



Safety data sheet
According to 1907/2006/EC, Article 31
version nr: 1

Printing date 1.11.2016

Revision: 1.11.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name: RADILON A GF350W 333BK****1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU12 Manufacture of plastics products, including compounding and conversion

Product category PC32 Polymer preparations and compounds**Process category**

PROC2 Use in closed, continuous process with occasional controlled exposure

PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC14 Production of preparations or articles by tableting, compression, extrusion, pelletization

Environmental release category

ERC11a Wide dispersive indoor use of long-life articles and materials with low release

Article category AC13 Plastic articles**Application of the substance / the preparation**

Production of items by injection molding or comparable processes

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Radici Plastics USA, Inc.

960 Seville Road Wadsworth, Ohio 44281

USA

Further information obtainable from: Laboratory of Research & Development and Quality Control**1.4 Emergency telephone number:**

During regular office hours phone 330-336-7611

E-mail: msds.plastics@radicigroup.com**SECTION 2: Hazards identification****Classification of the substance or mixture**

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

Label elements

GHS label elements Void

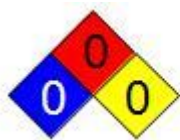
Hazard pictograms Void

Signal word Void

Hazard statements Void

Classification system:

NFPA ratings (scale 0 - 4)

HMIS rating scale (0-4)

Health = 0
Fire = 0
Reactivity = 0

HEALTH	0
FIRE	0
REACTIVITY	0

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SECTION 3: Composition/information on ingredients

·3.2 Chemical characterization: Mixtures

· Description:

Polyamide 66 glass fiber reinforced

Base used: Polyamide 66

Synonyms: Polyamide 66- Nylon 66

CAS number: PA66 32131-17-2

CAS number: Glass fiber 65997-17-3

Chemical name: Poly (hexamethylene adipamide)

Chemical Formula: $H-[HN(CH_2)_6NHCO(CH_2)_4CO]_N-OH$

Dangerous components:

Dangerous components: Void

· **Additional information:** Refer to Section 16 for the risk phrases concerning the above-mentioned hazards

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:** No special measures required

· **After inhalation:** Product is in granular form and thus inhalation is very unlikely

· **After skin contact:** Generally the product does not irritate the skin

· **After eye contact:** Keeping the eyelids wide-open, flush eyes for several minutes under running water

· **After swallowing:**

The product is not acutely toxic. In case of ingestion of a considerable quantity of material, seek medical assistance

· **Information for doctor:**

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam

Use fire extinguishing methods appropriate to surrounding area

· 5.2 Special hazards arising from the substance or mixture

Processing fumes evolved under processing conditions (thermal decomposition >340°C) may contain trace amounts of carbon monoxide, carbon dioxide, ammonia, formaldehyde, cyanhydric acid, nitrogen oxides, acrolein and their derivatives

·5.3 Advice for firefighters

· **Protective equipment:** No special measures required

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Do not drop/scatter product granules on warehouse or workplace floors to prevent the possibility of slip and fall accidents

· **6.2 Environmental precautions:** No special measures required.

· **6.3 Methods and material for containment and cleaning up:** No special measures required.

· **6.4 Reference to other sections**

Safety data sheet

According to 1907/2006/EC, Article 31

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Revision: 1.11.2016

Trade name: RADILON A GF350W 333BK

(Contd. of page 2)

See Section 7 for information on safe handling
 See section 8 for information on personal protection equipment
 See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

In processing colored materials, particular care must be exercised not to exceed recommended processing temperatures, as thermal decomposition may generate harmful products

Do not inhale the air trapped in the packaging

Do not drop/scatter product granules on warehouse or workplace floors to prevent the possibility of slip and fall accidents

The handling of product at the molten state (see Section 9) requires the use of suitable gloves to prevent burns

Do not ingest product granules: during digestion, gastric juices could hydrolyze the material releasing substances harmful in human health

Ensure that there are suitable exhaust systems in processing machine areas

· **Information about fire - and explosion protection:**

The product is not explosive (see Section 9). In case of fire see Section 5

· 7.2 Conditions for safe storage, including any incompatibilities

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Do not stack up packages too high without proper support to prevent the pile from collapsing

Keep the product away from heat sources since it is combustible

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Store in a dry place

Keep the product dry to allow for optimal processing

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see Section 7

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Product in solid state: follow the ordinary precautionary measures for non-hazardous chemicals

Product in molten state: avoid skin contact with the molten material and do not breathe product vapors

· **Respiratory protection:** Not required.

· **Protection of hands:**

Protective gloves are not required for handling the product in a solid state

The use of appropriate protective gloves is required for handling the product in its molten state (see Section 9) to avoid burns

· **Material of gloves**

Rubber gloves

Leather gloves

Synthetic rubber gloves

· **Penetration time of glove material** Not available

(Contd. on page 4)
 US

Safety data sheet

According to 1907/2006/EC, Article 31

Printing date 1.11.2016

version nr: 1

Revision: 1.11.2016

Trade name: **RADILON A GF350W 333BK**

(Contd. of page 3)

· **Eye protection:** Safety glasses

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	<i>Chips</i>
Color:	<i>Black</i>
· Odor:	<i>Odorless</i>
· Odor threshold:	<i>Not determined.</i>
· pH-value:	<i>Not applicable.</i>

· **Change in condition**

Melting point/Melting range:	<i>250 ± 3 °C</i>
Boiling point/Boiling range:	<i>Undetermined.</i>

· Flash point:	<i>> 400°C</i>
· Flammability (solid, gaseous):	<i>Not determined.</i>
· Ignition temperature:	<i>440° C</i>
· Decomposition temperature:	<i>Not determined.</i>
· Self-igniting:	<i>Product is not self-igniting</i>
· Danger of explosion:	<i>Product is not explosive</i>

· **Explosion limits:**

Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>

· Vapor pressure:	<i>Not applicable.</i>
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· Density at 20°C:	<i>1.39 g/cm³</i>
· Relative density	<i>Not determined</i>
· Vapor density	<i>Not applicable</i>
· Evaporation rate	<i>Not applicable</i>

· **Solubility in / Miscibility with water:**

Insoluble

· Segregation coefficient (n-octanol/water):	<i>Not determined</i>
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· **Viscosity:**

Dynamic:	<i>Not applicable</i>
Kinematic:	<i>Not applicable</i>

· **Solvent content:**

Organic solvents:	<i>0.0 %</i>
VOC (EC)	<i>0.00%</i>

Solids content:	<i>100.0 %</i>
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· **9.2 Other information** *No further relevant information available.*

(Contd. on page 5)
US

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version nr: 1

Revision: 1.11.2016

Trade name: **RADILON A GF350W 333BK**

(Contd. of page 4)

SECTION 10: Stability and reactivity

· **10.1 Reactivity**

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

At temperatures >340°C the product undergoes thermal decomposition/degradation releasing fumes that may contain traces of cyanhydric acid, ammonia, acrylonitrile, formaldehyde, nitrogen oxides and their derivatives phosphorus pentoxide and their derivatives

· **10.3 Possibility of hazardous reactions**

Reacts with strong acids

Reacts with oxidizing agents

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** Irritation could be caused by dust formed during product handling

· **on the eye:** Irritation could be caused by dust formed during product handling

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Based on our experience and according to available information, when handled correctly and used according to regulations, the product does not have any harmful effects

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** Product is not biodegradable

· **Behavior in environmental systems:**

· **12.3 Bio accumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Generally not hazardous for water

Negative ecological effects are, according to the current state of knowledge, not expected.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **Waste treatment methods**

· **Recommendation**

This product can be recycled and used for other appropriate applications

This product is not considered hazardous waste. Eliminate the waste according to local rules and regulations

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(Contd. of page 5)

- **Uncleaned packaging:**
- **Recommendation:** Not hazardous according to the above regulations

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, AND, IMDG, IATA** void
- **14.2 UN proper shipping name**
- **ADR, AND, IMDG, IATA** void
- **14.3 Transport hazard class(es)**
- **ADR, AND, IMDG, IATA**
- **Class** void
- **14.4 Packing group**
- **ADR, IMDG, IATA** void
- **14.5 Environmental hazard:**
- **Marine pollutant** No
- **14.6 Special precautions for user** Not applicable
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC code** Not applicable
- **Transport/Additional information:** Not dangerous according to the above regulations
- **UN "Model Regulation":** --

SECTION 15: Regulatory information

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

Sara

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product characteristics and shall not establish a legally valid contractual relationship

Relevant Phrases

- H225 *Highly flammable liquid and vapor*
- H228 *Flammable solid*
- H319 *Causes serious eye irritation*
- H361d *Suspected of damaging the unborn child*
- H400 *Very toxic to aquatic life*
- H411 *Toxic to aquatic life with long lasting effect*
- H412 *Harmful to aquatic life with long lasting effects*

Abbreviations and acronyms:

- Flam. Liq.2: Flammable liquids, Hazard Category 2*
- Flam. Sol.1: Flammable solids, Hazard Category 1*
- Eye Irrit. 2: Serous eye damage/eye irritation, Hazard Category 2*
- Repr. 2: Reproductive toxicity, Hazard Category 2*
- Aquatic Acute 1: Hazardous to the aquatic environment – Acute Hazard Category 1*
- Aquatic Chronic 2: Hazardous to the aquatic environment – Chronic Hazard, Category 2*
- Aquatic Chronic 3: Hazardous to the aquatic environment – Chronic Hazard, Category 3*