

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Product Name: Black Toner

Product description: Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product Use: ATMI03160KE005 / ATMI03160KE006 / ATMI03162KA001 / ATMI03164KL001

ATMI03170KE004 / ATMI03170KE005 / ATMI03172KA002 / ATMI03174KL001

ATMI03182KA002 / ATMI03182KA003 / ATMI03190KE003 / ATMI03190KE004

ATMI03192KA002 / ATOLP2545KX002 / ATOLP2550KX002 / ATOLP2555KX002

ATUT03010KX003 / ATUT03011KX002 / ATUT03012KX002

1.3 Details of the supplier of the safety data sheet

Name: General plastic industrial co.,ltd

Address: 50,Tzu-chiang Rd.,Wu-Chi Town,Taichung county,Taiwan

Tel: +886-4-2639-3103

Fax: +886-4-2639-6204

E-mail Address :sales@gpi.com.tw

1.4 Emergency Telephone Number : +886-4-26393103

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Not Classified, Not applicable or Classification not possible

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]:

Hazard pictograms : None

Signal word : None

Hazard statements : None

Precautionary statements : None

Supplemental Hazard information (EU):

EUH208 – “Contains Rosin fumarated. May produce an allergic reaction.”

One of the ingredients of this product, Organic Pigment, contains rosin, fumarated (CAS No.: 65997-04-8, EC No.266-040-8). According to the information obtained from the supplier of the ingredient, the Organic Pigment itself did not demonstrate sensitising effect in guinea pigs. However, in compliance with Annex II to Regulation (EC) No. 1272/2008, the EUH code is described on the label since rosin, fumarated is classified as a sensitiser and present in a concentration equal to or greater than 0.1% in the product.

2.3 Other hazards : May form explosible dust-air mixture if dispersed.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture

Hazardous substances or substances for which workplace exposure limits have been assigned

Ingredients	CAS No.	EC No.	Concentration % [weight]	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
				Hazard Class and Category Code	Hazard Statement Code
Paraffin wax*	8002-74-2	232-315-6	1 - 5	None	None
Carbon black*	1333-86-4	215-609-9	0.1 - 5	None	None
Organic pigment	101357-15-7 65997-04-8	309-912-6 266-040-8	1 - 5**	None**	None**
Titanium dioxide*	13463-67-7	236-675-5	0.1 - <1	None	None

*: Substance for which Occupational Exposure Limit(s) is (are) established (See SECTION 8)

** : The EU classification is that of the Organic Pigment as a whole.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

EYES: Flush eyes immediately with plenty of water for 15 minutes.

If irritation persists, obtain medical advice.

SKIN: Wash with plenty of water and soap. If irritation persists, obtain medical advice.

INGESTION: Rinse mouth and give several glasses of water. If symptoms persist, call a physician.

INHALATION: Move to fresh air. If the patient continues to feel unwell, get immediate medical attention.

NOTE TO PHYSICIAN: None

4.2 Most important symptoms and effects, both acute and delayed

Information not available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media: CO₂, dry chemical, water.

Unsuitable Extinguishing Media :

Do not use a solid water stream as it may scatter and spread fire.

Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products : CO₂, CO, Organic products of decomposition.

5.3 Advice for fire-fighters

Fire-Fighting equipment: Wear full bunker gear including a positive pressure self-contained

breathing apparatus in case of burning in large quantities.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Minimize the release of particulates. Wear personal protective equipment. Garments should be washed or dry cleaned after removal of toner if contaminated.

6.2 Environmental Precautions

Do not allow this mixture to contaminate ground water system.

6.3 Methods and material for containment and cleaning up

Spills should be swept up or wiped up after spraying with water to prevent generation of dusts. Residuals can be removed with soap and water. Otherwise slowly sweep spilled powder on to a flat paper and transfer into a suitable container for disposal. If cleaning with a vacuum cleaner, dust explosion-proof type should be used.

6.4 Reference to other sections:

See Section 8 for exposure controls and personal protection and Section 13 for disposal consideration.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid creating dust. Clean up all spills promptly. Inhalation and contact with skin or eyes should be avoided. Provide general ventilation. You should use or handle in a clean place.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well ventilated environment, cool and dry place, away from open flames and spark-producing equipment.

7.3 Specific end use: See subsection 1.2.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational exposure limits

The table below is a summary. Please see the specific legislation for complete information.

Control parameters (as inhalable dust)

Austria:	10 mg/m ³ , TWA	20 mg/m ³ , STEL
Belgium:	10 mg/m ³ , TWA	
Denmark:	10 mg/m ³ , TWA	20 mg/m ³ , STEL
France:	10 mg/m ³ , TWA	
Germany (AGS*):	10 mg/m ³ , TWA	20 mg/m ³ , STEL
Hungary :	10 mg/m ³ , TWA	
Ireland :	10 mg/m ³ , TWA	
Spain:	10 mg/m ³ , TWA	

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Sweden: 10 mg/m³, TWA
Switzerland : 10 mg/m³, TWA
USA-OSHA 15 mg/m³, TWA (Total dust)

*Germany (AGS): 15 minutes average values, insoluble particulates

Control Parameters (Ingredients)

Ingredient Name	ACGIH/ TLV-TWA	OSHA-PEL/ TWA
Carbon Black	3 mg/m ³ (Inhalable fraction)	3.5 mg/m ³
Titanium dioxide	10 mg/m ³	15 mg/m ³ (Total dust)

Paraffin solid is not hazardous except for its flammable properties, but "paraffin wax fume" is one of hazardous chemicals. Both of ACGIH TLVs (TWA) and NIOSH RELs (TWA) values of paraffin wax fume are 2 mg/m³.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation to maintain below occupational limits.

8.2.2 Personal protective equipment

Respiratory protection: In dusty atmospheres, use an approved dust respirator.

Skin protection: No precautions should be needed under normal use.

Eye protection: No precautions should be needed under normal use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Black fine powder

Odour: Odourless

pH: No data

Melting point / freezing point: No data

Initial boiling point and boiling range : Not applicable

Flash point : No data.

Evaporation rate : Not applicable

Flammability (solid, gas) : No data.

Upper/lower flammability or explosive limits : No data.

Vapour pressure : Not applicable

Vapour density : Not applicable

Relative density : 1.6 g/cm³

Solubility in water : Negligible.

Solubility(ies) : No data.

Partition coefficient: n-octanol/water : No data.

Auto-ignition temperature : No data.

Decomposition temperature : No data.

Viscosity : No data.

Explosive properties : Can form explosive dust-air mixtures if finely dispersed in air.

Oxidising properties : No data.

9.2 Other information: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity :	None
10.2	Chemical stability :	This is a stable product.
10.3	Possibility of hazardous reactions :	None
10.4	Conditions to avoid :	None
10.5	Incompatible materials :	Oxidizing materials
10.6	Hazardous decomposition products :	Carbon oxides, hydrocarbons (by heat and fire)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Substance: Not applicable

11.1.2 Mixture

Acute toxicity:	No data available
Skin corrosion/ irritation:	No data available
Serious eye damage/ irritation:	No data available
Skin sensitization:	[Product] No data available [Organic pigment] Non-sensitiser (Method: OECD TG406 or TG429)
Germ Cell Mutagenicity:	Negative in the Ames test*

*: Estimated from the data of other products or information on constituent components obtained from raw material manufacturers.

Carcinogenicity:

[Product] No data available

[Carbon black]

In 2010, the IARC reevaluated carbon black as a GROUP 2B carcinogen (possible human carcinogen), as it had in 1996. This evaluation is given to carbon black for which there is inadequate evidence in humans, but sufficient evidence in experimental animals. The latter is based upon the development of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors.

A two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

[Titanium dioxide]

Titanium dioxide is classified as IARC Group 2B. However, in lung inhalation exposure testing on rats, mice and hamsters, tumor incidence was only observed with high-dose administration to rats. Furthermore, a similar trend is seen in rats with inert poorly soluble particles and carcinogenicity is thought to be influenced by the action of the rat-specific immune system. A causal relationship between titanium dioxide and carcinogenicity has not been displayed in human epidemiological population studies conducted in Europe and North America.

Reproductive toxicity:	No data available
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Specific Target Organ Toxicity – Single Exposure - : No data available

Specific Target Organ Toxicity – Repeated Exposure -:

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration(16 mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4 mg/m³) exposure group. But no pulmonary changes were reported in the lowest (1 mg/m³) exposure group, the most relevant level to potential human exposures.

Aspiration hazard: No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic

- Acute (short-term) toxicity: No data available

- Chronic (long-term) toxicity: No data available

12.2 Persistence and degradability: No data available

12.3 Bioaccumulative potential: No data available

12.4 Mobility in soil: No data available

12.5 Results of PBT and vPvB Assessment: No components of the product meet the criteria for PBT or vPvB under Regulation (EC) No 1907/2006.

12.6 Other adverse effects: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods (See Section 6 and 7):

Waste must be disposed of in accordance with country and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number: None allocated

14.2 UN Shipping Name: None allocated

14.3 UN Transport hazard class(es):None allocated

14.4 UN Packing Group: None allocated

14.5 Environmental hazards No supplementary information available.

14.6 Special precautions for user No data available

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

Additional informaiton

Air transport (IATA) : Not regulated

Land transport (ADR/RID) : Not regulated

Sea transport (IMDG): Not regulated

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 (REACH)

Authorisations on use : Not regulated

Restrictions on use : Not regulated
Classification according to Regulation (EC) No. 1272/2008 [CLP] :
Hazard Class and Category Code (s) : None
Hazard statement Code (s) : None
Supplemental Hazard information (EU):
EUH208 – “Contains Rosin, fumarated. May produce an allergic reaction.”

Other regulations

USA Information

TSCA: All chemical substances in this product comply with all applicable rules or orders under TSCA.

SECTION 16: OTHER INFORMATION

16.1 Indication of changes from the previous version

- SECTION 3: Correction of writing errors.

16.2 Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists
ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR)
CAS: Chemical Abstracts Service
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods
OSHA: Occupational Safety and Health Administration
STEL: Short Term Exposure Limit
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average

16.3 Key literature references and sources for data

IARC: IARC Monographs on the Evaluation of Carcinogenic Risk Humans, Vol.93, Carbon Black, Titanium Dioxide, and Talc, WHO IARC Volume 93, pp. 43-190 and pp. 193-275 (2010).

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.Mackenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein: Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. *Fundamental and Applied Toxicology* 17, pp280-299 (1991).

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]: See Section 2.

16.5 Relevant H- and EUH-phrases (number and full text): EUH208 – “Contains Rosin fumarated. May produce an allergic reaction.”

16.6 Training advise: None

16.7 Further information: None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product described in terms of the legal warranty.