



**Albemarle Corporation**  
**Material Safety Data Sheet**  
 451 Florida Street, Baton Rouge, LA 70801  
 For Emergencies Only - Phone (225) 344-7147  
 For Non-Emergency Health & Safety Phone 1-800-535-3030  
 Representing Albemarle Foreign Sales Corporation  
 for Export Sales

ISSUE DATE: 08/04/08  
 SUPERSEDES: 06/02/08  
 HMIS CLASSIFICATIONS:  
     HEALTH: 1  
     FLAMMABILITY: 1  
     REACTIVITY: 0

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PRODUCT IDENTIFICATION

PRODUCT NAME: Pergopak M; Pergopak M3; Pergopak M4; Pergopak  
 M2; Pergopak M5; Pergopak M6; Pergopak HP; Pergopak FC

CHEMICAL NAME: Condensation polymer of Urea and Formaldehyde

CAS NO.: 9011-05-6

CHEMICAL FORMULA: (CH4N2OCH2O)x

Manufactured by Martinswerk GmbH.

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SUMMARY OF HAZARDS

May cause eye, skin and respiratory tract irritation.  
 See 'Other Health Effects.'

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OSHA HAZARDOUS COMPONENTS

CHEMICAL NAME	CAS NO.	NOTE	EXPOSURE LIMIT
Urea, polymer with formaldehyde	9011-05-6	ND	15 mg/m3 particulated not otherwise regulated (total particulated - OSHA-PEL); 5 mg/m3 particulates not otherwise regulated (respirable fraciton -

OSHA-PEL); 10  
mg/m3  
particualtes  
not otherwise  
clasified  
(inhalable -  
ACGIH-TWA); 3  
mg/m3  
particulates  
not otherwise  
classified  
(respirable -  
ACGIH-TWA).

NOTE: Carcinogenicity listing of components at concentrations greater than or equal to 0.1% indicated by: @=NTP; #=IARC; &=OSHA; +=ACGIH; \*=OTHER; ND=Not Designated.

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CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE/ODOR: White powder/no odor.

BOILING POINT: Not applicable.

VAPOR PRESSURE: Not known.

SOLUBILITY IN WATER: Insoluble.

SPECIFIC GRAVITY: Not known.

PERCENT VOLATILE: 15% by weight.

MELTING POINT: Not applicable.

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FIRE AND EXPLOSION HAZARDS

FLASH POINT(METHOD): >200C

FLAMMABLE LIMITS: Not established.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area of unnecessary personnel. Wear safety equipment for fire conditions including NIOSH/MSHA self-contained breathing apparatus.

EXTINGUISHING MEDIA: Dry chemical, water spray (fog), foam or carbon dioxide.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: May produce toxic vapors/fumes of formaldehyde and other organic materials, and oxides of carbon and nitrogen.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This material will

release formaldehyde under burning conditions. Products of combustion are toxic.

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REACTIVITY DATA

STABILITY: Stable.

CONDITIONS TO AVOID: None known.

MATERIALS TO AVOID: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

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HEALTH HAZARDS

INHALATION: May cause irritation. Do not breathe fumes from fires or decomposition. See 'OTHER HEALTH EFFECTS'.

EYE CONTACT: May cause eye irritation.

SKIN CONTACT: May cause skin irritation. See 'OTHER HEALTH EFFECTS'.

INGESTION: Not expected to be acutely toxic.

CHRONIC EFFECTS OF OVEREXPOSURE: None known.

OTHER HEALTH EFFECTS: It is anticipated that inhalation of significant quantities of this material will produce decreased lung capacity as is typical of nuisance dusts. Individuals who are sensitized to formaldehyde might exhibit allergic reactions from contact with this material.

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EMERGENCY FIRST AID PROCEDURES

INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

SKIN CONTACT: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse.

INGESTION: If swallowed, give two glasses of water.

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EXPOSURE CONTROL INFORMATION

EXPOSURE LIMITS: See ''Hazardous Components'' section.  
EYE PROTECTION: Chemical goggles or safety glasses.  
PROTECTIVE GLOVES: Resistant to chemical penetration.  
RESPIRATORY PROTECTION: NIOSH approved dust/mist respirator.  
LOCAL EXHAUST VENTILATION: At source of mists or dusts.  
MECHANICAL VENTILATION: Recommended.  
OTHER: If skin contact or contamination of clothing is likely, protective clothing should be worn.

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ENVIRONMENTAL PROTECTION

SPILLS OR LEAKS: Sweep or shovel spills into appropriate container for disposal.  
DISPOSAL METHODS: To the best of Albemarle's knowledge, this product is not regulated by CERCLA/RCRA as a hazardous waste or material. However, this product has not been tested for the toxicity characteristic via the Toxicity Characteristic Leaching Procedure. Therefore, it may be disposed of as an industrial waste in a manner acceptable to good waste management practice and in compliance with applicable local, state and federal regulations.  
STORAGE REQUIREMENTS: Store in cool, dry, well-ventilated area away from sources of ignition. Keep containers closed when not in use.

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ADDITIONAL PRECAUTIONS OR COMMENTS

NOTE: Under burning conditions, or at high temperatures, this product will release Formaldehyde. Formaldehyde is listed by IARC, OSHA and NTP as a possible human carcinogen, which is indicated on MSDSs when the Formaldehyde levels are 0.1% or more. Formaldehyde is regulated by OSHA when present at 0.1% or more, or when it is anticipated that exposure to 0.1 ppm or greater may occur. Epidemiologic studies, however, do not document any increased risk of human cancer due to Formaldehyde exposure.

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REGULATORY INFORMATION

TSCA:

THIS MATERIAL IS IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT (15 USC 2601 - 2629).

DOT DESCRIPTION/PROPER SHIPPING NAME:

NOT REGULATED FOR TRANSPORTATION

HAZARD CATEGORIES FOR SARA 311/312 REPORTING ARE INDICATED BELOW:

HEALTH	Immediate (Acute)	Yes
HEALTH	Delayed (Chronic)	No
PHYSICAL	Fire	No
PHYSICAL	Sudden Release of Pressure	No
PHYSICAL	Reactive	No
	Nuisance Mist/Dust Only	No

FOLLOWING ARE WHMIS CLASSIFICATIONS FOR THIS PRODUCT:

NOT CONTROLLED

WHMIS ASSESSMENT DATE: 04/04/08

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ADDRESS CONTACT INFORMATION

MSDS prepared by: Health & Environment Department  
Albemarle Corporation

FOR ADDITIONAL NONEMERGENCY PRODUCT INFORMATION, CONTACT:

HEALTH AND ENVIRONMENT DEPARTMENT  
ALBEMARLE CORPORATION  
451 FLORIDA ST.  
BATON ROUGE, LA. 70801  
(800) 535-3030

THIS MATERIAL SAFETY DATA SHEET CONTAINS AT LEAST THE INFORMATION REQUIRED BY THE FEDERAL OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200(g) (2).

THE RESPONSIBILITY TO PROVIDE A SAFE WORKPLACE REMAINS WITH USER. THE USER SHOULD CONSIDER THE HEALTH HAZARDS AND SAFETY INFORMATION CONTAINED HEREIN AS A GUIDE AND SHOULD TAKE THOSE PRECAUTIONS REQUIRED IN AN INDIVIDUAL OPERATION TO INSTRUCT EMPLOYEES AND TO DEVELOP WORK PRACTICE PROCEDURES FOR A SAFE WORK ENVIRONMENT.

THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. HOWEVER, BECAUSE THE

CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS, AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY THE USE OF THIS MATERIAL. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

08/04/08