

110CT02

MARTIN ENGINEERING CO
ONE MARTIN PLACE
NEPONSET IL 61345

Attn: PLANT MANAGER

Dear Customer:

We appreciate your order for the following product:

==> LONZACURE# MCDEA GS

This product is manufactured by our Polyurethane and Performance Chemicals Division and the attached MSDS is being forwarded to you via our automated MSDS program. Under this program, you will automatically be sent an MSDS whenever you place the initial order for a new product, when there is a change in your ship to address and/or mode of shipment, or whenever an MSDS has been updated, provided you purchased this product within the previous twelve (12) months. Air Products invites you to also take advantage of Internet access to our MSDSs at our e-commerce address <http://www.airproducts.com/msds>.

For this MSDS to serve its intended purpose as an effective means of hazard communication, we request that you pass it along to all personnel that either handle or use the product. Also, please insure that those who are involved with the design, implementation, or any other operation involving use of the product review this MSDS. This document is also available, upon request, in Danish, Dutch, French, German, Italian, Portuguese, Spanish, Great Britain English, Finnish, Swedish, Norwegian, Latin American Spanish, Latin American Portuguese, Canadian French, and Bahasa.

Regarding labeling requirements: drums are labeled with the appropriate hazard warning; bulk truck shipments are accompanied by a hazard warning document carried by the driver; and bulk rail shipments have the hazard warning attached to the top of the car.

Should you require additional assistance, please contact us at Air Products and Chemicals, Inc., 7201 Hamilton Blvd., Allentown, PA 18195-1501 or call our Product Information Center at (800) 345-3148 in in the USA and (610) 481-6799 for International inquiries.

Once again, thank you for your order.

Sincerely,
E.I. Handwerk
Manager, Chemicals Group Product Safety

A REGISTERED TRADEMARK OF AIR PRODUCTS AND CHEMICALS INC.

* A TRADEMARK OF AIR PRODUCTS AND CHEMICALS INC.

Order Number: K37973

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes.

SKIN CONTACT

Remove contaminated clothing and shoes. Wash affected area with soap and water. Destroy contaminated leather apparel. Launder contaminated clothing prior to reuse.

INHALATION

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Seek medical advice. Prevent aspiration of vomit. Turn victim's head to the side.

INGESTION

If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION DATA

FLASH POINT (closed cup) No Data

UPPER EXPLOSION LIMIT (UEL) No Data

LOWER EXPLOSION LIMIT (LEL) No Data

AUTOIGNITION TEMPERATURE >300.00 C (>572.00 F)

FIRE HAZARD CLASSIFICATION (OSHA/NFPA)

Combustible Solid

EXTINGUISHING MEDIA

Ignition will give rise to a Class A fire. In case of large fire use: water spray, alcohol foam. In case of small fire use: carbon dioxide (CO₂), dry chemical, dry sand or limestone.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May generate toxic or irritating combustion products.

Sudden reaction and fire may result if product is mixed with an oxidizing agent.

May generate carbon monoxide gas.

May generate toxic nitrogen oxide gases. May generate ammonia gas.

Personnel in vicinity and downwind should be evacuated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc)

Stop the leak, if possible. Reduce vapor spreading with a water spray.
Shut off or remove all ignition sources.

CLEAN-UP PROCEDURES

Shovel spilled chemical product into empty, dry container for later disposal or recovery. Place in metal containers for recovery or disposal. Flush area with water spray. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing.

OTHER EMERGENCY ADVICE

Wear protective clothing, boots, gloves, and eye protection.

SECTION 7 - HANDLING AND STORAGE

STORAGE

Keep away from: acids, oxidizers. Keep in cool, dry, ventilated storage and in closed containers. Do not store in reactive metal containers.

HANDLING

When handling, do not eat, drink, or smoke. Avoid contact with eyes.
Avoid contact with skin.

OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g. OSHA).

SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS

EYE PROTECTION

Chemical safety glasses.

HAND PROTECTION

Nitrile rubber gloves. Polyvinyl chloride gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

RESPIRATORY PROTECTION

Not required under normal conditions in a well-ventilated workplace.

PROTECTIVE CLOTHING

No specific recommendation.

ENGINEERING CONTROLS

No specific controls needed.

WORK AND HYGIENIC PRACTICES

Provide readily accessible eye wash stations and safety showers. Discard contaminated leather articles.

SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Granules
COLOR	Off-White
ODOR	Odorless
pH	No Data
VAPOR PRESSURE (mm Hg at 21C (70F))	<1.00
VAPOR DENSITY (Air = 1)	No Data
BOILING POINT	No Data
MELTING POINT	No Data
SOLUBILITY IN WATER	Insoluble (<0.1%)
SPECIFIC GRAVITY (Water = 1)	0.95
MOLECULAR WEIGHT	No Data

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable

CONDITIONS TO AVOID (if unstable)

Not applicable

INCOMPATIBILITY (Materials to Avoid)

Mineral acids (i.e. sulfuric, phosphoric, etc.). Organic acids (i.e. acetic acid, citric acid etc.). Oxidizing Agents (i.e. perchlorates, nitrates etc.). Sodium or Calcium Hypochlorite. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials).

Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm). Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic.

HAZARDOUS POLYMERIZATION

Will not occur

CONDITIONS TO AVOID (if polymerization may occur)

Not applicable

SECTION 11 - TOXICOLOGICAL PROPERTIES

ACUTE ORAL TOXICITY (LD50, RAT)

>5000.00 mg/kg (No deaths)

ACUTE DERMAL TOXICITY (LD50, RABBIT)

>2000.00 mg/kg (No deaths)

ACUTE INHALATION TOXICITY (LC50, RAT)

No Data

OTHER DATA

AMES TEST: Negative (activated and nonactivated)

OTHER ACUTE EFFECTS

No Data

IRRITATION EFFECTS DATA

Mild irritant to the eyes of a rabbit. Non-irritant to the skin of a rabbit.

CHRONIC/SUBCHRONIC DATA

Subacute oral toxicity (28 day, rat): No effects were observed at 300 ppm (approximately 38 mg/kg/day). At a dose of 1000 ppm (138 mg/kg/day), observed effects include increased liver weight and hypertrophy of the centrilobular hepatocytes. The hypertrophy was not accompanied by any biochemical evidence of liver damage, and is considered to be adaptive. Subacute dietary toxicity (90 days, rat): The NOEL was considered to be 300 ppm (ca. 23-26 mg/kg/day). At a dose of 1600 ppm (129-143 mg/kg/day), observed effects include increased liver, spleen and kidney weights, hypertrophy, and only in females, increased cholesterol and triglyceride levels were observed. There was no evidence of retinotoxicity. Mutagenicity: in vivo/in vitro unscheduled DNA synthesis (UDS) test in rat hepatocytes (liver cells) showed no DNA damage over the tested range of 100 mg/kg to 1000 mg/kg. This product has been tested and shown not to cause sensitization in guinea pigs.

SECTION 12 - ECOLOGICAL INFORMATION

No Data

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Comply with all Federal, State and Local Regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT NON-BULK SHIPPING NAME Chemicals, N.O.I. - Not DOT Regulated

DOT BULK SHIPPING NAME Refer to Bill of Lading.
IMO SHIPPING DATA Refer to Bill of Lading.

ICAO/IATA SHIPPING DATA Chemicals, N.O.I. - Not IATA Regulated

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA)-

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

TOXIC SUBSTANCE CONTROL ACT (TSCA) 12(b) COMPONENT(S)

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)
None

EPA SARA Title III Section 312 (40CFR370) hazard class
None

None

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimi level are

STATE REGULATIONS

PROPOSITION 65 SUBSTANCES (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")

None

NEW JERSEY TRADE SECRET REGISTRY NUMBER(S)

None

SECTION 16 - INTERNATIONAL REGULATIONS

CANADA

DSL

Included on Inventory.

WHMIS HAZARD CLASSIFICATION

None

None

WHMIS SYMBOLS

None

EUROPEAN ECONOMIC COMMUNITY (EEC)

EINECS/ELINCS MASTER INVENTORY

On ELINCS. Importation or manufacture requires
EEC RISK (R) PHRASES

There are no known health hazards (R00).

AUSTRALIA

AICS

Not on Inventory.

JAPAN MITI

Not on Inventory.

PHILIPPINES PICCS

Not on Inventory.

KOREA ECL

Not on Inventory.

CHINA SEPA

Included on Inventory.

PRODUCT CODE

LNZCUG

END OF DOCUMENT