DEMU Fixing Anchor T-FIXX by HALFEN Gmbh

CLASSIFICATION: 01 73 23

PRODUCT DESCRIPTION: The DEMU Fixing Anchor T-FIXX is a cast in place threaded insert that is an innovative combination of a socket anchor and bolt anchor. T-FIXX is manufactured from steel precision tubing that is crimped at one end and has a threaded opening on the opposite end. An optional plastic data clip is attached to the opening to clearly identify the system once cast into concrete. Corrosion protection is provided with an elctro-plated coating (GV or Yellow Zinc).

Residuals/Impurities

C Partially Considered

C Not Considered

Section 1: Summary

CONTENT INVENTORY

Inventory Reporting Format

Nested Materials Method
 Basic Method

Threshold Disclosed Per

- C Material
- Product

Threshold level 100 ppm
1,000 ppm
Per GHS SDS
Per OSHA MSDS

C Other

Explanation(s) provided for Residuals/Impurities?

Considered

Basic Method / Product Threshold

All Substances Above the Threshold Indicated Are:

Characterized O Yes Ex/SC O Yes O No % weight and role provided for all substances.

Screened O Yes Ex/SC O Yes O No All substances screened using Priority Hazard Lists with results disclosed.

Identified O Yes Ex/SC O Yes O No All substances disclosed by Name (Specific or Generic) and Identifier.

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY GREENSCREEN SCORE | HAZARD TYPE

DEMU FIXING ANCHOR T-FIXX [STEEL NoGS ZINC LT-P1 | AQU | END | MUL | PHY MANGANESE LT-P1 | END | MUL | REP SILICON LT-UNK CARBON LT-UNK PHOSPHORUS BM-2 | MAM | PHY SULFUR LT-UNK | SKI ALUMINUM LT-P1 | RES | END | PHY]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

HALFEN worked with the the HPDC Approved Preparer, ToxServices LLC, to screen all intentionally added ingredients in the product formulation to the level of 100 ppm (0.01%).

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings. VOC emissions: CDPH Standard Method V1.2 (Section 01350/CHPS) -Residential scenario

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

Yes
 No

PREPARER: ToxServices LLC VERIFIER: VERIFICATION #: SCREENING DATE: 2018-07-12 PUBLISHED DATE: 2019-03-19 EXPIRY DATE: 2021-07-12

Health Product Declaration v2.1.1

created via: HPDC Online Builder

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

DEMU FIXING ANCHOR T-FIXX

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: HALFEN worked with the the HPDC Approved Preparer, ToxServices LLC, to screen all intentionally added ingredients and all residuals/impurities that are present in product formulation to the level of 100 ppm (0.01%)

OTHER PRODUCT NOTES:

AZARD SCREENING METHOD: Pha	HAZARD SCREENING DATE: 2018-07-12			
: 98.0200 - 99.8000	GS: NoGS	RC: None NA	ano: No	ROLE: Structure Component
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
	No hazards found			*3rd Party Screened

SUBSTANCE NUTES:

AZARD SCREENING METHOD: Pharos	Chemical and Materials Library	HAZARD SCREE	NING DATE: 2018	8-07-12
6: 0.1960 - 0.1998	GS: LT-P1	RC: None	NANO: NO	ROLE: Finish Component
HAZARD TYPE	AGENCY AND LIST TITLES	WARNIN	GS	
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life		
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effect		
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air		
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)		 In contact with may ignite spor 	water releases flammable gases Itaneously

3rd Party Screened

MANGANESE					ID: 7439-96-
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2018-07-12			
%: 0.0000 - 1.2000	GS: LT-P1	RC: None	NANO: NO	ROLE: Structure	Component
HAZARD TYPE	AGENCY AND LIST TITLES	WAF	RNINGS		
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor			
MULTIPLE	German FEA - Substances Hazardous Waters	to Class 2 - Hazard to Waters			
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B			
				3re	d Party Screened
SUBSTANCE NOTES:					
SILICON					ID: 7440-21
HAZARD SCREENING METHOD: Pha	aros Chemical and Materials Library	HAZARD SCR	EENING DATE: 201	18-07-12	
6: 0.0000 - 0.3500	GS: LT-UNK	RC: None	NANO: NO	ROLE: Structure	Component
HAZARD TYPE	AGENCY AND LIST TITLES	10/0 E	RNINGS		

No hazards found

SUBSTANCE NOTES:

AZARD SCREENING METHOD: Pharo	s Chemical and Materials Library	HAZARD SCREI	ENING DATE: 201	8-07-12
o: 0.0000 - 0.1700	GS: LT-UNK	RC: None	NANO: NO	ROLE: Structure Component
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
	No hazards found			*3rd Party Screened*
SUBSTANCE NOTES:				
PHOSPHORUS				ID: 7723-14-
AZARD SCREENING METHOD: Pharo	s Chemical and Materials Library	HAZARD SCREE	ENING DATE: 201	8-07-12
.: 0.0000 - 0.0200	GS: BM-2	RC: None	NANO: NO	ROLE: Structure Component

3rd Party Screened

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances		
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid		
		*3rd Party Screened		
SUBSTANCE NOTES:				
SULFUR		ID: 7704-3		
HAZARD SCREENING METHOD: Pharos C	Chemical and Materials Library	HAZARD SCREENING DATE: 2018-07-12		
%: 0.0000 - 0.0200	GS: LT-UNK	RC: None NANO: No ROLE: Structure Component		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation		
		*3rd Party Screened		
SUBSTANCE NOTES:				
ALUMINUM		id: 7429-9		
HAZARD SCREENING METHOD: Pharos C	Chemical and Materials Library	HAZARD SCREENING DATE: 2018-07-12		
%: 0.0000 - 0.0100	GS: LT-P1	RC: None NANO: No ROLE: Structure Component		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only		
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid		
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air		
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases		
		*3rd Party Screened		

SUBSTANCE NOTES:

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS	CDPH Standard Method V1.2 (Section 01350/CHPS) - Residential scenario			
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: No VOC Testing Performed	ISSUE DATE: 2018- 07-12	EXPIRY DATE:	CERTIFIER OR LAB: N/A	
CERTIFICATE URL:				

CERTIFICATION AND COMPLIANCE NOTES:

General Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

PLASTIC DATA CLIP

HPD URL: No HPD Available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

An optional HDPE plastic data clip is attached to the opening to clearly identify the system once cast into concrete. The review of the HDPE plastic clip was not included under this HPD.

Section 5: General Notes

HALFEN worked with the HPDC Approved Preparer, ToxServices LLC, to confirm that full formulation disclosure was properly obtained to the 100 ppm level, and that all residuals and impurities have been considered under the preparation of this HPD.

MANUFACTURER INFORMATION

MANUFACTURER: HALFEN Gmbh Address: Liebigstrasse 14 Langenfeld Richrath 40764, Germany WEBSITE: www.halfen.com CONTACT NAME: Raimo Fuellsack-Koeditz TITLE: Innovation and Sustainability Officer PHONE: +49 (0) 3466 3268 - 200 EMAIL: raimo.fuellsack-koeditz@halfen.de

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity CAN Cancer DEV Developmental toxicity END Endocrine activity EYE Eye irritation/corrosivity GEN Gene mutation

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspecified (insuficient data to benchmark)

Recycled Types

PreC Preconsumer (Post-Industrial) PostC Postconsumer Both Both Preconsumer and Postconsumer Unk Inclusion of recycled content is unknown None Does not include recycled content

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material Nested Method / Product Threshold Substances listed within each material per threshold indicated per product Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology Third Party Verified Verification by independent certifier approved by HPDC Preparer Third party preparer, if not self-prepared by manufacturer Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.

GLO Global warming MAM Mammalian/systemic/organ toxicity MUL Multiple hazards NEU Neurotoxicity OZO Ozone depletion PBT Persistent Bioaccumulative Toxic PHY Physical Hazard (reactive) REP Reproductive toxicity RES Respiratory sensitization SKI Skin sensitization/irritation/corrosivity LAN Land Toxicity NF Not found on Priority Hazard Lists

LT-P1 List Translator Possible Benchmark 1 LT-1 List Translator Likely Benchmark 1 LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark) NoGS Unknown (no data on List Translator Lists)