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

1.1 Product identifier

Trade name

UPM Formi EcoAce WB40
UPM Formi EcoAce WB50
UPM Formi EcoAce WB60

Company product code

Wood-plastic composite granulates.

Reach registration number

Not registered.

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

Uses of the chemical

It is used for the production of injection moulding and extrusion products.

Classification of economic activities (NACE)	C222 Manufacturing of plastic materials
Use categories (UC62)	none
The chemical can be used by the general public	☐
The chemical is used by the general public only	☐

1.3 Details of the supplier of the safety data sheet

Manufacturer, importer, other undertaking

UPM-Kymmene Corporation

Street address	Alvar Aallonkatu 1
Postcode and post office	FI-00100 Helsinki
Post-office box	P.O Box 380
Postcode and post office	FI-00101 Helsinki
Telephone number	+358 20 41 5113
Telefax	
E-mail address	upmformi@upm.com
Finnish Business ID (Y code)	1041090-0

1.4 Emergency telephone number **112**

Poison Information centre (in Finland), open 24 h daily
PL 790 (Tukholmankatu 17)
00029 HUS

tel. +358 9 471977 or +358 800 147111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

In accordance with current regulations (1272/2008 CLP), this substance is not classified as dangerous.

2.2 Label elements

EUH 208 Contains maleic anhydride. May produce an allergic reaction.

2.3 Other hazards

For the results of PBT/vPvB assessment, see point 12.6.
The product does not contain any known or suspected endocrine disruptors.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The product contains 40-60% Wood (softwood, CAS none), 35-55% polypropylene (CAS 9003-07-0), <5% carboxylated polypropylene (CAS number 25722-45-6, contains max. 0.099 % maleic anhydride CAS 108-31-6) and 0-2% other additives. Moisture <1.5%. On basis of tests on a corresponding product, the product contains < 0.001 % unbound and biologically available maleic anhydride and does not require classification as a skin sensitiser. Moisture <0.5%.

Hazardous ingredients

CAS/EC number and the registration number	Name of the ingredient	Concentration	Classification
108-31-6	Maleic anhydride	≤ 0.005 % (< 0.001 % unbound and biologically active)	Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Resp. Sens. 1, H334; STOT RE 1, H372; EUH071 Specific concentration limit: Skin Sens. 1A, H317: ≥ 0,001 %

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Move to fresh air. Get medical attention if symptoms appear.
Skin contact: Wash with water. Get medical attention if irritation occurs.
Eye contact: Rinse with plenty of water for several minutes. Get medical attention if irritation occurs.
Ingestion: Rinse mouth with plenty of water. By ingestion of large quantities endeavour to vomit. Get medical attention if symptoms appear.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact: Mechanical irritation possible.

4.3 Indication of any immediate medical attention and special treatment needed

No special treatment needed.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Water spray, foam, carbon dioxide

5.2 Special hazards arising from the substance or mixture

The product itself is non-flammable. If dried, flammable organic dust may form. The product is a solid mixture of wood particles, plastic and additives, that will burn if ignited or in contact with intense heat. Auto-ignition is possible several hours after processing if the material is not cooled down properly. Dust may be generated during processing. Dust is combustible and may be explosive in the presence of a spark or other ignition sources.

5.3 Advice for firefighters

In large fires or in confined areas, use appropriate protective equipment and a self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Handle carefully to avoid dust formation. Remove all ignition sources.
Dust filters are recommended.

6.2 Environmental precautions

Minimize contamination of drains, surface and ground waters.

6.3 Methods and material for containment and cleaning up

Use appropriate tools to collect the product for disposal. Flush the area with water.

6.4 Reference to other sections
Personal protection equipment: see Section 8.2
Disposal: see Section 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid dust formation. Avoid breathing of dust.

7.2 Conditions for safe storage, including any incompatibilities
Storage in dry, cool and well-ventilated place protected from direct sunlight and away from highly flammable substances / materials.
No legal demands concerning storage.

7.3 Specific end use(s)
Not reported.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

National occupational exposure limit values

Organic dust: HTP 5 mg/m^3 (8 h) ja 10 mg/m^3 (15 min).
Maleic anhydride: HTP 0.1 ppm or 0.41 mg/m^3 (8 h) and 0.2 ppm or 0.81 mg/m^3 (15 min).

Other limit values
UK (WEL, 8 h TWA): 10 mg/m^3 (total inhalable dust), 4 mg/m^3 (respirable dust)
Maleic anhydride:
UK (WEL): 1 mg/m^3 (8 h TWA), 3 mg/m^3 (15 min)

DNEL
Chemical safety assessment has not been performed for the product, no information available about ingredients.

PNEC
Chemical safety assessment has not been performed for the product, no information available about ingredients.

8.2 Exposure controls

Appropriate engineering controls

Keep containers tightly closed and away from ignition sources and heat.

Eye/face protection
Normally not needed. In dusty conditions, use eye protection.

Skin protection
Normally not needed.

Hand protection
Normally not needed.

Respiratory protection
Normally not needed.

Thermal hazards
The product itself is stable and non-flammable. If dried, flammable organic dust may form.

Environmental exposure controls
Prevent large amounts from entering sewers or environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	solid, white or brown
Odour	mild wood odour or odourless
Odour threshold	Not applicable.
pH	Not applicable
Melting point	130-170 ºC
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Unknown
Flammability (solid, gas)	Non-flammable when moist.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	Unknown.
Particle characteristics	Not determined.
Solubility(ies)	Insoluble in alcohols, diethyl ether, acetone, etc. Insoluble in cold and hot water.
Partition coefficient: n-octanol/water	Not applicable.
Decomposition temperature	Unknown
Viscosity	Not applicable.
Explosive properties	Dust may be explosive in the presence of ignition sources.
Oxidising properties	Not oxidising

9.2 Other information

Density 0.9-1.1 g/cm3

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive under normal use and storage conditions.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

No hazardous reactions under normal use and storage conditions.

10.4 Conditions to avoid

Keep away from ignition sources and heat.

10.5 Incompatible materials

None.

10.6 Hazardous decomposition products

Burning may produce toxic gases e.g.carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

There is no toxicological data available for this specific product: The product is not classified as acute toxic.

Skin corrosion/irritation

The product is not classified as corrosive or an irritant.

Serious eye damage/irritation

The product is not classified as an irritant or hazardous for the eye.

Respiratory or skin sensitisation

The product is not classified as sensitising. May produce an allergic reaction. The product contains small amounts of a skin sensitiser, but its unbound concentration in the product is below the specific concentration limit for classification (< 10 ppm or 0.001 %). While the release of this substance from the polymer cannot be entirely ruled out, experience with similar polymer products excludes allergic reactions in sensitised persons at lower concentrations.

Germ cell mutagenicity

The product is not classified as a mutagen.

Carcinogenicity

The product is not classified as a carcinogen.

Reproductive toxicity

The product is not classified as a reproductive toxicant.

STOT-single exposure

The product is not classified as toxic to specific target organs.

STOT-repeated exposure

The product is not classified as toxic to specific target organs.

Aspiration hazard

The product is not classified as causing aspiration toxicity.

Other information

The product does not contain any known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

There is no ecotoxicological data available for this specific product. The product is not classified as dangerous for environment.

12.2 Persistence and degradability

Hardly biodegradable in soil based on information from similar products. Chemical degradation produces carbon oxides (CO, CO2) and water.

12.3 Bioaccumulative potential

No bioaccumulative potential.

12.4 Mobility in soil

Partly insoluble in water.

12.5 Results of PBT and vPvB assessment

Chemical safety assessment has not been performed for the product, no information available about ingredients.

12.6 Endocrine disrupting properties

The product does not contain any known or suspected endocrine disruptors.

12.7 Other adverse effects

Not reported.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Disposal according to current national and local official regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
Not classified for transportation.

14.2 UN proper shipping name
Not applicable.

14.3 Transport hazard class(es)
Not applicable.

14.4 Packing group
Not applicalble.

14.5 Environmental hazards
Prevent large amounts from entering sewers or waterways.

14.6 Special precautions for user
Keep away from ignition sources and heat.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No specific regulations.

15.2 Chemical safety assessment
Not registered and no chemical safety assessment performed.

SECTION 16: OTHER INFORMATION

Glossary of abbreviations

HTP value	concentration known to be hazardous (Finland)
TWA	time-weighted average
WEL	workplace exposure limit

References
Material safety data by UPM
Decree on Concentrations known to be Hazardous 654/2020 (HTP-arvot 2020), Finland
EH40/2005 Workplace exposure limits (fourth edition 2020)

Information added, deleted or revised
1.4 Emergency numbers updated
2.2 EUH208 phrase added
2.3 Added content according to updated REACH Annex II requirements
3 Composition specified
8.1 Exposure limit values for maleic anhydride added
9.1 Added content according to updated REACH Annex II requirements
11 Added content according to updated REACH Annex II requirements and due to presence of maleic anhydride (Respiratory and skin sensitisation)
12.5 Updated information on PBT and vPvB assessment
12.6 Added content according to updated REACH Annex II requirements
14.4 Updated packing group information
16 Updated glossary of abbreviations, references, list of relevant hazard statements

List of relevant hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
EUH071	Corrosive to the respiratory tract.