

**G-Coat H110 (Monobutyltin Trichloride)****SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product Name G-Coat H110 (Monobutyltin Trichloride)
 Synonyms MBTC

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s) Not known.
 Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier

Company Identification Gulbrandsen Private Limited
 Address of Manufacturer On Coastal Highway
 Village Mujpur
 Tal:Padra, Vadodara
 Gujarat, India

Postal code 391440
 Telephone +91 2662 229100
 Fax +91 2662 229210
 E-mail gpl-msds@gulbrandsen.com
 Office hours 09:00 - 18:30 (Monday - Friday)

Only representative

Company Identification Gulbrandsen EC Ltd
 Address (Responsible Person: Mr. John Knychala)
 Beck House, 13 Water Lane,
 Ancaster, Lincs,
 United Kingdom

Postal code NG32 3QS
 Telephone (+44) 01400230700
 Fax (+44) 01400230601
 E-mail reach@gulbrandsen.com
 Website <http://www.gulbrandsen.com>

1.4 Emergency telephone number

Emergency Phone No. +91 2662 229200
 Contact Company

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

GB CLP Regulation, UK SI 2019/720 and Skin Corr. 1B :Causes severe skin burns and eye damage.

UK SI 2020/1567 Eye Dam. 1 :Causes serious eye damage.

Acute Tox. 4 :Harmful if inhaled.

STOT SE 3 :May cause respiratory irritation.




Aquatic Acute 1 :Very toxic to aquatic life.

Aquatic Chronic 1 :Very toxic to aquatic life with long lasting effects.



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2.2 Label elements

	According to GB CLP Regulations, UK SI 2019/720 and UK SI 2020/1567
Product Name	G-Coat H110 (Monobutyltin Trichloride)
Hazard Pictogram(s)	  
	GHS05 GHS07 GHS09
Signal Word(s)	Danger
Hazard Statement(s)	H314: Causes severe skin burns and eye damage. H332: Harmful if inhaled. H335: May cause respiratory irritation. H410: Very toxic to aquatic life with long lasting effects.
Precautionary Statement(s)	P260: Do not breathe vapour. P280: Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTRE/doctor.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / Registration number(s)	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Monobutyltin trichloride	1118-46-3	214-263-6 UK-01-1639819641-6-0001	≥98	Skin Corr. 1B H314 Eye Dam. 1 H318 Acute Tox. 4 H332 STOT SE 3 H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	GHS05 GHS07 GHS09
Ethanol	64-17-5	200-578-6 UK-01-8186404962-2-0027	≤2	Flam. Liq. 2 H225	GHS02



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Dibutyltin dichloride	683-18-1	211-670-0	≤0.1	Acute Tox. 2 H300 Acute Tox. 4 H312 Skin Corr. 1B H314 Eye Dam. 1 H318 Acute Tox. 2 H330 Muta. 2 H341 Repr. 1B H360 STOT RE 1 H372 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	GHS06 GHS05 GHS08 GHS07 GHS09
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For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE/doctor.
Skin Contact	Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTRE/doctor.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor.
Ingestion	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. May cause respiratory irritation.
Harmful if inhaled.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	As appropriate for surrounding fire.
Unsuitable extinguishing media	None.

5.2 Special hazards arising from the substance or mixture

Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Halogenated compounds, Metal oxides.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe vapour. Wear appropriate personal protective equipment, avoid direct contact. Ensure full personal protection (including respiratory protection) during removal of spillages. Wash contaminated clothing before reuse.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Shut off source of leak if safe to do so. Adsorb spillages onto sand, earth or any suitable adsorbent material. Collect spillage. Transfer to a container for disposal.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Do not breathe vapour. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin and eyes. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke at the work place.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

Strong oxidising agents, Acids, Alkalis.

7.3 Specific end use(s)

Not known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Ethanol	64-17-5	1000	1920			
Tin compounds, organic, except Cyhexatin (ISO), (as Sn)	683-18-1		0.1		0.2	Sk

Region

Source

United Kingdom UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)



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Remark	Notes
Sk	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

8.2 Exposure controls

8.2.1. Appropriate engineering controls Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection Wear protective eyewear (goggles, face shield, or safety glasses).



Skin protection Wear protective clothing and gloves: Impervious gloves.
Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Respiratory protection Wear suitable respiratory protection.



Thermal hazards Not applicable.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Colour: Colourless.
Odour	Not known.
Odour threshold	Not established.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	92-100°C @ 10 mm Hg
Flash Point	112°C [Open cup] (ASTM D – 92) 79°C [Closed cup] (ASTM D – 93)
Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	0.1 kPa
Vapour density	9.7
Density (g/ml)	Not known.
Relative density	1.69



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Solubility(ies)	Solubility (Water): Not known. Solubility (Other): Partially soluble: Methanol, Diethylether, Acetone.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Heat and direct sunlight.

10.5 Incompatible materials

Strong oxidising agents, Acids, Alkalis.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Calculation method : Not classified. Calculation method : Calculated acute toxicity estimate (ATE): 5000 Monobutyltin trichloride: LD50 (oral,rat) mg/kg: 2140
Acute toxicity - Skin Contact	Calculation method : Not classified. Calculation method : Calculated acute toxicity estimate (ATE): 1000000 LD50 (skin,rat) mg/kg: >5000
Acute toxicity - Inhalation	Calculation method : Harmful if inhaled. Calculation method : Calculated acute toxicity estimate (ATE): 11.21 LC50 (inhalation,rat) mg/l/4h: 11.24
Skin corrosion/irritation	Calculation method : Causes severe skin burns and eye damage. No data.
Serious eye damage/irritation	Calculation method : Causes serious eye damage. No data.
Skin sensitization data	Calculation method : Not classified. It is not a skin sensitiser.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified. There is no evidence of mutagenic potential.



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Carcinogenicity	Calculation method : Not classified. No evidence of carcinogenicity.
Reproductive toxicity	Calculation method : Not classified. No evidence of reproductive effects.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : May cause respiratory irritation. No data.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.

11.2 Other information

Not known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

	Very toxic to aquatic life with long lasting effects.
Toxicity - Aquatic invertebrates	No data.
Toxicity - Fish	No data.
Toxicity - Algae	No data.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and degradability

Not readily biodegradable. The product is likely to persist in the environment.

12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of this material and its container as hazardous waste. Dispose of empty containers and wastes safely. Incineration or landfill should only be considered when recycling is not feasible.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.



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SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 3265

14.2 UN proper shipping name

UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Monobutyltin trichloride)

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 8
 ADR Classification Code C3
 Special Provisions 274
 Limited Quantities 1 L
 Excepted Quantities E2
 Emergency Action Code 2X
 Packing Instructions for Packages P001 IBC02
 Mixed Packing Instructions for Packages MP15
 Instructions for Portable Tanks T11
 Special Provisions for Portable Tanks TP2 TP27
 Tank Code for Tanks L4BN
 Vehicle for Tank Carriage AT
 ADR Transport Category 2
 Tunnel Restriction Code E
 ADR HIN 80

IMDG

IMDG Class 8
 Special Provisions 274
 Limited Quantities 1 L
 Excepted Quantities E2
 Packing Instructions for Packages P001 IBC02
 Instructions for Portable Tanks T11
 Special Provisions for Portable Tanks TP2 TP27
 IMDG EMS F-A, S-B
 Stowage and Handling Category B SW2
 Segregation SGG1 SG36 SG49

ICAO/IATA

IATA Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Monobutyltin trichloride)
 Excepted Quantities E2
 Passenger and Cargo Aircraft Limited Y840
 Quantities Packing Instructions
 Passenger and Cargo Aircraft Limited 0.5L
 Quantities Max net Qty
 Passenger and Cargo Aircraft Packing 851
 Instructions



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Passenger and Cargo Aircraft Max net Qty	1L
Cargo Aircraft Packing Instructions	855
Cargo Aircraft Max net Qty	30L
Special Provisions	A3, A803
Emergency Response Guidebook (ERG)	8L
Code	
Labels	
Labels	8



14.4 Packing group

Packing group II

14.5 Environmental hazards

Environmental hazards Classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United Kingdom Regulations - Authorisations and/or Restrictions On Use

UK REACH Candidate List of Substances Dibutyltin dichloride (683-18-1)

of Very High Concern for Authorisation

UK REACH Authorisation List (Annex XIV) list of substances subject to

authorisation

authorisation

UK REACH Restrictions List (Annex XVII) Monobutyltin trichloride (1118-46-3), Ethanol (64-17-5)

Restrictions on the manufacture, placing

on the market and use of certain

dangerous substances, mixtures and

articles

UK REACH Rolling Action Plan (RAP) Not listed

The Persistent Organic Pollutants Regulations 2007 (SI 2007/3106) as

amended

amended

The Ozone-Depleting Substances and Fluorinated Greenhouse Gases

(Amendment etc.) (EU Exit) Regulations

2019 (SI 2019/583)

2019 (SI 2019/583)



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The Prior Informed Consent (PIC) Dibutyltin dichloride (683-18-1)
Regulations concerning the export and
import of hazardous chemicals
SI2008/2108 as amended
European Regulations - Authorisations and/or Restrictions On Use
Community Rolling Action Plan (CoRAP) Monobutyltin trichloride (1118-46-3)

15.2 Chemical Safety Assessment

United Kingdom

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

9, 11, 14, 16

LEGEND

Hazard Pictogram(s)



GHS05



GHS07



GHS09

GHS02: GHS: Flame

GHS06: GHS: Skull and crossbones

GHS08: GHS: Health hazard

Hazard classification

Flam. Liq. 2 : Flammable liquid, Category 2

Acute Tox. 2 : Acute toxicity, Category 2

Acute Tox. 4 : Acute toxicity, Category 4

Skin Corr. 1B : Skin corrosion/irritation, Category 1B

Eye Dam. 1 : Serious eye damage/irritation, Category 1

STOT SE 3 : Specific target organ toxicity — single exposure, Category 3

Muta. 2 : Germ cell mutagenicity, Category 2

Repr. 1B : Reproductive toxicity, Category 1B

STOT RE 1 : Specific target organ toxicity — repeated exposure, Category 1

Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1

Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1

Hazard Statement(s)

H225: Highly flammable liquid and vapour.

H300: Fatal if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H330: Fatal if inhaled.

H332: Harmful if inhaled.



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H335: May cause respiratory irritation.
H341: Suspected of causing genetic defects.
H360: May damage fertility or the unborn child.
H372: Causes damage to organs through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P260: Do not breathe vapour.
P264: Wash hands and exposed skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTRE/doctor.
P312: Call a POISON CENTRE/doctor if you feel unwell.
P363: Wash contaminated clothing before reuse.
P391: Collect spillage.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE : Acute Toxicity Estimate
CAS : Chemical Abstracts Service
EC : European Community
IATA : International Air Transport Association
IBC : Intermediate Bulk Container
ICAO : International Civil Aviation Organization
IMDG : International Maritime Dangerous Goods
LTEL : Long term exposure limit
PBT : Persistent, Bioaccumulative and Toxic
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
RID : Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
UN : United Nations



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vPvB : very Persistent and very Bioaccumulative

Key literature references and sources for GB CLP Regulation, UK SI 2019/720 and UK SI 2020/1567
data used to compile the SDS

Training advice

Regular safety training as appropriate

Disclaimers

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