

## Annex 1 to Safety Data Sheet

### Exposure Scenario (ES) Magnesium Hydroxide

#### 1.1. Manufacturing

##### Manufacturing Process

Manufacturing facilities are located outside the EU.

##### General information:

Magnesium hydroxide M5F, M7F, M10F is manufactured by liquid phase method with the separation and drying of the product obtained through a unique production cycle. The surface of the product is modified with fatty acids, C16-18.

#### 1.2 Identified Uses

No.	Short Title of the Exposure Scenario	SU	PROC	ERC	spERC	PC	AC
<b>Manufacturing</b>							
1	Manufacturing of magnesium hydroxide		1, 2, 3, 4,8a, 8b,9,15	1			
<b>Composition of the Mixture</b>							
2	Polymer processing		1, 2, 3, 8b, 9, 4, 5, 6, 8a, 13, 14, 21,	3		32	
3	Formulation of flame retardants		1,2,3,4,5,8a, 8b 9, 15	2		0	
4	Flame retardant for fire extinguishing compositions		3	2		0	
5	Plastics processing		14, 21	3		32	
6	Use in PVC stabilizers		3	3		32	
<b>Industrial Uses</b>							
7	Use as PVC stabilizer	12	3	5		32	
8	Industrial production of rubber and plastics	10, 11, 12,	1, 2, 3, 4, 5, 6, 8a, 8b, 14, 19, 15, 21, 24	5, 6a, 6c, 6d			
9	Use in coatings, paints and roof coatings	5, 8, 0	1, 2, 3, 4, 5, 7, 8a, 8b, 10, 13, 15	4, 5, 6a, 6d, 6c		9a, 1, 4, 18, 23, 24, 31, 9b, 34, 32	
10	Use in the construction industry	10, 19	3, 5, 8a, 8b, 6, 14	5		19	
11	Use in lubricants	0	1, 2, 3, 4, 7, 8a, 8b, 9, 10, 13, 17	4, 7		1, 24, 31	
12	Use in bonding and release agents	0	1, 2, 3, 4, 6, 8b, 10, 14, 7	5		0	



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13	Laboratory use	0	10, 15	4		21	
Professional Use							
14	Compounds used in the transport industry	17	14, 21			32	
15	Compounds used in the electric industry	16	14, 21			32	
16	Compounds used in the construction	19	14, 21			32	
17	Use in lubricants	16	1, 2, 3, 4, 8a,8b, 9, 13, 17, 20	8a, 8d, 9a, 9b		31	
18	Use in road works and construction	17	5, 7, 8b, 8a, 9, 10, 11, 13	8f		0	
19	Laboratory use	24	10, 15	8a		21	
20	Polymer processing	12	1, 2, 8a, 8b, 14, 21	8a, 8c, 8d, 8f		32	
Consumer Use							
21	Use in coatings, inks, paints and roofing materials					1, 4, 9a, 18, 23, 24, 31, 9b	
22	Compounds used in the transport industry		14, 21	11a			1
23	Compounds used in the electric industry		14, 21	11a			2
24	Compounds used in the construction		14, 21	10a			13, 7, 4
25	Use in coatings, inks, paints and roofing materials			10a, 11a			7, 11, 13, 1, 8, 10

### Use Descriptors

#### SU End-Use Sector

SU 0	Other: manufacture and finishing of glass, ceramics and stone (NACE codes C23.1, C23.3 and C23.7)
SU 5	Manufacture of textiles, leather and fur
SU 8	Manufacture of bulk, large scale chemicals (including petroleum products).
SU 9	Manufacture of fine chemicals
SU 10	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU 11	Manufacture of rubber products
SU 12	Manufacture of plastics products, including compounding and conversion.
SU 16	Manufacture of computer, electronic and optical products, electrical equipment.
SU 17	General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment
SU 18	Manufacture of furniture
SU 19	Building and construction work
SU 23	Electricity, steam, gas, water supply and sewage treatment
SU 24	Scientific research and development

#### PROC Process Category

PROC 1	Use in closed processes, no likelihood of exposure.
PROC 2	Use in closed continuous processes with occasional exposure.
PROC 3	Use in closed batch process (synthesis or formulation).
PROC 4	Use in batch and other process (synthesis) where opportunity for exposure arises.
PROC 5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact).
PROC 6	Calendering operations.
PROC 7	Industrial spraying
PROC 9	Transfer of substance or preparation into small containers (dedicated filling lines, including weighing)
PROC 10	Roller application or brushing
PROC 11	Non-industrial spraying
PROC 12	Use of blowing agents in manufacture of foam
PROC 13	Treatment of articles by dipping and pouring
PROC 14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC 15	Use as laboratory reagent
PROC 19	Hand-mixing with intimate contact and only PPE available.



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PROC 21	Low energy manipulation of substances bound in materials and/or articles.
PROC 24	High (mechanical) energy work-up of substances bound in materials and/or articles.
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities.
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities.

**ERC Environmental Release Category**

ERC 1	Manufacture of substances
ERC 2	Formulation of preparations
ERC 3	Formulation in materials
ERC 4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC 5	Industrial use resulting in inclusion into or onto a matrix
ERC 6a	Industrial use resulting in manufacture of another substance (use of intermediates).
ERC 6b	Industrial use of reactive processing aids
ERC 6c	Industrial use of monomers for manufacture of thermoplastics.
ERC 6d	Industrial use of auxiliaries for polymerisation processes in production of resins, rubbers, polymers
ERC 7	Industrial use of substances in closed systems.
ERC 8a	Wide dispersive indoor use of processing aids in open systems
ERC 8b	Wide dispersive indoor use of reactive substances in open systems
ERC 8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix.
ERC 8d	Wide dispersive outdoor use of processing aids in open systems.
ERC 8e	Wide dispersive outdoor use of reactive substances in open systems.
ERC 8f	Wide dispersive outdoor use resulting in inclusion into or onto a matrix
ERC 9a	Wide dispersive indoor use of reactive substances in closed systems.
ERC 9b	Wide dispersive outdoor use of reactive substances in closed systems
ERC 10a	Wide dispersive outdoor use of long-life articles and materials with low release
ERC 11a	Wide dispersive indoor use of long-life articles and materials with low release

**PC Market Sector by Type of Chemical Product**

PC 0	Other: flame retardant agent
PC 1	Adhesives, sealants



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PC 3	Air care products
PC 18	Ink and toners
PC 21	Laboratory chemicals
PC 23	Leather tanning, dye, finishing, impregnation and care products
PC 32	Polymer preparations and compounds
PC 34	Textile dyes, finishing and impregnating products; including bleaches and other processing aids
PC 9a	Coatings and paints, thinners, paint removes
PC 9b	Fillers, putties, plasters, modelling clay

**AC Article Category Related to Subsequent Service Life**

AC 1	Vehicles
AC 2	Machinery, mechanical appliances, electrical/electronic articles
AC 4	Stone, plaster, cement, glass and ceramic articles
AC 10	Rubber articles
AC 13	Plastic articles

This SDS is prepared for the purpose of providing health, safety and environmental data. The information given corresponds with our actual knowledge and experience. While the descriptions, data and information contained in the present datasheet are provided in good faith, these are to be considered as guidance only. Thus, this SDS shall not constitute a guarantee for any specific properties or quality standards.

This information is meant to describe our product in view of possible safety requirements, but it remains the responsibility of the customer to determine the applicability of the information and suitability of any product for its own particular purpose, to provide a safe workplace and comply with all applicable laws and regulations.

Since handling, storage, use and disposal of the product are beyond our control and our knowledge, we do exclude any responsibility connecting to handling, storage, use or disposal of this product.

Please note that if the product used as a component of another product, this SDS information may not be applicable.