

28U11 - Walk On AFO

Material number 028U11

Page: 1 of 6

1. Product and company identification**Product identifier**

Trade name: 28U11 - Walk On AFO

Relevant identified uses of the substance or mixture and uses advised againstGeneral use: Reserved for industrial and professional use.
Article for orthopedic procedures.**Details of the supplier of the safety data sheet**Company name: Otto Bock Health Care
Street/POB-No.: 3820 W. Great Lakes Drive
Postal Code, city: Salt Lake City, UT 84120
USAWWW: www.ottobockus.com

Telephone: +1 (801) 956-2400

Telefax: +1 (801) 956-2401

Dept. responsible for information:

Quality Department,
Telephone: +1 (801) 954-2304 (7 AM – 3 PM, Mountain Time),
Email: USRegulatory@ottobock.comAdditional information: Corporate headquarters:
Ottobock SE & Co. KGaA
Max-Näder-Straße 15
Duderstadt
Germany**Emergency phone number****CHEMTREC, Telephone: +1 (800) 424-9300****2. Hazards identification****Emergency overview**Appearance: Form: solid
Color: black

Odor: odorless

Classification: This material is classified as not hazardous.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classifiedProcessing by heating can produce vapours. Processing, e.g. by cutting, sawing or grinding, can produce particles and dust. For risks which have to be observed thereby, see section 7: Handling, section 8: Exposure controls / personal protection and section 11: Toxicology.
see section 11: Toxicological information

28U11 - Walk On AFO

Material number 028U11

Page: 2 of 6

3. Composition / Information on ingredients

Chemical characterization: Carbon fibers and Thermoplastic (PP)

Additional information: The maximum workplace exposure limits are, where necessary, listed in section 8.

4. First aid measures

In case of inhalation: Dust/Vapors: Provide fresh air. Seek medical treatment in case of troubles.

Following skin contact: Dust: Remove residues with soap and water. Seek medical treatment in case of troubles.
If burned by hot product, quench immediately with cold tap water.
Do not peel solidified product off the skin. Immediately get medical attention.After eye contact: Dust: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Dust: Repeatedly drink water. Seek medical treatment in case of troubles.

Most important symptoms/effects, acute and delayed

Carbon fibers (dust): mild irritant.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

No data available

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, foam, dry chemical powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet.

Specific hazards arising from the chemical

In case of fire may be liberated: carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Cool endangered containers with water spray and, if possible, remove from danger zone.
Use a water fog to control vapors. Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions: Handle in accordance with good industrial hygiene and safety practice.

For mechanical processing: Avoid generation of dust. Wear appropriate protective equipment. Keep unprotected people away. Provide fresh air.

Environmental precautions:

Discharge into the environment must be avoided.

Methods for clean-up: Take up mechanically. Dispose of waste according to applicable legislation.

7. Handling and storage

Handling

Advices on safe handling: Handle in accordance with good industrial hygiene and safety practice.

For mechanical processing:

Provide adequate ventilation. The use of local exhaust ventilation is recommended.

Avoid generation of dust. Wear appropriate protective equipment. When using do not eat, drink or smoke.

If necessary: With the formation of dust, use a dust mask.

Precautions against fire and explosion:

Carbon Fiber is electrically conductive. It can cause short circuits within electrical equipment, if material dusts penetrate into the ambient air.

Specific use(s)

Article for orthopedic procedures.

Storage

Requirements for storerooms and containers:

Store at room temperature.

Protect from: heat, UV-radiation/sunlight

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

Type	Limit value
USA: ACGIH: TWA	10 mg/m ³
USA: ACGIH: TWA	3 mg/m ³
USA: OSHA: TWA	15 mg/m ³
USA: OSHA: TWA	5 mg/m ³

Engineering controls

For mechanical processing: Provide adequate ventilation.

The use of local exhaust ventilation is recommended.

In case of warming: Make sure that the processing machines are well equipped with suction and ventilation systems.

See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection

For mechanical processing:

Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010

Skin protection

For mechanical processing: Wear suitable protective clothing.

In case of warming:

If necessary: Protective gloves against thermic risks

For mechanical processing:

Protective gloves according to OSHA Standard - 29 CFR: 1910.138

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

28U11 - Walk On AFO

Material number 028U11

Page: 4 of 6

Respiratory protection: For mechanical processing:
In case of dust formation:
Dust mask.

General hygiene considerations:

For mechanical processing: Avoid generation of dust.
In case of warming: Do not breathe vapors.
Wash hands before breaks and after work. Provide a conveniently located eye rinse station. When using do not eat, drink or smoke.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: solid Color: black
Odor:	odorless
Odor threshold:	No data available
pH value:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Density:	No data available
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	Thermoplastic: > 300 °C
Ignition temperature:	Carbon fibers: 662 °F

10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	Carbon Fiber is electrically conductive. It can cause short circuits within electrical equipment, if material dusts penetrate into the ambient air.
Conditions to avoid:	Protect from: heat, UV-radiation/sunlight.
Incompatible materials:	No data available
Hazardous decomposition products:	In case of fire may be liberated: carbon monoxide and carbon dioxide.
Thermal decomposition:	Thermoplastic: > 300 °C

11. Toxicological information

Toxicological tests

Toxicological effects: Acute toxicity (oral): Lack of data.
 Acute toxicity (dermal): Lack of data.
 Acute toxicity (inhalative): Lack of data.
 Skin corrosion/irritation: Lack of data.
 Serious eye damage/irritation: Lack of data.
 Sensitisation to the respiratory tract: Lack of data.
 Skin sensitisation: Lack of data.
 Germ cell mutagenicity/Genotoxicity: Lack of data.
 Carcinogenicity: Lack of data.
 Reproductive toxicity: Lack of data.
 Effects on or via lactation: Lack of data.
 Specific target organ toxicity (single exposure): Lack of data.
 Specific target organ toxicity (repeated exposure): Lack of data.
 Aspiration hazard: Lack of data.

Other information: For mechanical processing: Possible in traces: formation of WHO-fibers.
 classification WHO-fibers: Causes concern for man owing to possible carcinogenic effects.
 In case of heating: risk of burns.

Symptoms

Carbon fibers (dust): mild irritant.

12. Ecological information

Ecotoxicity

Further details: No data available

Mobility in soil

No data available

Persistence and degradability

Further details: Product is not biodegradable.

Additional ecological information

Volatile organic compounds (VOC):

0 % by weight

General information: Discharge into the environment must be avoided.

13. Disposal considerations

Product

Recommendation: Incinerate according to applicable local, state and federal regulations.

14. Transport information

USA: Department of Transportation (DOT)

Proper shipping name: Not restricted

Sea transport (IMDG)

Proper shipping name: Not restricted

Marine pollutant: no

Air transport (IATA)

Proper shipping name: Not restricted

Further information

No dangerous good in sense of these transport regulations.

15. Regulatory information

National regulations - U.S. Federal Regulations

Product: Refer to 29 CFR
Part 1910 subpart q - Welding, Cutting, Brazing 1910.252.

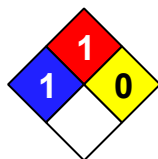
Carbon fibers: TSCA Inventory: listed
TSCA HPVC: not listed
NIOSH Recommendations:
Occupational Health Guideline: 0307

National regulations - Great Britain

Hazchem-Code: -

16. Other information

Hazard rating systems:



NFPA Hazard Rating:
Health: 1 (Slight)
Fire: 1 (Slight)
Reactivity: 0 (Minimal)

HMIS Version III Rating:
Health: 1 (Slight)
Flammability: 1 (Slight)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

Reason of change: Changes in section 1.3: Corporate headquarters
Date of first version: 12/2/2008

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.