

# SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Tris(ethylmethyamido)aluminum, dimer**

FORMULA:  $C_{18}H_{48}N_6Al_2$

CAS NO: 480438-29-7

SYNONYMS: Tris(ethylmethyamino)alane, dimer

### MANUFACTURER:

WONIK MATERIALS NORTH AMERICA  
N115 W19392 EDISON DRIVE  
GERMANTOWN, WI 53022 USA

PHONE: 1-262-293-0251  
FAX: 1-262-253-1258

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC +1 703-741-5971

FOR TECHNICAL INFORMATION CONTACT: 1-262-293-0251

## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### GHS CLASSIFICATION:

Flammable liquids (Category 1)

In contact with water, releases flammable gas (Category 2)

Skin corrosion/irritation (Category 1)

Serious eye damage (Category 1)

Pictogram



Signal Word

**Danger**

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

### Hazard Statements

H225	Highly flammable liquid and vapour
H261	In contact with water releases flammable gas
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

### Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces.- No smoking
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P231 + P232	Handle under inert gas. Protect from moisture.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P335 + P334	Brush off loose particles from skin. Immerse in cool/water/wrap in wet bandages.
P370 + P378	In case of fire: Use carbon dioxide or dry powder for extinction.
P402 + P404	Store in a dry place. Store in a closed container.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

### NFPA Rating:

Health: 3

Flammability: 4

Reactivity: 3

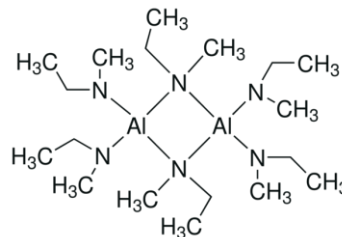
Special: Water reactive

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula:  $C_{18}H_{48}N_6Al_2$

Molecular Weight: 402.60 g/mol (201.30 monomer)

Synonyms: Tris(ethylmethylamino)alane, dimer



### CHEMICAL NAME

### CAS#

Tris(ethylmethylamido)aluminum, dimer

480438-29-7

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.

**SKIN EXPOSURE:** Wash off immediately with plenty of water for at least 15 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay.

**INHALATION:** Remove victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. If not breathing, give artificial respiration. Seek medical attention.

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek immediate medical attention.

## SECTION 5 FIREFIGHTING MEASURES

### EXTINGUISHING MEDIA:

Suitable Carbon dioxide, or dry powder.

Unsuitable DO NOT USE WATER!

### HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:

Carbon monoxide, carbon dioxide, nitrogen oxides, and aluminum oxide.

### ADVICE FOR FIRE FIGHTERS

Wear self contained breathing apparatus for fire fighting if necessary. Wear protective clothing to prevent contact with eyes and skin. Specific hazards- Flammable liquid. Water reactive material. Emits toxic fumes under fire conditions.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS

Wear suitable protective clothing, rubber boots and heavy rubber gloves, eye and face protection. Use self-contained breathing apparatus and chemically protective clothing. Remove all sources of ignition. Evacuate personnel to safe areas.

### ENVIRONMENTAL PRECAUTIONS

Do not allow material to enter drains or streams.

### METHODS AND MATERIALS

Approach suspected leak areas with caution. Absorb with inert absorbent materials such as: Dry sand, vermiculite, activated charcoal. Use appropriate chemical waste container. Ventilate area and wash spill site after material pick up is complete.

## SECTION 7 HANDLING AND STORAGE

### PERSONAL PRECAUTIONS

Avoid contact with skin and eyes. Keep away from sources of ignition. Prevent build up of electrostatic charge. Avoid inhalation of vapor or mist. Avoid prolonged or repeated exposure.

### CONDITIONS FOR SAFE STORAGE

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Protect from humidity and water. Keep container tightly sealed.

### INCOMPATIBILITIES:

Water, strong oxidizing agents

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

Contains no substances with occupational exposure limit values.

### APPROPRIATE ENGINEERING CONTROLS

Maintain process conditions to ensure temperature is below flashpoint. Use non-sparking tools. Be sure there is adequate ventilation. Be sure to provide readily accessible eye wash stations and safety showers.

### PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY PROTECTION:** Use respirators and components tested and approved under appropriate government shows airpurifying respirators are appropriate use a full-face respirator with multi-purpose combination or type ABEK respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

**Eye/Face Protection:** Chemical safety goggles.

**Skin Protection:** Compatible chemical-resistant gloves.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** Colorless liquid

**FORMULA MASS:** 402.61 g/mol

**ODOR:** No data available

**pH:** No data available

**MELTING POINT/ FREEZING POINT:** No data available

**BOILING POINT:** No data available

**FLASH POINT:** -30° C

**EVAPORATION RATE:** No data available

**UPPER/LOWER FLAMMABILITY/EXPLOSION LIMITS:** No data available

**VAPOR PRESSURE:** 1 torr @ 118 °C

**VAPOR DENSITY:** No data available

**RELATIVE DENSITY:** 0.9430 g/cm<sup>3</sup>

**SOLUBILITY IN WATER:** Reacts violently

**AUTO-IGNITION TEMPERATURE:** No data available

**DECOMPOSITION:** No data available

**VISCOSITY:** No data available

## SECTION 10 STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Heat, flames, and sparks. Exposure to moisture.

**POSSIBILITY OF HAZARDOUS REACTION:** Will not polymerize.

**CONDITIONS TO AVOID:** Avoid contact with air. Store in a dry place. Store in a location away from water supplies and sewers. Avoid heat, sparks, flame and other ignition sources.

**INCOMPATIBILITY:** Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, aluminum oxide, nitrogen oxides

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** No data available

**SKIN CORROSIVE/IRRITANT:** Can cause severe burns to the skin.

**SKIN ABSORPTION:** May be harmful if absorbed through the skin.

**SERIOUS EYE DAMAGE/IRRITATION:** Can cause serious damage to eyes.

**RESPIRATORY OR SKIN SENSITIZATION:** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**INGESTION:** May be harmful if swallowed.

**GERM CELL MUTAGENICITY:** No data available

**CARCINOGENICITY:** No data available.

**REPRODUCTIVE TOXICITY:** No data available

**ASPIRATION HAZARD:** No data available

**SIGNS AND SYMPTOMS OF EXPOSURE:**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema.

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, and nausea.

Physical and toxicological properties have not been thoroughly investigated.

## SECTION 12 ECOLOGICAL DATA

**TOXICITY:** No data available

**PERSISTENCE AND DEGRADABILITY:** No data available

**BIOACCUMULATIVE POTENTIAL:** No data available

**MOBILITY IN SOIL:** No data available

**OTHER ADVERSE EFFECTS:** No data available

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of all product and materials according to the state, local, or national regulations.

## SECTION 14 TRANSPORTATION DATA

Organometallic substance, liquid, water-reactive, flammable (tris(ethylmethylamido)aluminum, dimer)

Class 4.3 (3)

UN3399

PG I

Marine Pollutant: No data available

DOT, IATA, IMDG Regulated

## SECTION 15 REGULATORY INFORMATION

**INDUSTRIAL SAFETY AND HEALTH ACT:** Title compound not listed.

**TOXIC CHEMICAL CONTROL ACT:** Title compound not listed.

**DANGEROUS MATERIAL SAFETY CONTROL ACT:**

3<sup>rd</sup> Group Spontaneously Combustible Materials and Water-Prohibitive Materials (Organic metal compounds)

**WASTES MANAGEMENT ACT:** Title compound not listed.

**OTHER REQUIREMENTS IN DOMESTIC AND OTHER COUNTRIES:** Title compound not listed.

## SECTION 16 OTHER INFORMATION

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, Wonik Materials North America makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE PREPARED: 09/18

SDS DEPT.