

HPD UNIQUE IDENTIFIER: 24095

CLASSIFICATION: 03 15 19 Cast-In Concrete Anchors

PRODUCT DESCRIPTION: HTA-CE(HTA) HZA Anchor Channel – The product portfolio of HALFEN cast-in anchor channel systems comprise cast-in anchor channels type HTA-CE (HTA), and type HZA, with corresponding hook-head channel bolts and hammer-head channel bolts identified as HS (for HTA-CE and HTA), and HZS (for HZA). The anchor channel comprises a C-shaped steel profile with mounted anchors on the channel back. These anchors are formed as round bolt anchors or I-anchors. The anchors are mounted on the channel back by riveting (round bolt anchors) or welding (I-anchors). The assembled channels are the hot dip galvanized to provide corrosion protection. The inner section of the channel is then filled with a PE foam which prevents concrete from entering the channel during casting of the concrete.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i> Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No % weight and role provided for all substances. Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No All substances screened using Priority Hazard Lists with results disclosed. Identified <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No All substances disclosed by Name (Specific or Generic) and Identifier.
<input type="radio"/> Nested Materials Method	<input checked="" type="radio"/> 100 ppm	<input checked="" type="radio"/> Considered	
<input checked="" type="radio"/> Basic Method	<input type="radio"/> 1,000 ppm	<input type="radio"/> Partially Considered	
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	<input type="radio"/> Not Considered	
<input type="radio"/> Material	<input type="radio"/> Other	Explanation(s) provided for Residuals/Impurities? <input checked="" type="radio"/> Yes <input type="radio"/> No	

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
 HTA & HZA HDG ANCHOR CHANNELS [STEEL NoGS ZINC LT-P1 |
 AQU | END | MUL | PHY POLYETHYLENE LT-UNK MANGANESE LT-P1
 | END | MUL | REP COPPER LT-P1 | AQU | MUL CARBON LT-UNK
 PHOSPHORUS BM-2 | MAM | PHY LEAD BM-1 | END | PBT | REP | MUL
 | CAN | DEV | GEN SILICON LT-UNK SULFUR LT-UNK | SKI ALUMINUM
 BM-1 | END | RES | PHY ISOBUTANE LT-P1 | CAN | GEN | PHY
 PROPANE LT-UNK | PHY]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

HALFEN worked with the the HPD Third Party Preparer, ToxServices LLC, to screen all intentionally added ingredients in the two product formulations to 100 ppm (0.01%).

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: MAS Certified Green - VOC Emissions

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-03-16

PUBLISHED DATE: 2021-03-16

EXPIRY DATE: 2024-03-16

Section 2: Content in Descending Order of Quantity

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 2.2, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-2-standard

HTA & HZA HDG ANCHOR CHANNELS

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: HALFEN worked with the HPD Third Party Preparer, ToxServices LLC, to confirm that all residuals and impurities have been considered for both HALFEN product formulations under this current HPD.

OTHER PRODUCT NOTES:

STEEL

ID: 12597-69-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-03-16

#: 94.2200 - 95.4100 GS: NoGS RC: None NANO: No SUBSTANCE ROLE: Alloy element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

ZINC

ID: 7440-66-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-03-16

#: 2.9400 - 2.9700 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Corrosion inhibitor

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
PHY	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHY	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: Part of zinc coating in hot dip galvanized components

POLYETHYLENE

ID: 9002-88-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-03-16

#: 0.9200 - 1.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Blowing agent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES: Foam Component		

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-16	
%: 0.5400 - 0.6000	GS: LT-P1	RC: None	NANO: No SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor	
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters	
REP	GHS - Japan	Toxic to reproduction - Category 1B [H360]	
SUBSTANCE NOTES:			

COPPER

ID: 7440-50-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-16	
%: 0.4000 - 0.4500	GS: LT-P1	RC: None	NANO: No SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
AQU	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects	
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters	
SUBSTANCE NOTES:			

CARBON

ID: 7440-44-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-16	
%: 0.1300 - 0.1400	GS: LT-UNK	RC: None	NANO: No SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES:			

PHOSPHORUS

ID: 7723-14-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-16	
%: 0.0700 - 0.0800	GS: BM-2	RC: None	NANO: No SUBSTANCE ROLE: Alloy element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
PHY	EU - GHS (H-Statements)	H228 - Flammable solid

SUBSTANCE NOTES:

LEAD

ID: 7439-92-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-03-16**

#: **0.0420 - 0.0420** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Corrosion inhibitor**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
REP	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
DEV	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
REP	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A

GEN	MAK	Germ Cell Mutagen 3a
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
DEV	EU - GHS (H-Statements)	H362 - May cause harm to breast-fed children
REP	GHS - New Zealand	6.8A - Known or presumed human reproductive or developmental toxicants
CAN	GHS - Korea	Carcinogenicity - Category 1 [H350 - May cause cancer]
REP	GHS - Korea	Reproductive toxicity - Category 1 [H360 - May damage fertility or the unborn child]
DEV	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility
REP	GHS - Japan	Toxic to reproduction - Category 1A [H360]

SUBSTANCE NOTES: component of hot dip galvanized components

SILICON

ID: 7440-21-3

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE:	2021-03-16
%:	0.0400 - 0.0500	GS:	LT-UNK
RC:	None	NANO:	No
SUBSTANCE ROLE:	Alloy element		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	

SUBSTANCE NOTES:

SULFUR

ID: 7704-34-9

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE:	2021-03-16
%:	0.0200 - 0.0300	GS:	LT-UNK
RC:	None	NANO:	No
SUBSTANCE ROLE:	Alloy element		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation	

SUBSTANCE NOTES:

ALUMINUM

ID: 7429-90-5

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE:	2021-03-16
%:	0.0190 - 0.1700	GS:	BM-1
RC:	None	NANO:	No
SUBSTANCE ROLE:	Alloy element		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor	
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced	
PHY	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases	
PHY	EU - GHS (H-Statements)	H228 - Flammable solid	

SUBSTANCE NOTES:

ISOBUTANE

ID: 75-28-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-03-16**

%: **0.0000 - 0.0500** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	GHS - Australia	H350 - May cause cancer
GEN	GHS - Australia	H340 - May cause genetic defects
PHY	EU - GHS (H-Statements)	H220 - Extremely flammable gas

SUBSTANCE NOTES: Component of Foam Filler within the channel

PROPANE

ID: 74-98-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-03-16**

%: **0.0000 - 0.0500** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHY	EU - GHS (H-Statements)	H220 - Extremely flammable gas

SUBSTANCE NOTES: Foam Component

Section 3: Certifications and Compliance

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

MAS Certified Green - VOC Emissions

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2019-03- EXPIRY DATE:
19

CERTIFIER OR LAB: Christopher
Hurd

APPLICABLE FACILITIES: HALFEN USA - Windcrest,
Texas HALFEN GmbH - Langenfeld, Germany

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: One is not available for this product (N/A)

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.

HS T-BOLTS AND HZS T-BOLTS

HPD URL: No HPD Available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

HALFEN carbon steel HS T-bolts (for HTA-CE and HTA) and HZS T-bolts (for HZA) are hook-head and hammer head channel bolts that are used to fasten components to the HTA/HZA HDG Anchor Channels. The channels bolts consist of a threaded bolt , hexagonal nut and washer.

Section 5: General Notes

HALFEN worked with the HPD Third Party Preparer, ToxServices LLC, to confirm that full formulation disclosure was 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**
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 EMAIL: **raimo.fuellsack-koeditz@halfen.de**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
BM-2 Benchmark 2 (use but search for safer substitutes)	
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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.