

## METALGUARD® H50

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

### SECTION 1: Identification

#### 1.1 Product identifier

Trade name **METALGUARD® H50**  
Product code(s) H50

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

Relevant identified uses  
Corrosion inhibitor for automotive antifreeze  
Industrial use  
Professional use

Uses advised against  
Do not use for private purposes (household)  
Do not use for other than recommended use

#### 1.3 Details of the supplier of the safety data sheet

WEBA Technology  
NFS CAP WEBA, LLC  
500 Cummings Center, Suite 6050  
Beverly MA 01915 United States

Telephone: +1 812-822-3658  
e-mail: info@webacorp.com

Additional information

e-mail (competent person) info@webacorp.com

#### 1.4 Emergency telephone number

Poison center		
Country	Name	Telephone
United States	CHEMTREC	1-800-424-9300 (NORTH AMERICA) +1-703-527-3887 (INTERNATIONAL)

### SECTION 2: Hazard(s) identification

#### 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and category	Hazard statement
A.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
A.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319

For full text of H-phrases: see SECTION 16

#### 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- signal word Warning

**METALGUARD® H50**

 Version number: 14.0  
 Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

- pictograms

GHS07



- hazard statements

 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

- precautionary statements

 P280 Wear protective gloves/eye protection/face protection.  
 P302+P352 If on skin: Wash with plenty of water.  
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.

**2.3 Other hazards**

Hazards not otherwise classified

 May be harmful if swallowed (GHS category 5: acutely toxic - oral).  
 May be harmful in contact with skin (GHS category 5: acutely toxic - dermal).  
 Harmful to aquatic life with long lasting effects (GHS category 3: aquatic toxicity - acute and/or chronic).  
 Can cause very long-lasting and diffuse contamination of water resources.

Results of PBT and vPvB assessment

 Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0.1\%$ .

Endocrine disrupting properties


 Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

**SECTION 3: Composition/information on ingredients**
**3.1 Substances**

Not relevant (mixture).

**3.2 Mixtures**

The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes	Specific Conc. Limits
Sodium 4(or 5)-methyl-1H-benzotriazolide	CAS No 64665-57-2	1 - <5	Acute Tox. 4 / H302 Skin Corr. 1B / H314 Eye Dam. 1 / H318			

Consideration of other advice

As per paragraph (i) of OSHA Hazard Communication Standard 29 CFR 1910.1200, the formulation is considered a trade secret and the specific chemical identity and exact percentage (concentration) of this composition has been withheld. The specific chemical identity and exact percentage of this composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

**Remarks**

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

**SECTION 4: First-aid measures**
**4.1 Description of first-aid measures**

General notes

**METALGUARD® H50**

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

**Following inhalation**

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

**Following skin contact**

Wash with plenty of soap and water. Call a POISON CENTER/doctor.

**Following eye contact**

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor.

**Following ingestion**

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

**4.2 Most important symptoms and effects, both acute and delayed**

Symptoms and effects are not known to date.

**4.3 Indication of any immediate medical attention and special treatment needed**

For specialist advice physicians should contact the poison centre.

**SECTION 5: Fire-fighting measures****5.1 Extinguishing media**

Suitable extinguishing media

Coordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

**5.2 Special hazards arising from the substance or mixture**

Hazardous combustion products

During fire hazardous fumes/smoke could be produced: phosphorus oxides (P<sub>x</sub>O<sub>y</sub>), potassium oxides.

**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases. Wear personal protective equipment/face protection.

**6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

**6.3 Methods and material for containment and cleaning up**

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).

**METALGUARD® H50**

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

**6.4 Reference to other sections**

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

**7.2 Conditions for safe storage, including any incompatibilities**

Managing of associated risks

- flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of the effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight. Frost.

Consideration of other advice

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

- specific designs for storage rooms or vessels

- storage temperature

Minimum storage temperature: 15.5 °C/60 °F

- packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

**7.3 Specific end use(s)**

See section 1.2.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

**National limit values**

No information available.

**Relevant DNELs/DMELs/PNECs and other threshold levels**

## METALGUARD® H50

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	DNEL	0.54 mg/kg bw/day	human, oral	consumer (private households)	acute - systemic effects
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	DNEL	98.7 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	DNEL	1.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	DNEL	17.4 mg/m <sup>3</sup>	human, inhalatory	consumer (private households)	chronic - systemic effects
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	DNEL	0.5 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	DNEL	0.5 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Relevant PNECs of components						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	PNEC	8 µg/l	aquatic organisms	freshwater	short-term (single instance)
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	PNEC	8 µg/l	aquatic organisms	marine water	short-term (single instance)
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	PNEC	0.218 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	PNEC	0.117 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	PNEC	0.117 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	PNEC	45 µg/kg	terrestrial organisms	soil	short-term (single instance)

## 8.2 Exposure controls

### Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

### Individual protection measures (personal protective equipment)

#### Eye/face protection



Use safety goggle with side protection

**METALGUARD® H50**

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

**Skin protection**



Chemical protective clothing.

**Hand protection**



Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**- type of material**

Nitrile rubber

**- material thickness**

Use gloves with a minimum material thickness:  $\geq 0.38$  mm.

**- breakthrough time of the glove material**

Use gloves with a minimum breakthrough time of the glove material:  $>480$  minutes (permeation: level 6).

**- other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Type: ABEK-P2 (combined filters against gases, vapors and particles, color code: Brown/Grey/Yellow/Green/White). Observe the OSHA respirator regulations cited in 29 CFR 1910.134 and use NIOSH/MSHA approved respirators.

**Environmental exposure controls**

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Physical state	liquid
Color	clear to amber
Odor	distinctive
Melting point/freezing point	5 °C 40 °F
Boiling point or initial boiling point and boiling range	$>100$ °C $>212$ °F
Evaporation rate	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	LEL: UEL: not determined
Flash point	no data available
Auto-ignition temperature	not determined
Decomposition temperature	no data available
pH (value)	10 – 11
Kinematic viscosity	not determined

**Solubility**

**METALGUARD® H50**

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Water solubility	miscible in any proportion
------------------	----------------------------

Partition coefficient n-octanol/water (log value)	this information is not available
---	-----------------------------------

Vapor pressure	10 mmHg at 20 °C 10 mmHg at 68 °F
----------------	-----------------------------------

Density and/or relative density

Density	1.25 – 1.35 g/cm <sup>3</sup> at 21.1 °C 1.25 – 1.35 g/cm <sup>3</sup> at 70 °F
Relative vapour density	>2 (air = 1)

Particle characteristics	not relevant (liquid)
--------------------------	-----------------------

**9.2 Other information**

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
--	---

Other safety characteristics

Miscibility	Completely miscible with water.
-------------	---------------------------------

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

May crystallize at temperatures below 15.5 °C/60 °F.

**10.2 Chemical stability**

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**10.3 Possibility of hazardous reactions**

No known hazardous reactions.

**10.4 Conditions to avoid**

Avoid temperatures: < 15.5 °C/60 °F

**10.5 Incompatible materials**

Acids, bases, oxidizers

**10.6 Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

Acute toxicity

Shall not be classified as acutely toxic.

## METALGUARD® H50

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Acute toxicity estimate (ATE) of components			
Name of substance	CAS No	Exposure route	ATE
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	oral	735 mg/kg
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	dermal	>2,000 mg/kg

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	oral	LD50	735 mg/kg	rat
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	dermal	LD50	>2,000 mg/kg	rabbit

### Skin corrosion/irritation

Causes skin irritation.

### Serious eye damage/eye irritation

Causes serious eye irritation.

### Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## 11.2 Information on other hazards

### Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

## SECTION 12: Ecological information

### 12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	ErC50	75 mg/l	algae	72 h
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	LC50	240 mg/l	zebra fish (Danio rerio)	24 h

**METALGUARD® H50**

 Version number: 14.0  
 Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	EC50	15.8 mg/l	aquatic invertebrates	48 h
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	NOEC	30 mg/l	sheepshead minnow (Cyprinodon variegatus)	96 h
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	growth rate (Er-Cx) 10%	1.18 mg/l	algae	72 h
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	growth (EbCx) 10%	8.56 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	EC50	>37.6 mg/l	daphnia magna	21 d
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	NOEC	18.4 mg/l	daphnia magna	21 d
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	LOEC	37.6 mg/l	daphnia magna	21 d
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	growth (EbCx) 10%	0.97 mg/l	aquatic invertebrates	21 d

**12.2 Persistence and degradability**

Data are not available.

**12.3 Bioaccumulative potential**

Data are not available.

**12.4 Mobility in soil**

Data are not available.

**12.5 Results of PBT and vPvB assessment**

 Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0.1\%$ .

**12.6 Endocrine disrupting properties**

 Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

**12.7 Other adverse effects**

Data are not available.

**SECTION 13: Disposal considerations**
**13.1 Waste treatment methods**

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

**Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## METALGUARD® H50

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>                                      | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>                        | not relevant  |
| <b>14.3 Transport hazard class(es)</b>                     | none  |
| <b>14.4 Packing group</b>                                  | not assigned  |
| <b>14.5 Environmental hazards</b>                          | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 Special precautions for user</b>                   | There is no additional information.                                   |
| <b>14.7 Transport in bulk according to IMO instruments</b> | No data available.  |

#### Additional information for each of the UN Model Regulations

##### **Transport of dangerous goods by road or rail (49 CFR US DOT) - additional information**

Not subject to transport regulations.

##### **International Maritime Dangerous Goods Code (IMDG) - additional information**

Not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR) - additional information**

Not subject to ICAO-IATA.

### SECTION 15: Regulatory information

#### **15.1 Safety, health and environmental regulations specific for the product in question**

##### **National regulations (United States)**

##### **Toxic Substance Control Act (TSCA)**

all ingredients are listed (ACTIVE) or exempt from listing

##### **Superfund Amendment and Reauthorization Act (SARA TITLE III )**

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

None of the ingredients are listed.

- Specific Toxic Chemical Listings (EPCRA Section 313)

None of the ingredients are listed.

##### **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

None of the ingredients are listed.

##### **Clean Air Act**

None of the ingredients are listed.

##### **Right to Know Hazardous Substance List**

- Cleaning Product Right to Know Act Substance List (CA-RTK)

None of the ingredients are listed.

- Toxic or Hazardous Substance List (MA-TURA)

None of the ingredients are listed.

- Hazardous Substances List (MN-ERTK)

None of the ingredients are listed.

- Hazardous Substance List (NJ-RTK)

None of the ingredients are listed.

## METALGUARD® H50

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

- Hazardous Substance List (Chapter 323) (PA-RTK)

None of the ingredients are listed.

- Hazardous Substance List (RI-RTK)

None of the ingredients are listed.

### California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

None of the ingredients are listed.

### Industry or sector specific available guidance(s)

#### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	2	temporary or minor injury may occur
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

#### NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	2	material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

### SECTION 16: Other information, including date of preparation or last revision

#### Indication of changes (revised safety data sheet)

Complete revision of the safety data sheet.

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level

## METALGUARD® H50

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Abbr.	Descriptions of used abbreviations
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ED	Endocrine disruptor
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LOEC	Lowest Observed Effect Concentration
NOEC	No Observed Effect Concentration
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
UEL	Upper explosion limit (UEL)
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.

**METALGUARD® H50**

Version number: 14.0  
Replaces version of: 2020-03-01 (13)

Revision: 2026-03-13

Code	Text
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

**Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.