

SAFETY DATA SHEET



Date Prepared : 02/23/2011
 MSDS No : 9040842
 Date Revised : 02/07/2017
 Revision No : 5

Grilamid TR 55 LX White L 99401.01

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Grilamid TR 55 LX White L 99401.01
PRODUCT DESCRIPTION: PA 12/MACMI + PA 12 (acc. to ISO 1874)
PRODUCT CODE: 9040842 (TR55LXWHL99401.01)
CHEMICAL FAMILY: polyamide

MANUFACTURER

EMS-CHEMIE (North America) Inc.
 EMS GRIVORY America
 2060 Corporate Way
 PO Box 1717
 Sumter, SC 29151-1717
Emergency Contact: QA/MT Manager - (803)
 481-9173
 EMS-CHEMIE AG
 Business Unit EMS-GRIVORY
 Via Innovativa 1
 Domat/Ems, CH-7013
 Switzerland
Emergency Phone: ++41(0)81-632-6111

24 HR. EMERGENCY TELEPHONE NUMBERS

Poison Control Center (Medical) : (877) 800-5553
CHEMTREC (US Transportation) : (800) 424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

This product is not classified according to the Globally Harmonized System (GHS).

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White 1/8" cube-shaped granules

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
PA 12/MACMI + PA 12: No hazardous components present	proprietary	proprietary
Titanium Dioxide	proprietary	13463-67-7
proprietary ingredients	proprietary	various

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for several minutes. Get medical attention, if irritation persists.

SKIN: For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention. Do not attempt to remove material from skin or contaminated clothing as the flesh can be easily torn.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: If problems arise due to excessive fuming, remove subject to fresh air.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use carbon dioxide, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol-resistant foam.

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HAZARDOUS COMBUSTION PRODUCTS: Potential decomposition gases have not been fully determined. Complete thermal decomposition may generate very small amounts of CO, CO₂, and water vapor, plus trace amounts of HCN and oxides of nitrogen.

OTHER CONSIDERATIONS: Avoid temperatures above 315 ° C (599 ° F). Avoid exposure to strong oxidizing agents.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Sweep up and deposit in dry waste container to avoid loose granules causing a fall hazard.

COMMENTS: Waste disposal method is not critical. Treat as conventional solid waste in accordance with local, state, and federal regulations.

7. HANDLING AND STORAGE

STORAGE: Hygroscopic material - keep dry in closed container or sealed bags. Excessive moisture results in degradation during processing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

Chemical Name	Type	EXPOSURE LIMITS		
		ppm	mg/m ³	
Titanium Dioxide	OSHA PEL	TWA		15 T
	ACGIH TLV	TWA		10
	Supplier OEL	TWA	NL	NL
		STEL	NL	NL

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use appropriate eye protection during processing, in accordance with accepted industry safety precautions.

SKIN: Use appropriate protective gloves during processing to avoid thermal burns from molten material, hot molded, or extruded end-products.

RESPIRATORY: Not necessary if room is well-ventilated.

WORK HYGIENIC PRACTICES: Provide exhaust over processing machinery in common with accepted practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid

ODOR: odorless

APPEARANCE: granules with geometry of ca. 1/8 in³

COLOR: white

FLASH POINT AND METHOD: > 400°C (752°F)

THERMAL DECOMPOSITION: > 315°C

SPECIFIC GRAVITY: ~ 1.04

Notes: (Water = 1.00)

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10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable

CONDITIONS TO AVOID: Temperatures above 315 ° C (600 ° F). Strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY

Chemical Name	IARC Status
Titanium Dioxide	2B

GENERAL COMMENTS: Ca Prop 65: Titanium dioxide listed as "airborne, unbound particles of respirable size". In this product, titanium dioxide is not supplied in the form regulated in California.

COMMENTS: When used and handled according to specifications, the product has no harmful effects to our experience and the information provided to us.

12. ECOLOGICAL INFORMATION

COMMENTS: Not known to be hazardous to water.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Contact waste processors for recycling information. Can be reused after reprocessing. Dispose of large quantities can after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. Dispose of smaller quantities with household waste.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

MARINE POLLUTANT #1: Not a marine pollutant.

OTHER SHIPPING INFORMATION: Not dangerous according to the above specifications.

15. REGULATORY INFORMATION

UNITED STATES

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients used to produce this material are listed in the TSCA inventory as required by federal law.

CALIFORNIA PROPOSITION 65: As supplied in this product, titanium dioxide is not in the form of "airborne unbound particles of respirable size" as described in the California Proposition 65 list.

Chemical Name	Wt. %	Listed
Titanium Dioxide	proprietary	Cancer

GENERAL COMMENTS: :

REACH: Up-to-date statements regarding REACH can be found at <http://www.emsgrivory.com/en/products-markets/products/reach-compliance/>

RoHS/WEEE: Up-to-date statements regarding RoHS/ WEEE can be found at

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<http://www.emsgrivory.com/en/products-markets/products/rohs-and-weee-compliance/>

ALLERGENS:

Our products do not contain the following allergens: celery, egg or egg products, fish, gluten, milk or milk products, mustard, natural rubber, peanuts or peanut-based products, PVC, seafood (e.g. shellfish), seeds (e.g. poppy, sesame, etc.), soybeans or soy-based products, sulfites, synthetic rubber (latex), tree nuts (e.g. walnuts, almonds, pecans, etc.), hydrolyzed vegetable protein, MSG - monosodium glutamate, wheat or wheat-based products.

GENERAL INFORMATION:

Our products do not contain

-benzophenone,

-2,2-bis(4-hydroxyphenyl)propane bis(2,3-epoxypropyl)ether ('BADGE' i.e. Bisphenol-A DiGlycidyl Ether), bis(hydroxyphenyl)methane bis(2,3-epoxypropyl) ethers ('BFDGE' i.e. Bisphenol-F DiGlycidyl Ether) and novolac glycidyl ethers (NOGE),

-chlorofluorocarbons (CFC's), perfluorochemicals (PFC's), or fluoroelastomers,

-melamine,

-butylated hydroxytoluene (BHT),

-dimethylphthalate (DMP), benzylbutylphthalate (BBP), diisononylphthalate (DINP), diisodecylphthalate (DIDP), di-n-octylphthalate (DNOP), Diisobutylphthalate (DIBP), dicyclohexylphthalate (DCHP), di-(2-ethylhexyl)phthalate (DEHP), dibutylphthalate (DBP), or diisooheptylphthalate (DIHP), bis(2-methoxyethyl)phthalate (DMEP), di-n-pentylphthalate (DnPP), di-isopentylphthalate (DIPP), or n-pentyl-isopentylphthalate.

They are in compliance with Commission Decision 1999/815/EC and Directive 2005/84/EC.

Our products also comply with EC Directive No. 1895/2005.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

Our products nor their components are listed in the Canadian Environmental Protection Act, 1999 (CEPA).

HEAVY METALS:

Our products do not contain components consisting of Ag, As, Bi, Cd, Cu, Hg, Pb, Sn and hexavalent chromium, or contain trace quantities of these elements in a combined concentration exceeding 2 ppm (part per million) by weight.

TOXICS IN PACKAGING CLEARINGHOUSE (TPCH):

Our products comply with the requirements of the toxics in packaging law(s) as defined by Toxics in Packaging Clearinghouse (TPCH) in 1989. Specifically:

The regulated metals - lead, mercury, cadmium, and hexavalent chromium - are not intentionally added to any product(s) during the manufacturing process or distribution.

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The sum of the incidental concentration levels of lead, mercury, cadmium and hexavalent chromium present in any product(s) do not exceed 100 parts per million by weight.

Our products comply with EC Directive 94/62/CE.

COSMETIC PRODUCTS:

Our products do not contain components within Annex II or Annex III of the EC Directive 76/768/EEC.

SENSITIVE SUBSTANCES:

Our products do not contain components within RPP900/E, "List of Sensitive Substances" and "Requirements Toward Non-Wovens" - Annex II.

AGENCY/ REGULATORY INFORMATION CONTACT:

If your agency and regulatory needs are not found in the above text, or you require a formal statement of any of the above, please contact Dr. Andrea Gatzke (Agency Compliance Specialist) at andrea.gatzke@us.emsgrivory.com for further assistance.

16. OTHER INFORMATION

APPROVED BY: Heather Bass **TITLE:** QA/MT Manager

PREPARED BY: Andrea Gatzke **Date Revised:** 02/07/2017

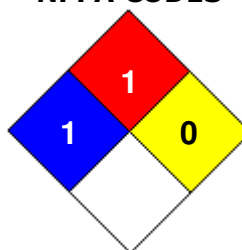
INFORMATION CONTACT: (803) 481-6114

REVISION SUMMARY: This MSDS replaces the 12/02/2016 MSDS. Revised: **Section 11:** GENERAL COMMENTS.

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	B

NFPA CODES



MANUFACTURER DISCLAIMER: This Material Safety Data Sheet (MSDS) is presented in good faith, based on currently available information, and is accurate to the best of our knowledge. It does not replace the precautions, directions, and information contained on the product label. The user is solely responsible for: 1) following all instructions, recommendations, and directions; 2) deciding whether this product or the information about this product is suitable for its use; 3) providing this MSDS and all other information about this product to any subsequent uses; 4) meeting all applicable health and safety standards and regulations; and 5) ensuring that no patent infringement occurs.

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