

Material safety data sheet

Manufacturer's name : Bitufa Waterproofing BV
Vlijtweg 4
8191 JP WAPENVELD
THE NETHERLANDS

Information : +31-(0)38-3372100

Product : SBS Modified Bitumen Roll Roofing Membrane

Identity : Flexoper N, Flexoper PV, Flexobit Sanded/Grey,
Ufo's, Flexowall.

FORMULA / MIXTURE

Component/ Ingredient:

No.	Composition	Percent
1.	Petroleum Asphalt	75-82%
2.	Styrene Butadiene Styrene	16-22%
3.	Polyester matting	0- 8%
4.	Fiberglas matting	0- 8%
5.	Roofing granules	0-25%
6.	Sand	1- 4%

Component 3 is contained only in Flexowall and Flexoper PV.

Component 4 is contained only in Flexoper N.

Component 5 is contained only in Flexoper N Grey, Flexobit Grey, Ufo's, Flexowall Grey.

Component 6 is contained only in Flexoper N Sanded, Flexobit Sanded and Flexowall Sanded

Exposure Standard For Pure Components, TLV in air averaged over an 8-hour daily exposure (ACGHI 1987-88)

5mg/m ³	Petroleum Asphalt (For Fumes or Mist)
Not Established	Styrene Butadiene Styrene
Not Established	Polyester Matting
15mg/m ³	Fiberglas Matting (For Nuisance Dust)
Not Established	Roofing Granules
15mg/m ³	Sand (For Respirable Dust)

Physical Data:

Initial Boiling Point, of	700
Specific Gravity (H ₂ O=1)	1.01-1.06
Vapour Pressure (MMHg)	NA
Percent Volatile (by volume %)	NA
Vapour Density (AIR=1)	NA
Evaporation Rate (n-Butyl Acetate=1)	NA
Solubility in Water	Nil
Appearance and Odour	Black or other various roofing granule colours at room temperature. Petroleum odour increases with temperature. Seem-solid at application temperatures. May contain Hydrogen Sulphide, a toxic gas.

Fire and Explosion Hazard Data:

Flash Point – COC, oF	Above 450
Flammable Limits LEL	NDA
UEL	NDA
Extinguishing Media	Foam, Water Fog, Dry Chemical, CO ₂

Special Fire Fighting Procedures:

Do not enter confined fire space without proper protective equipment including self-contained breathing apparatus. See hazardous decomposition products.

Reactivity Data:

Stability (Thermal, Light)	Stable
Incompatibility (Materials to avoid)	May react with strong oxidisers

Hazardous Decomposition Products:

Thermal decomposition products are highly dependent on the combustion conditions. A complex of airborne solid, liquid, particulates and gases will evolve when this material undergoes pyrolysis or combustion. Carbon monoxide and other unidentified organic and inorganic compounds may be formed upon combustion.

Hazardous Decomposition Products	Will not occur
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Spill or leak procedures:

Steps in case of spill Waste disposal method	Recover by placing in suitable container. Observe federal, state and local regulations covering non-hazardous solid waste disposal.
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Emergency, First Aid and Special Protection Information:

Eyes	Avoid eye contact, irrigate with plenty of water, see a physician. Use splash goggles or face shield when eye contact may occur.
Skin	Is splashed on skin, cool water. Do not use solvents or thinners to remove material from skin. Get immediate medical attention.
Inhalation	Fumes from hot material from skin. Get immediate medical attention.
Respiratory Protection	If conditions create airborne concentrations which exceed an exposure standard, the use of an approved respirator or air supplied breathing equipment is recommended.
Ventilation	Use adequate ventilation to keep the airborne concentrations of the material below the exposure standard.

Health Hazard Data:

Eyes	The cool solid material is not expected to cause eye irritation. Thermal burns may result from contact with hot material.
Skin	The cool solid material is not expected to cause skin irritation. Thermal burns may result from contact with hot material.
Ingestion	Not expected to be acutely toxic by ingestion. If swallowed, do not induce vomiting; call a physician.
Effects of overexposure	Inhalation of high fume or mist concentrations may cause dizziness, headache or nausea.

Hazardous according to OSHA (1910.1200) or one or more state Right to Know lists.

Special Precautions:

Precautions to be taken in handling and storing: avoid skin contact with hot product.

Avoid breathing vapours. Do not heat above flash point.

Other precautions: Practice good hygiene, wash thoroughly after working with product and before eating or smoking. Remove contaminated clothing and laundry before re-use.

Transportation:

DOT hazard classification: not regulated by DOT

	HEALTH	FLAMMABILITY	REACTIVITY
HMIS *) rating	1	1	0
NFPA **) rating	1	1	0

NOTICE:

These ratings involve data and interpretations that may vary from company to company and are intended only for rapid, general identification of the magnitude of the specific hazard.



TO DEAL WITH ADEQUATELY WITH THE SAFE HANDLING OF THIS MATERIAL, ALL THE INFORMATION CONTAINED IN THIS M.S.D.S. MUST BE CONSIDERED.

The customer is responsible for determining the proper personal protective equipment needed for its particular use of this material.

*) Hazardous Materials Identification Systems (HMIS) Revised RWA Materials Rating Manual, National Paint & Coatings Association, fall 1984.

***) NFPA 704 Standard System for the Identification of the Fire Hazards of Materials, National Fire Protection Association, 1985.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make assure proper use and disposal of these materials and the safety and health of employees and customers.

Information on this form is furnished solely for the purpose of compliance with OSHA Hazard Communication Standard, 20 CFR 1910.1200, the Workplace Hazardous Material Information System (WHMIS), and shall not be used for any other purpose.

Date revised August 2010