Printing date 31.03.2015 Revision: 31.03.2015

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: The Inhibitor™

· Article number: No other identifiers

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

No further relevant information available.

· Application of the substance / the mixture Catalyst

· Uses advised against No further relevant information

· 1.3 Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Chemco Corporation 300 Canal St.

Lawrence MA 01840 USA Telephone (978) 687-9000

Toll-Free (800) 458-8010

· 1.4 Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585

#### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

· Additional information:

There are no other hazards not otherwise classified that have been identified.

0 percent of the mixture consists of component(s) of unknown toxicity

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is not classified as hazardous according to OSHA GHS regulations within the United States. The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

(Contd. of page 1)

- · Hazard pictograms Not Regulated
- · Signal word Not Regulated
- · Hazard-determining components of labelling:

copper

· Hazard statements

Not applicable within the USA; only applicable for the EU.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

Not applicable within the USA; only applicable for the EU.

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazard description:
- · WHMIS-symbols: Not hazardous under WHMIS.
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 0

Reactivity = 1

· HMIS-ratings (scale 0 - 4)



1 Health = 1 Fire = 0

### HMIS Long Term Health Hazard Substances

None of the ingredients are listed.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

# **SECTION 3: Composition/information on ingredients**

- · 3.2 Mixtures
- **Description**: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 1344-28-1 EINECS: 215-691-6	aluminium oxide substance with a Community workplace exposure limit	50-100%
CAS: 7440-50-8 EINECS: 231-159-6	copper N R50/53 Aquatic Acute 1, H400 Aquatic Chronic 3, H412	< 3%
CAS: 7440-22-4	silver N R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	< 1%

(Contd. on page 3)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

Additional information:

(Contd. of page 2)

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret. For the wording of the listed risk phrases refer to section 16.

### **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Brush off loose particles from skin.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

Breathing difficulty

Cramp

Gastric or intestinal disorders.

Coughing

Nausea

· Hazards

No further relevant information available.

May be harmful if swallowed.

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

If necessary oxygen respiration treatment.

### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information No further relevant information available.

(Contd. on page 4)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

(Contd. of page 3)

### **SECTION 6: Accidental release measures**

#### · 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep people at a distance and stay on the windward side.

Do not breathe dust.

Wear respiratory protection.

#### · 6.2 Environmental precautions:

Damp down dust with water spray.

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

### 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

### · 7.1 Precautions for safe handling

Prevent formation of dust.

Use only in well ventilated areas.

Avoid breathing dust.

Any unavoidable deposit of dust must be regularly removed.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: Protect from humidity and water.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 7.3 Specific end use(s) No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

#### 1344-28-1 aluminium oxide

PEL (USA) Long-term value: 15\*; 15\*\* mg/m³
\*Total dust; \*\* Respirable fraction

(Contd. on page 5)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

	(Contd. of page 4)	
REL (USA)	Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f.	
TLV (USA)	Long-term value: 1* mg/m³ as Al; *as respirable fraction	
EL (Canada)	Long-term value: 1,0 mg/m³ respirable, as Al	
EV (Canada)	Long-term value: 10 mg/m³ total dust	
7440-50-8 co	7440-50-8 copper	
PEL (USA)	Long-term value: 1* 0,1** mg/m³ as Cu *dusts and mists **fume	
REL (USA)	Long-term value: 1* 0,1** mg/m³ as Cu *dusts and mists **fume	
TLV (USA)	Long-term value: 1* 0,2** mg/m³ *dusts and mists; **fume; as Cu	
EL (Canada)	Long-term value: 1* 0,2** mg/m³ *dusts and mists; **fume, as Cu	
EV (Canada)	Long-term value: 0,2* 1** mg/m³ as copper, *fume;**dust and mists	
7440-22-4 silver		
IOELV (EU)	Long-term value: 0,1 mg/m³	
PEL (USA)	Long-term value: 0,01 mg/m³	
REL (USA)	Long-term value: 0,01 mg/m³	
TLV (USA)	Long-term value: 0,1 mg/m³ metal: dust and fume	
EL (Canada)	Short-term value: 0,03 mg/m³ Long-term value: 0,01 mg/m³ as Ag	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Long-term value: 0,1* 0,01** mg/m³ *metal;**water-soluble compdounds (as silver)	

- **DNELs** No further relevant information available.
- · PNECs No further relevant information available.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- · Respiratory protection: Not required under normal conditions of use.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

(Contd. on page 6)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

· Material of gloves

(Contd. of page 5)

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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses

· Limitation and supervision of exposure into the environment

No further relevant information available.

· Risk management measures

See Section 7 for additional information.

No further relevant information available.

### **SECTION 9: Physical and chemical properties**

- 9.1 Information on basic physical and chemical properties
- · General Information

· Appearance:

Form: Particles
Colour: Dark green
Black
Odour: Odourless
Odour threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Decomposition temperature:

Melting point/Melting range:
Boiling point/Boiling range:
Undetermined.

Flash point:
Flammability (solid, gaseous):
Not determined.

Not determined.

Not determined.

· **Self-igniting:** Product is not self-igniting.

• **Danger of explosion:** Product does not present an explosion hazard.

Not determined.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

(Contd. on page 7)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

(Contd. of page 6)

Vapour pressure: Not applicable.
Density: Not determined.
Relative density Not determined.
Vapour density Not applicable.
Evaporation rate Not applicable.

· Solubility in / Miscibility with

water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

**Dynamic:** Not applicable. **Kinematic:** Not applicable.

**9.2 Other information** No further relevant information available.

### **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with strong acids and oxidising agents.

Reacts with strong alkali.

- · 10.4 Conditions to avoid Excessive heat.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: Toxic metal oxide smoke

### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- LD/LC50 values relevant for classification: None.
- · Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: Mechanical irritation.
- Sensitisation: No sensitising effects known.
- · Subacute to chronic toxicity: No further relevant information available.
- Repeated dose toxicity: No further relevant information available.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): None.

(Contd. on page 8)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

(Contd. of page 7)

### **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: The material is harmful to the environment.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- **Ecotoxical effects:**
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

# **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

Contact waste processors for recycling information.

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

# **SECTION 14: Transport information**

· 14.1 UN-Number

· DOT, ADR, ADN, IMDG, IATA Not Regulated

14.2 UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA Not Regulated

· 14.3 Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA

Class Not Regulated

· 14.4 Packing group

· DOT, ADR, IMDG, IATA Not Regulated

(Contd. on page 9)

(Contd. of page 8)

# Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and **OSHA GHS**

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

· 14.5 Environmental hazards:

No

· Marine pollutant:

· 14.6 Special precautions for user

Not applicable.

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

UN "Model Regulation":

## **SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

All ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenic Categories

· EPA (Environmental Protection Agency)

7440-50-8 copper

7440-22-4 silver

D  $\overline{\mathsf{D}}$ 

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

1344-28-1 aluminium oxide

A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

- · Canada
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

(Contd. on page 10)

Printing date 31.03.2015 Revision: 31.03.2015

Trade name: The Inhibitor™

(Contd. of page 9)

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

· Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### · Relevant phrases

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

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

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

### Sources

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com