

Safety Data Sheet

according to Regulation (EC) No. 453/2010 Date of issue: 29/03/2015 Revision date: 27/02/2018

Version: 1.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1. Product identifier			
Product form	: Solid Preformed Material		
Name	: HiFlex Preformed - all grades / colours		
1.2. Relevant identified uses of the s	ubstance or mixture and uses advised against		
1.2.1. Relevant identified uses			
Main use category	: Industrial use, Professional use		
Industrial/Professional use spec	: Industrial For professional use only		
Use of the substance/mixture	: Thermoplastic Preformed Road Markings		
1.2.2. Uses advised against			
No additional information available			
1.3. Details of the supplier of the safety data sheet			

Hitex Traffic Safety Ltd. Cloister Wav Ellesmere Port Cheshire CH65 4EL Tel: 0151-355 4100 Fax: 0151-355 4171 Web site: www.hitexinternational.com Email: info@hitexinternational.com

1.4. Emergency telephone number

Emergency number

: +44(0) 151 355 4100 Hours of operation : 08.00 to 17.00 GMT

Country	Organisation/Company	Address	Emergency number
IRELAND (REPUBLIC OF)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
UNITED KINGDOM	National Poisons Information Service (NHS Direct)	http://www.npis.org	111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Sens. 1 H317

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects No additional information available

Label elements 2.2

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP)



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: Warning

GHS07

- : Resin acids and Rosin acids, fumarated, esters with pentaerythritol
- : H317 May cause an allergic skin reaction
- : P261 Avoid breathing dust

P272 - Contaminated work clothing should not be allowed out of the workplace P280 - Wear eye protection, face protection, protective clothing, protective gloves EN (English)





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P302+P352 - IF ON SKIN: Wash with plenty of water P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Resin acids and Rosin acids, fumarated, esters with pentaerythritol	(CAS No) 94581-15-4 (EC no) 305-514-1 (REACH-no) 01-2119485895-17-XXXX	5 - 15	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 4, H413

Full text of H-phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Wash with plenty of soap and water. Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects	
Symptoms/injuries after inhalation	: May cause an allergic skin reaction.
· · · · · · · · · · · · · · · · · · ·	attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the subs	stance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measure	ures
6.1. Personal precautions, protective equi	ipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
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6.1.2. For emergency responders		
Protective equipment	: Equip cleanup crew with proper protection.	
Emergency procedures	: Ventilate area.	
6.2. Environmental precautions		
Prevent entry to sewers and public waters. Notify a	uthorities if substance enters sewers or public waters.	
6.3. Methods and material for containment	and cleaning up	
Methods for cleaning up	: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.	
6.4. Reference to other sections		
See Heading 8. Exposure controls and personal pro-	otection.	
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust.	
Hygiene measures	: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.	
7.2. Conditions for safe storage, including	any incompatibilities	
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Heat and ignition sources. Keep container closed when not in use.	

Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

None

8.2. Exposure controls	
Appropriate engineering controls	: Provide adequate general and local exhaust ventilation.
Personal protective equipment	: Protective goggles. Gloves. Avoid all unnecessary exposure.





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- Hand protection Eye protection Respiratory protection
- : Wear protective gloves
- : Chemical goggles or safety glasses
- : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended



Other information

: Do not eat, drink or smoke during use.

.1. Information on basic physical and	chemical properties
Physical state	: Solid
Appearance	: Solid thermoplastic sheet
Colour	: Various (usually white or yellow but can be other colours)
Odour	: characteristic.
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 100 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 230 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density (bulk)	: 1.9 – 2.1 g cm ⁻³
Solubility	: Insoluble
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

CTION 10: Stability and reactivity		
1. Reactivity		
product is stable at normal handling and stora	ge conditions.	
2. Chemical stability		
ble under normal conditions.		
3. Possibility of hazardous reactions		
established.		
4. Conditions to avoid		
ect sunlight. Extremely high or low temperatures	5.	
5. Incompatible materials		
ong acids. Strong bases.		
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e al	e product is stable at normal handling and stora 2. Chemical stability able under normal conditions. 3. Possibility of hazardous reactions at established. 4. Conditions to avoid rect sunlight. Extremely high or low temperatures	1. Reactivity e product is stable at normal handling and storage conditions. 2. Chemical stability able under normal conditions. 3. Possibility of hazardous reactions at established. 4. Conditions to avoid rect sunlight. Extremely high or low temperatures. 5. Incompatible materials rong acids. Strong bases.



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10.6. Hazardous decomposition products	
Fume. Carbon monoxide. Carbon dioxide.	
SECTION 11: Toxicological informatic	on
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
Titanium(IV) oxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 6,8 mg/l/4h (Rat; Experimental value)
Skin corrosion/irritation	: Not classified
	Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified
	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
	Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
	Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
	Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated	: Not classified
exposure)	Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
ποριτατίστη παλατά	Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Titanium(IV) oxide (13463-67-7)		
LC50 fish 1	> 1000 mg/l (96 h; Pimephales promelas)	
EC50 Daphnia 1	< 1000 mg/l (432 h; Daphnia magna; Static system)	
LC50 fish 2	> 1 g/l (96 h; Leuciscus idus)	
EC50 Daphnia 2	< 500 mg/l (720 h; Daphnia magna; Static system)	
Threshold limit algae 1	61 mg/l (72 h; Pseudokirchneriella subcapitata)	

12.2. Persistence and degradability

Titanium(IV) oxide (13463-67-7)		
Persistence and degradability	Biodegradability: Not applicable. Low potential for Mobility in soil.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	

12.3. Bioaccumulative potential

	Titanium(IV) oxide (13463-67-7)		
	Bioaccumulative potential	Not bioaccumulative.	
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12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assess	sment	
No additional information available		
12.6. Other adverse effects		
Additional information	: Avoid release to the environment	
SECTION 13: Disposal considera	tions	
13.1. Waste treatment methods		
Waste disposal recommendations	: Dispose of contents/container to a licensed waste centre in accordance with	_
	local/regional/national/international regulations.	
Ecology - waste materials	: Avoid release to the environment.	
European List of Waste (LoW) code	: 20 01 27* - paint, inks, adhesives and resins containing dangerous substances	
SECTION 14: Transport informati	on	
In accordance with ADR / RID / IMDG / IATA		
14.1. UN number		
Not dangerous goods in terms of transport re	egulations	
	~	
14.2. UN proper shipping name		
Proper Shipping Name (ADR)	: Not applicable	
Proper Shipping Name (IMDG)	: Not applicable	
Proper Shipping Name (IATA)	: Not applicable	
Proper Shipping Name (ADN)	: Not applicable	
Proper Shipping Name (RID)	: Not applicable	
14.3. Transport hazard class(es)		
ADR		
Transport hazard class(es) (ADR)	: Not applicable	
IMDG		
Transport hazard class(es) (IMDG)	: Not applicable	
ΙΑΤΑ		
Transport hazard class(es) (IATA)	: Not applicable	
ADN		
Transport hazard class(es) (ADN)	: Not applicable	
RID		
Transport hazard class(es) (RID)	: Not applicable	
14.4. Packing group		
Packing group (ADR)	: Not applicable	
Packing group (IMDG)	: Not applicable	
Packing group (IATA)	: Not applicable	
Packing group (ADN)	: Not applicable	
Packing group (RID)	: Not applicable	
14.5. Environmental hazards		
Dangerous for the environment	: No	
Marine pollutant	: No	
Other information	: No supplementary information available	
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14.6. Special precautions for user					
14.6.1. Overland transport					
14.6.2. Transport by sea					
14.6.3. Air transport					
14.6.4. Inland waterway transport					
Carriage prohibited (ADN)	: No				
Not subject to ADN	: No				
14.6.5. Rail transport					
Carriage prohibited (RID)	: No				
14.7. Transport in bulk according to A	Annex II of MARPOL 73/78 and the IBC Code				
Not applicable					
SECTION 15: Regulatory information	tion				
	I regulations/legislation specific for the substar	ace or mixture			
15.1.1. EU-Regulations		N. 4007/0000			
o 11	ording to Annex XVII of the REACH Regulation (EC	,			
categories set out in Annex I to Regulation	teria for any of the following hazard classes or (EC) No 1272/2008: Hazard classes 3.1 to 3.6, fertility or on development, 3.8 effects other than	HiFlex Road Markings - Resin acids and Rosin acids, fumarated, esters with pentaerythritol - Silicon dioxide			
narcotic effects, 3.9 and 3.10	Tertility of on development, 5.6 enects other than				
3.c. Substances or mixtures fulfilling the cri categories set out in Annex I to Regulation	teria for any of the following hazard classes or (EC) No 1272/2008: Hazard class 4.1	Resin acids and Rosin acids, fumarated, esters with pentaerythritol			
Contains no substance on the REACH candi					
Contains no REACH Annex XIV substances					
15.1.2. National regulations					
Germany					
Water hazard class (WGK)	: 3 - severe hazard to waters				
WGK remark	: Classification water polluting based on the				
	Verwaltungsvorschrift wassergefahrdende	er Stoffe (VwVwS) of 27 July 2005 (Anhang 4)			
15.2. Chemical safety assessment					
No chemical safety assessment has been ca	arried out				
SECTION 4C: Other information					
SECTION 16: Other information					
Data sources	Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances an mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.				
Other information	: None.				
Full text of H- and EUH-phrases:					
Aquatic Chronic 4	Hazardous to the aquatic environment				
Eye Irrit. 2	Serious eye damage/eye irritation, Ca Sensitisation — Skin, category 1	tegory 2			
Skin Sens. 1					
STOT RE 2	ated exposure, Category 2				
H317 May cause an allergic skin reaction					
H319 Causes serious eye irritation H373 May cause damage to organs through prolonged or repeated exposure					
H413 May cause long lasting harmful effects to aquatic life					





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To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Revision Date : 27th February 2018

Revision Note : Updated to remove obsolete classification.

