

Sintabond™

Material Safety Data

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Safety items	Specific data	OSHA DIN	
		1)	2)
<u>Material identification</u>			
Trade name	Sintabond	1	–
Chemical name	Polyethylene (adhesive modified)	1	1.1
Chemical family	Polyolefin's	1	1.1
Chemical Abstract Service (CAS) registry number	9002-88-44	1	N/A ³
Appearance	Solid granulate or powder	7	1.2
Colour	Colourless or white	N/A	1.3
Smell	Weak typical parafine odour	7	1.4
<u>Physical Properties</u>			
Density:			
Apparent density	910-965 kg/m ³	N/A	2.2
Bulk density:		N/A	2.2
Granulate:	450-570 kg/m ³		
Powder:	350-450 kg/m ³		
Rheology:			
Melting point/range	120-130 °C	N/A	2.2
Viscosity	N/A	N/A	2.4
Boiling point	N/A	7	N/A
Evaporation:			
Vapour pressure	N/A	7	2.3
Vapour density (air =1)	N/A	7	N/A
Evaporation rate	N/A	7	N/A
pH-value:			
at...g/l H ₂ O	not soluble in H ₂ O pH of dispersion = 6-8	7	2.6

¹ Section numbers according to OSHA (Occupational Safety and Health Administration of the U.S. Department of Labour) Form 20.

² Section numbers according to DIN (Sicherheitsdatenblatt fuer chemische Stoffe und Zubereitungen) 52 9000

³ N/a = not applicable

Solubility in:

Water	Insoluble	7	2.5
Other(s)	soluble in cycloaliphatic and halogenated aromatic solvents	N/A	2.5

Physical hazard data

Decomposition temperature >300 °C N/A 2.10

Flash point 380-400 °C 5 2.7

NFPA hazard signal:

health	Chemically unreactive and biologically inert	2	N/A
stability		2	N/A
flammability		2	N/A
special		2	N/A

Stability: Stable 5 2.13

Conditions to avoid Strong oxidizing agents 5 2.13
temperatures above 300 °C

hazardous decomposition At processing temperatures some degree of thermal degradation will occur. Although highly dependant on temperature and environmental conditions, a variety of decomposition products may be present ranging from simple hydrocarbons (such as methane and propane) to toxic/irritating gases (e.g. carbon monoxide, acrolein, acids, ketones, aldehydes). 5 2.13

Hazardous reactions: Not hazardous. 5 2.12

conditions to avoid Electrostatic loading. 5 N/A

Incompatibility:

materials to avoid Strong oxidizing agents. 5 N/A

Hazard specifications

Known hazards:

eye hazard	Product fines can cause mechanical irritation. Flush eyes with water if irritation occurs.	2	N/A
lung toxin	Product fines may cause mechanical irritation at inhalation.	2	N/A
Skin hazard	Product is unlikely to cause irritation. If contact with molten product occurs, treat as for thermal burn.	2	N/A

CAUTION! PLASTIC BAG OR LINER MAY CAUSE STATIC IGNITION HAZARD. DO NOT HANDLE BAGS OR LINERS IN THE PRESENCE OF FLAMMABLE VAPOR.
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Emergency response

Fire

extinguishing media	Use water fog, foam, dry chemical, or CO ₂	4	6.2
special procedures	Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker and rubber boots) including a positive pressure self-contained breathing apparatus. Cool fire exposed containers with water.	4	N/A
unusual hazards	Treat the material as a solid that can burn. coated parts generally burn slowly with a low smoke density and flaming drips. Under certain conditions the material can burn with high smoke density.	4	6.4

<p>Exposure: Effects of exposure</p>	<ul style="list-style-type: none"> • <u>Respiration protection</u> not ordinarily required. • <u>Protective clothing</u> not ordinarily required. • <u>Adequate ventilation</u> is required when product is heated is processing. • <u>Local exhaust ventilation</u> should be provided in the vicinity of processing machinery. 	6	N/A
<p>First aid measures/ Emergency measures</p>	<ul style="list-style-type: none"> • <u>Eye injuries:</u> any materials entering the eye should be flushed out with copious volumes of water. • <u>inhalation of fumes:</u> An affected person should be removed into fresh air as quickly as possible, kept warm and artificial respiration supplied when necessary. • <u>Burns:</u> any molten material on the skin should be cooled as quickly as possible, e.g. in cold water, but should not be pulled off. Medical attention should be obtained immediately. 	4	6.4
<p>Spills: steps to be taken</p>	<p>Shoved or sweep up or use industrial vacuum cleaner. Avoid generating dust clouds. Put into containers for reclaiming or disposal.</p>	4	6.1
<p>waste disposal method</p>	<p>Place in an appropriate disposal facility in compliance with local regulations.</p>	4	5.5

Various

Special regulations

None

N/A 4

Toxicological data

Sintabond is regarded as biologically inert.

N/A 7

Other information processing

Various measures must be taken where handling and processing of Sintabond are concerned. This is due to the special additives contained in the product..

Non applicable items

The following safety items do not apply to Sintabond:

Safety items	OSHA	DIN
Material identification:		
formula	1	1.1
synonym(s)	1	1.1
volatile components	1	1.1
other characteristics(s)	7	N/A
hazardous ingredient(s)	1	N/A
Physical hazard data:		
flammability	5	N/A
explosion limits	N/A	2.9
threshold limit value (TLV)	2	N/A
Permissible exposure level (PEL)	2	N/A
Hazard specifications:		
blood toxin	2	N/A
carcinogen	2	N/A
combustible liquid	2	N/A
compressed gas	2	N/A
corrosive material	2	N/A
explosive material	2	N/A
flammable material	2	N/A
highly toxic agent	2	N/A
irritant	2	N/A
kidney toxin	2	N/A
liver toxin	2	N/A
nervous system toxin	2	N/A
organic peroxide	2	N/A
oxidizer	2	N/A
pyrophoric material	2	N/A
reproductive material	2	N/A
sensitizer	2	N/A
toxic agent	2	N/A
unstable material	2	N/A
water reactive material	2	N/A
Handling and storage		
Protective equipment (other protection)	3	5.2
