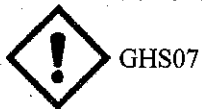


1 Identification

- **Product identifier**
- **Trade name:** VpCI®-649 / S-69
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Corrosion inhibitors
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Cortec Corporation
4119 White Bear Parkway
St. Paul, MN 55110 USA
Phone (651) 429-1100
Fax (651) 429-1122
- **Information department:** regulatory@cortecvci.com
- **Emergency telephone number:**
Spill, Leak, Fire, Exposure, or Accident
24 hour CHEMTREC contact:
USA and Canada 1-800-424-9300
International +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Tolyltriazole, sodium salt
- **Hazard statements**
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
- **Precautionary statements**
Wear protective gloves.
Wear eye protection / face protection.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Specific treatment (see on this label).
If swallowed: Call a poison center/doctor if you feel unwell.

(Contd. on page 2)

USA

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/22/2015

Reviewed on 06/22/2015

Trade name: VpCI®-649 / S-69

(Contd. of page 1)

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

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

	proprietary ammonia derivate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	2.5-10%
CAS: 64665-57-2 EINECS: 265-004-9	Tolyltriazole, sodium salt ⚠ Acute Tox. 2, H300; ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318	≤ 2.5%
CAS: 7631-95-0 EINECS: 231-551-7	Sodium molybdate ⚠ Skin Irrit. 2, H315; STOT SE 3, H335	≤ 2.5%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After skin contact** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact** Rinse opened eye for several minutes under running water.

· **After swallowing** If symptoms persist consult doctor.

· **Information for doctor**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

USA

(Contd. on page 3)

Trade name: VpCl®-649 / S-69

(Contd. of page 2)

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures



Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:** Do not allow undiluted product to enter sewers/surface or ground water
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.

7 Handling and storage

- **Handling**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**
Do not store together with acids.
Store away from foodstuffs.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

Components with limit values that require monitoring at the workplace:

7631-95-0 Sodium molybdate ($\leq 2.5\%$)

PEL	Long-term value: 5 mg/m ³ as Mo
TLV	Long-term value: 0.5 mg/m ³ as Mo; respirable fraction

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**
Rubber gloves
Latex Gloves
Protective gloves

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/22/2015

Reviewed on 06/22/2015

Trade name: VpCI®-649 / S-69

(Contd. of page 3)

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

· **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:** Goggles recommended during refilling.

· **Body protection:** Protective work clothing.

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Amber colored
Odor:	Characteristic
Odour threshold:	Not determined.

· **pH-value at 20 °C (68 °F):** 9.1-9.8 (Neat)

· **Change in condition**

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Not applicable.

· **Ignition temperature:** 260.0 °C (500 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

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

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17 mm Hg)

· **Density at 20 °C (68 °F):** 1.14-1.16 g/cm³ (9.513-9.68 lbs/gal)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

Water:	Fully miscible
--------	----------------

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

· **Viscosity:**

dynamic:	Not determined.
kinematic:	Not determined.

· **Solvent content:**

Organic solvents:	0.0 %
Water:	49-57 %

(Contd. on page 5)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/22/2015

Reviewed on 06/22/2015

Trade name: VpCI®-649 / S-69

(Contd. of page 4)

Solids content:	43-51 %
Other information	The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:** Repeated or prolonged skin contact with this product may produce skin irritation.
 - **on the eye:** May be irritating.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

IARC Category 3 : Not classifiable as to its carcinogenicity to humans

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 6)

USA

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/22/2015

Reviewed on 06/22/2015

Trade name: VpCI®-649 / S-69

Other adverse effects No further relevant information available.

(Contd. of page 5)

13 Disposal considerations

Waste treatment methods

Recommendation



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number

DOT, ADN, IMDG, IATA

Void

ADR

Void

Not applicable

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA

Void

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class

Void

Packing group

DOT, ADR, IMDG, IATA

Void

Environmental hazards:

Marine pollutant:

No

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of
MARPOL/73/78 and the IBC Code

Not applicable.

UN "Model Regulation":

-

15 Regulatory information

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

SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

TSCA (Toxic Substances Control Act) (-)

All ingredients are listed.

(Contd. on page 7)

USA

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/22/2015

Reviewed on 06/22/2015

Trade name: VpCI®-649 / S-69

(Contd. of page 6)

· **Prop 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

All components are listed on the DSL or NDSL

· **Philippines Inventory of Chemicals and Chemical Substances (-)**

All ingredients are listed.

· **Chinese Chemical Inventory of Existing Chemical Substances (-)**

All ingredients are listed.

· **Australian Inventory of Chemical Substances (-)**

All ingredients are listed.

· **New Zealand Inventory of Chemicals (-)**

All ingredients are listed.

· **Existing Chemical Substances (-)**

Tolyltriazole, sodium salt

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Tolyltriazole, sodium salt

· **Hazard statements**

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

· **Precautionary statements**

Wear protective gloves.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

If swallowed: Call a poison center/doctor if you feel unwell.

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

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

—USA—

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/22/2015

Reviewed on 06/22/2015

Trade name: VpCI®-649 / S-69

(Contd. of page 7)

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.

Cortec Corporation does not warrant any translation of this SDS not created by Cortec Corporation.

Date of preparation / last revision 06/22/2015 / -

Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

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

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)

Acute Tox. 2: Acute toxicity, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

*** Data compared to the previous version altered.**

USA