



<p><i>SUBJECT:</i></p> <p><u>Material Safety Data Sheet (MSDS)</u></p>	<p>ISSUE DATE: November 12, 2012 REVISION DATE: May 29, 2018</p> <p>Page 1 of 5</p>
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1. Product and company identification

Product name: GA 8135(7)

Producer: ITT Italia S.r.l.

Via San Martino, 87 – 12032 Barge (Cuneo) – Italy
C.da Pantano - Zona Ind.le - 86039 TERMOLI (CB) - Italy

Uses: Brake pads and shoes for automotive industries

Emergency contact: phone +1-248-863-2130 - Fax: +1-248-863-2129

2. Composition/Information Hazardous Ingredients

OSHA Status: The friction material product identified in this sheet meets the OSHA definition of an “article” and is not considered hazardous under normal handling and use. The definition of an “article” under OSHA classification is listed under standard: 29 CFR 1910:1200.

The products listed in section #1 contain the materials listed below.

Ingredient	Type	C.A.S. No.	OSHA PEL (mg/m ³)	ACGIH TLV-TWA (mg/m ³)	% w/w
Aramid Fiber		26125-61-1	Not Established		1-5%
Barium sulfate	Total Dust Respiratory Fraction	7727-43-7	15 5	10	5-20%
Graphite		7782-42-5		2	3-7%
Copper	(dusts and mix as Cu)	7440-50-8	1	1	10-30%
Silicate mixture		--			10-30%
Phenolic resin		67700-42-9	10	10	5-10%
Potassium Titanate		12056-51-8	Not Established		10-30%
Sulfide mixture		--			3-10%
Nitrile rubber		9003-18-3			1-5%



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<p>3.</p>	<p>EMERGENCY OVERVIEW: Brake pads are not normally considered hazardous, however operations such as burning, overheating, or machining can create airborne dust that should be avoided. Such actions may cause excessive exposure to ingredients with respect to there limits and should be considered hazardous.</p> <p>Hazard identifications The health hazards for eyes and inhalation described below are primarily associated with dusts that may be generated during machining or other such operations. Normal use of this product is not anticipated to result in a health hazard.</p> <p>Ingestion: May cause irritation, vomiting, and diarrhea Eyes: Dusts, if generated, may cause irritation and scratch the surface of the eye. Skin: Some persons may be sensitive to partially cured phenolic resins or cashew resins and develop dermatitis-type reactions (irritation) similar to poison ivy. Inhalation: Dusts, if generated, may cause respiratory irritation to nose, throat and possibly lungs. Chronic Effects None</p> <p>Ingredients found on one of the OSHA designated carcinogen lists are listed below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Ingredient Name</th> <th style="text-align: center;">NTP Status</th> <th style="text-align: center;">IARC Status</th> <th style="text-align: center;">OSHA List</th> </tr> </thead> <tbody> <tr> <td>No ingredients listed in this section</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> </tr> </tbody> </table>	Ingredient Name	NTP Status	IARC Status	OSHA List	No ingredients listed in this section	-----	-----	-----
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<p>4.</p>	<p>First aid measures</p> <p style="text-align: center;">**If any of the symptoms persists, seek medical attention immediately**</p> <p><u>Inhalation:</u> Remove affected person to fresh air. Request medical attention.</p> <p><u>Skin (powder):</u> The product doesn't irritate skin if the right precautionary measures are taken. In any case, wash skin with soap and water after handling parts. If irritation persists seek medical attention.</p> <p><u>Eyes (powder):</u> Flush eye with cool running water if dust becomes embedded. Request medical attention if reddening persists.</p> <p><u>Ingestion:</u> Request medical attention</p>
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5. Fire fighting measures

Flashpoint (Method): N/A

Flammable Limits: LEL: N/A UEL: N/A

Extinguishing media: CO₂, extinguishing powder or water jet.

Fire fighting equipment: The product must exceed 600°C for an extended period of time, in order to catch fire. Toxic and irritating materials may be released in a fire. Wear self contained breathing apparatus in case dusts are formed during a structural fire.

Hazard connected with the product: ----

6. Accidental release measures

If dust is produced during any use or processing of the product, it should be removed using a wet mop or a vacuum equipped with a HEPA filter.

7. Handling and storage

Handling: No special measures are required.

Storage: Store only in the original container away from acids and bases.

8. Exposure controls/personal protection

General precautions: Observe the rules of good industrial hygiene and the precaution measures which are usually taken in the handling of the composite materials.

Respiratory protection: *Respiratory protection may be required if dusts are created and the ingredient exposures exceeds their respective exposure limits. Use of NIOSH approved air purifying respirators is recommended.*

Protective equipment: Observe the good rules in the handling of composite materials. Nitrile gloves (type EN 388 - 29 CFR 1910.138) or protective clothing are recommended when handling brake parts, because some persons may be sensitive to partially cured phenolic or cashew resins and develop dermatitis type reaction upon contact with skin.

Eye protection: Wear safety glasses when necessary.

Ventilation: *All operations that may generate dust including grinding, machining, and drilling should be sufficiently exhausted to avoid inhalation of dust.*



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9. Physical and chemical properties

<u>Form:</u>	solid
<u>Color:</u>	grey-brown-black
<u>Odor:</u>	characteristic
<u>Melting point:</u>	not determined
<u>Boiling point:</u>	not determined
<u>Flash point:</u>	not applicable.
<u>Self-inflammability:</u>	product is not self igniting.
<u>Danger of explosion:</u>	none
<u>Density:</u>	2.00 – 3.50 g/cm ³
<u>Solubility in water:</u>	insoluble

10. Stability and reactivity

Thermal decomposition: No decomposition if used according to specifications. If decomposition occurs, products would include: hydrocarbons, ammonia, sulfur, carbon oxides (CO and CO₂), nitrogen, and trace amounts of other organic compounds.

Hazardous polymerization: Product is cured in manufacturing process and will not polymerize.

Stability: Stable at standard temperatures and storage conditions.

Incompatibility (Materials/Conditions to Avoid): Avoid contact with strong acids and strong oxidizers.

11. Toxicological information

See section 3 "Hazard Identifications". Ingredient-specific data for this article is not presented. When used and handled according to specifications, the product, according to our experience and to information provided to us, does not have any harmful effect. It is considered a non-hazardous article.

12. Ecological information

Water hazard: Class 0

The product is a stable article without environmental toxic effects.

13. Disposal considerations

In accordance with federal and state laws and regulations, the product should be disposed in sealed containers. Disposal must be in accordance with 49CFR261, 49CFR262, and state and local regulations.

*Must not be disposed with household garbage.



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14. Transport information

The product is not a hazardous material as defined in 49 CFR 172.101 by U.S. Department of Transportation for national/international road, rail, sea and air transport.

15. Regulatory information

California Proposition 65: This product contain titanium oxide (CAS 13463-67-7) in quantity <1400ppm by weight in the brake pad.

SARA Title III-Section 313 Supplier Notification: This product may contain the following chemicals that are subject to SARA Title III/CERCLA "Reportable Quantities" and/or "Threshold Planning Quantities" and/or "Toxic Chemicals" under the EPCRA and 40CFR372:

Ingredient	CAS Number
Copper and compounds	7440-50-8, 1317-40-4
Zinc and Compounds	7440-66-6

OSHA: Not available

CERCLA: Not available

TSCA (Toxic Substances Control Act)
 All ingredients are listed

16. Other information

These data are based on our present knowledge.
 ITT Industries FPD makes no express or implied warranties of any kind, including warranties of merchantability of fitness for particular purpose, with respect to the Friction Material Products or data described herein.
 Under no circumstances shall ITT Industries FPD be responsible for damages of any nature whatsoever directly or indirectly resulting from or arising out of the publication, use or reliance upon the data contained herein.

Revision

Date	Modification
11-12-12	Original Issue
04-15-13	Update
05-29-18	Update