
1. PRODUCT AND COMPANY IDENTIFICATION

Product Code	PAIKOR01
Trade Name	ECOPHOR A 447
Manufacturer/Supplier	PAI-KOR Chemical Corporation
Address	Via Tecchione 7 20098 S. Giuliano Milanese Milano, Italy
Phone Number	+39(02) 98 80 411
Emergency Phone Number	+39 (02) 98 80 411
Chemtrec Number	(800) 424-9300
MSDS first issued	December 11, 1997
MSDS data revised	April 23, 2006

This MSDS has been compiled in accordance with - OSHA's Hazcom Standard (29 CFR 1910.1200)

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Component Name	CAS#/Codes	Concentration
Alkylene Glycol Ether Compound*		92.00 - 98.00
<i>*This is a non-C2 glycol ether.</i>		

3. HAZARD IDENTIFICATION

Routes of Entry	- Absorption - Skin contact - Eye contact - Ingestion - Inhalation
Carcinogenic Status	Not considered carcinogenic by NTP, IARC, and OSHA.
Target Organs	- Eye - Skin - Lung - Liver - Central Nervous System
Health Effects - Eyes	Liquid, mist or vapor will cause conjunctival irritation and possibly corneal damage.
Health Effects - Skin	Material will cause irritation. Repeated or prolonged contact may cause chemical burns. Liquid may be absorbed through the skin in toxicologically significant amounts if area of contact is large and exposure prolonged. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Repeated and/or prolonged contact may lead to: - central nervous system depression
Health Effects - Ingestion	Aspiration during swallowing or vomiting may severely damage the lungs. Swallowing may have the following effects: - irritation of mouth, throat and digestive tract A large dose may have the following effects: - liver damage - central nervous system depression
Health Effects - Inhalation	Exposure to vapor may have the following effects: - eye irritation - irritation of nose, throat and respiratory tract Exposure to vapor at high concentrations may have the following effects: - central nervous system depression

4. FIRST AID MEASURES

First Aid - Eyes	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.
First Aid - Skin	Immediately flood the skin with large quantities of water, preferably under a shower. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists.
First Aid - Ingestion	Do not induce vomiting. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately.
First Aid - Inhalation	Remove from exposure. If there is difficulty in breathing, give oxygen. Keep warm and at rest. Obtain medical attention immediately.
Advice to Physicians	Monitor for effects on CNS function; support and treat.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.
Special Hazards of Product	This product may give rise to hazardous fumes in a fire. Be aware of possibility of re-ignition. Containers may explode in heat of fire. Vapors can travel a considerable distance to a source of ignition and flashback. Dangerous when exposed to heat or flame. May form explosive mixtures with air.
Protective Equipment for Fire-Fighting	Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures	Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.
Personal Precautions	Eliminate all sources of ignition. Vapors can accumulate in low areas. Consider need for evacuation.
Environmental Precautions	Prevent the material from entering drains or water courses.

7. HANDLING AND STORAGE

Handling	Use in well ventilated area. Use local exhaust ventilation. Avoid inhaling vapor. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use.
Storage	Store away from sources of heat or ignition. Storage area should be: - cool - dry - well ventilated - out of direct sunlight - away from incompatible materials

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards

Alkylene Glycol Ether Compound None assigned.

Engineering Control Measures Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform satisfactorily, should be used.

Respiratory Protection Respiratory protection if there is a risk of uncontrolled exposure to vapor. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

Hand Protection Chemical resistant gloves

Eye Protection Chemical goggles.

Body Protection Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Clear - Yellow
Odor	Characteristic
pH	3.0 - 4.5
Specific Gravity	0.88 +/-0.05 @20 °C.
Boiling Range/Point (°C/F)	>170 / 338
Flash Point (PMCC) (°C/F)	65 / 149
Vapor Pressure	0.85 mmHg @20°C
Solubility in Water	Partially soluble
Vapor Density (Air = 1)	Heavier than air.
Evaporation Rate (BuAc=1)	0.064

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	- High temperatures - Static discharge - Exposure to direct sunlight
Materials to Avoid	- Strong oxidizing agents - Acids
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	- carbon monoxide

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	Low order of acute toxicity. Oral LD50 (rat) 3300mg/kg. Dermal LD50 (rat) 2000mg/kg.
Chronic Toxicity/Carcinogenicity	Animal studies have shown that repeated administration or ingestion of large amounts produces liver enlargement.
Genotoxicity	No significant mutagenic response was observed and the carcinogenic potential of the material is therefore considered to be low.
Reproductive/Developmental Toxicity	No adverse reproductive effects were observed in experimental animals. No adverse effects on fertility or fetal development were observed in experimental animals.

12. ECOLOGICAL INFORMATION

Mobility	No relevant studies identified.
Persistence/Degradability	The product is expected to be readily biodegradable.
Bio-accumulation	Product is not expected to bioaccumulate.
Ecotoxicity	Alkylene Glycol Ether Compound: Tests on the following species gave a 96h LC50 of 560-1000mg/litre: - guppies Tests on the following species gave a 96h EC50 of >1000mg/litre: - daphnia

13. DISPOSAL

Product Disposal	Dispose of in accordance with all applicable local and national regulations.
Container Disposal	Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near to the container. Do not incinerate closed containers. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Proper Shipping Name: Combustible Liquid, N.O.S. UN/NA Number: NA1993 Packing Group: III
UN Proper Shipping Name	Not Regulated
UN Class	Not Regulated
UN Number	Not Regulated

15. REGULATORY INFORMATION

TSCA Listing	All ingredients have been verified for inclusion on the EPA Toxic Substance Control Act Chemical Substance Inventory.
WHMIS Classification	B3, D.2.B This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
Canada. Environmental Protection Act (DSL/NDSL)	All components of this product are in compliance with the inventory listing requirements of the New Substance Notification Regulations.
Canada. Ingredient Disclosure List (IDL)	This product does not contain any chemicals that exceed the threshold reporting limits of the Canadian Ingredient Disclosure List.
MA Right To Know Law	All components have been checked for inclusion on the Massachusetts Substance List (MSL). Those components present at the de minimus concentration have been identified in the hazardous ingredients section of the MSDS.
California Proposition 65	This product contains the following chemicals that have been found by the State of California to cause cancer, birth defects or other reproductive harm: - Formaldehyde (trace)
SARA Title III Sect. 311/312 Categorization	Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard Fire Hazard
SARA Title III Sect. 313	This product does not contain a chemical which is listed in Section 313 at or above de deminis concentrations.
Clean Air Act – Hazardous Air Pollutants (HAPS)	The following chemical(s) are listed as hazardous air pollutants (HAP) under the US Clean Air Act Section 112 (40 CFR 61): - Phenol (108-95-2).....<0.1% - Formaldehyde(50-00-0)...trace
Clean Air Act – Ozone Depleting Substances (ODS)	This product does not contain a Class I or Class II ozone depleting substance (ODS), as defined by the US Clean Air Act Section 602 (40 CFR 82, Subpart A, Appendix A-B)

16. OTHER INFORMATION

NFPA Ratings	NFPA Code for Health 2 NFPA Code for Flammability 2 NFPA Code for Reactivity 0
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16. OTHER INFORMATION

Abbreviations

N/A: Denotes no applicable information found or available
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
R: Risk
S: Safety
LD50: Lethal Dose 50%
LC50: Lethal Concentration 50%

Abbreviations

Uses and Restrictions

Cleaner

Prepared By:

EnviroNet LLC.

The data contained herein is based on information that Pai-Kor believes to be reliable, but no expressed or implied warranty is made with regard to the accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product and no agent of Pai-Kor is authorized to vary any such data. Pai-Kor and its agents disclaim all liability for any action taken or foregone on reliance upon such data.
