, self-contained breathing apparatus and other protective apparatus as warranted. Fight fire from distance or protected location – heat may build up pressure and rupture closed containers. Liquid may form slippery film. Use water spray or fog for cooling, solid stream may spread fire as burning liquid will float on water. Avoid frothing/steam explosion. Notify authorities if liquid enters sewers/ public waters.
Unusual Fire and Explosion Hazards: Heat from fire can generate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air and travel long distances along ground before igniting and flashing back. Fine sprays and mists may be combustible at temperatures below normal flash point.

6. ACCIDENTAL RELEASE MEASURES
Steps To be Taken In Case Material Is Released Or Spilled: Prevent flow to sewers and public waters as it may contaminate said water. Restrict usage to prevent slip/fall hazard. Soak up small spills with inert solids. Dike and recover large land spills. Notify appropriate authorities if product enters any waterways.
Emergency Contact: Chem-tel: 800-255-3924

7. HANDLING AND STORAGE
Precautions for safe handling: Product on surfaces can cause slippery conditions. Practice reasonable care and cleanliness. Avoid breathing spray mists if generated. Keep out of reach of children.
Condition for safe storage, including any incompatibilities: Do not store near food, foodstuffs, drugs or potable water supplies.
Specific end use(s): No further details

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters: None
Exposure controls
Respiratory Protection: No special respiratory protection equipment is recommended under normal conditions of anticipated use with adequate ventilation.
Ventilation: Adequate general ventilation is required, local exhaust is recommended if possible.
Engineering Controls: Keep containers closed when not in use.
Personal Hygiene: If product handling results in skin contact, wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, or using the toilet facilities. Promptly remove soiled clothing and wash before reuse.
Protective Gloves: Not required.
Eye Protection: Safety goggles and face shield. Emergency eyewash should be available. Contact lenses should not be worn when working with this chemical.

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9. PHYSICAL AND CHEMICAL PROPERTIES
Information on basic physical and chemical properties
Flash Point: 99 °C (211 °F)
Lower Flammability Limit: 3.5%
Upper Flammability Limit: 17.5%
Boiling point: 185 °C (365 °F)
Freeze point: -60°F
Specific gravity (water = 1): 1.05 (Pounds / gallon: 8.75)
Vapor pressure @ 20 °C: <0.1 mm hg
Vapor density (air = 1): 2.6
Water solubility: miscible
Evaporation rate (buac = 1): >1
Appearance and odor: Slightly viscous, almost odorless blue liquid
Other information: No further details

10. STABILITY AND REACTIVITY
Reactivity: Stable under normal conditions. Stable at room temperature.
Chemical stability: Stable under normal conditions. Stable at room temperature.
Possibility of hazardous reaction: No relevant information.
Conditions to avoid: Heat, sparks, open flame
Incompatible materials: Do not mix with Strong alkalis, strong oxidizing agents
Hazardous decomposition products: Carbon monoxide and other toxic vapors.
Hazardous Polymerization: Not expected to occur.

11. TOXICOLOGICAL INFORMATION
Information on toxicological effects
SKIN: The LD50 for skin absorption in rabbits is > 10,000 mg/kg.
INGESTION: The oral LD50 for rats is 20,000-34,000 mg/kg.
MUTAGENICITY (THE EFFECTS ON GENETIC MATERIAL): In vitro mutagenicity studies were negative. Animal mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION
Movement & Partitioning
Bioconcentration potential is low (BCF less than
100 or Log Kow less than 3). Log octanol/water partition coefficient (Log Kow) is – 1.36.
Henry's Law Constant (H) is 1.2E-8 atm.m3/mole.
Degradation & Transformation
Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD greater than 40%).
Biodegradation is expected to be achievable in a secondary wastewater treatment plant.
5-Day biochemical oxygen demand (BOD5) is 1.16 p/p.
20-Day biochemical oxygen demand (BOD20) is 1.45 p/p.
Theoretical oxygen demand (ThOD) is calculated to be 1.68 p/p.
Biodegradation may occur under both aerobic and anaerobic conditions (in either the presence or absence of oxygen).
Inhibitory concentration (IC50) in OECD "Activated Sludge, Respiration Inhibition Test" (Guideline #209) is < 1000 mg/L. Degradation is expected in the atmospheric environment within days to weeks.

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Ecotoxicology
Based largely or completely in information for similar material, i.e. propylene glycol. Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species.
Acute LC50 for fathead minnow (Pimephales promelas) is 4600-54900 mg/L.
Acute LC50 for guppy (Poecilla reticulata) is greater than 10000 mg/L.
Acute LC50 for water flea Daphine magna is 4850-34400 mg/L.
Acute LC50 for rainbow trout (Oncorhynchus mykiss) is 44mL/L (about 44000 mg/L).
Mobility in soil: No data available.
Results of PBT and vPvB assessment: This substance is not identified as a PBT substance.
Other adverse effects: No further details

13. DISPOSAL CONSIDERATIONS
Waste treatment methods
Landfill solids at permitted sites using registered transporters. Burn concentrated liquids, avoiding flameouts, and assuring emissions comply with applicable regulations. Diluted aqueous waste may biodegrade, but avoid overloading plant biomass and assure effluent complies with applicable regulations.

14. TRANSPORT INFORMATION
UN Number: None
UN Proper Shipping Name: None
Transport Hazard Class(es): None
Packing group: None
Environmental Hazards: Not an Environmentally Hazardous Substance or Marine Pollutant.
ADR/RID Transport Information: Not dangerous for transport under ADR/RID, IMO and IATA/ICAO regulations.
ADR/RID Class: None Allocated
ADR/RID Packing Group: None Allocated
IMDG Hazard Class: None Allocated
IMDG Packing Group: None Allocated
ADNR Class: None Allocated
ADNR Item: None Allocated
IATA Hazard Class: None Allocated
IATA Packing Group: None Allocated
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

15. REGULATORY INFORMATION
Risk Phrases:
R22: Harmful if swallowed
R35: Causes severe burns
R36: Irritating to the eyes
Country Inventory
Australia AICS X
Canada DSL X
Canada DSL no data for mixture
China IECS X
European Union EINECS X
European Union ELINCS no data for mixture

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European Union NLP no data for mixture
Japan ENCS X
Korea ECL X
Philippines PICCS X
United States TSCA: All components are included or are otherwise exempt from inclusion on this inventory.
WHMIS classification for product: N/A
This product has been classified in accordance with the hazard criteria of the CFR and the MSDS contains all the information required by the CFR
Regulatory Status
SARA 302/304: Chemicals with provided CAS numbers in this material are not subject to the reporting requirements of CERCLA.
SARA 311/312: Based upon available information, this material is not classified as a health and/or physical hazard according to Section 311 & 312.
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels established by SARA Title III, Section 313 and 40 CFR 372.
Component Reporting Threshold
State Reporting:
California Proposition 65: This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under at levels which would be subject to the proposition.
Massachusetts Substances List (MSL) - Extraordinarily hazardous substances must be identified when present in materials at levels greater than state specified criterion.
The criterion is >= 0.0001%. Hazardous Substances (MSL-HS) on the MSL must be identified when present in materials at greater than the state specified criterion. The criterion is >= 1%. Components with CAS numbers present in this material, at levels specified in Section 2 - Composition do not require reporting under the statute.
State of Pennsylvania: Hazardous Substances must be identified when present in materials at levels greaterthan the state specified criterion. The criterion is >= 1%. Components with CAS numbers in this material at a level which could require reporting under the statute are: Propylene Glycol / CAS# 57-55-6; Dipotassium Phosphate 7758-11-4. Special Hazardous Substances listed by the State of Pennsylvania must be identified when present in materials at levels greater than the state specified criterion. The criterion is >= 0.01%. Components with CAS numbers present in this material, at levels specified in Section 2 - Components, do not require reporting under the statute.

16. OTHER INFORMATION

	HMIS	NFPA
Health:	0	0
Flammability:	1	1
Reactivity:	0	0

KEY: 0 – Minimal, 1 – Slight, 2 – Moderate, 3 – Serious, 4 – Severe

This information is, to the best of our knowledge and belief, accurate and reliable as of the date completed. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the completeness and suitability of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer any warranty against patent infringement.