

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/05/2014 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Product name : Cobaltous Chloride, 1.2% w/v

Product code : LC13200

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

Use of the substance/mixture : For laboratory and manufacturing use only.

1.3. Details of the supplier of the safety data sheet

LabChem Inc

Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court

Zelienople, PA 16063 - USA T 412-826-5230 - F 724-473-0647 info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corr. 1B H314 Eye Dam. 1 H318 Resp. Sens. 1 H334 Skin Sens. 1 H317 Muta. 2 H341 Carc. 1B H350 Repr. 1B H360 Aquatic Acute 3 H402 Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)





GHS05 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H360 - May damage fertility or the unborn child H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe mist, vapours, spray

P264 - Wash exposed skin thoroughly after handling

P272 - Contaminated work clothing should not be allowed out of the workplace

P273 - Avoid release to the environment

P280 - Wear protective gloves, eye protection, protective clothing, face protection

P284 - Wear respiratory protection

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable

11/05/2014 EN (English) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 CENTER or doctor/physician

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or

doctor/physician

P363 - Wash contaminated clothing before reuse

P405 - Store locked up

P501 - Dispose of contents/container to comply with local, state and federal regulations

2.3. Other hazards

Other hazards not contributing to the classification

: None.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	94.46	Not classified
Hydrochloric Acid, 37% w/w	(CAS No) 7647-01-0	4.34	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 3, H402
Cobaltous Chloride, Hexahydrate	(CAS No) 7791-13-1	1.2	Acute Tox. 4 (Oral), H302 Resp. Sens. 1, H334 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 Repr. 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

SECTION 4: First aid measures

41	Description	of first aid	measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get

medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON

CENTER or doctor/physician.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor/physician.

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

Symptoms/injuries : Causes severe skin burns and eye damage. Suspected of causing genetic defects. May cause

cancer. May damage fertility or the unborn child.

Symptoms/injuries after inhalation : Possible inflammation of the respiratory tract. May cause allergy or asthma symptoms or

breathing difficulties if inhaled. May cause an allergic skin reaction.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin. May cause an allergic skin reaction.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Nausea. Vomiting. Irritation of the gastric/intestinal mucosa. Diarrhoea.

Chronic symptoms : Affection/discolouration of the teeth.

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

Obtain medical assistance.

11/05/2014 EN (English) 2/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable. Explosion hazard : Not applicable.

Reactivity : Thermal decomposition generates : Corrosive vapours.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Not applicable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Try to stop release. Dike and contain spill.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses. Protective clothing. Face-shield.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe mist. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and

understood.

Hygiene measures : Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : incompatible

materials. Keep container closed when not in use.

Incompatible products : metals. cyanides. Strong bases.
Incompatible materials : Direct sunlight. Sources of ignition.
Packaging materials : Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Cobaltous Chloride, 1.2% w/v	
ACGIH	Not applicable

11/05/2014 EN (English) 3/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Cobaltous Chloride, 1.2% w/v			
OSHA	Not applicable		
Water (7732-18-5)	Water (7732-18-5)		
ACGIH	Not applicable		
OSHA	Not applicable		
Cobaltous Chloride, Hexahydrate (7791-13-1)			
ACGIH	ACGIH TWA (mg/m³)	0.02 mg/m³	
OSHA	OSHA PEL (TWA) (mg/m³)	0.1 mg/m³	

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate

vicinity of any potential exposure. Ensure adequate ventilation. Material should be handled in a

laboratory hood whenever possible.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or face shield.
Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: LiquidColour: pinkOdour: Odourless

Odour threshold : No data available

pH : ≤ 0.5

Relative evaporation rate (butylacetate=1) No data available Melting point : No data available Freezing point : No data available Boiling point : No data available Flash point : No data available Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) No data available No data available Vapour pressure : No data available Relative vapour density at 20 °C Relative density No data available

Density : 1 - 1.1

Solubility : Soluble in water. Soluble in ethanol. Soluble in methanol.

Water: Solubility in water of component(s) of the mixture :

• Hydrochloric Acid, 37% w/w: Complete • Cobaltous Chloride, Hexahydrate: 76 g/100ml (0

°C)

Log Pow: No data availableLog Kow: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive properties: Not applicable.

Oxidising properties : None.

Explosive limits : No data available

9.2. Other information

No additional information available

11/05/2014 EN (English) 4/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts violently with (some) bases: release of heat.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

metals. cyanides. Strong bases.

10.6. Hazardous decomposition products

Hydrogen chloride. Thermal decomposition generates: Corrosive vapours. Cobalt and compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Hydrochloric Acid, 37% w/w (7647-01-0)	
LD50 oral rat	700 mg/kg
LD50 dermal rabbit	5010 mg/kg
ATE US (oral)	700.000 mg/kg bodyweight
ATE US (dermal)	5010.000 mg/kg bodyweight
Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000.000 mg/kg bodyweight
Cobaltous Chloride, Hexahydrate (7791-13-1	
LD50 oral rat	766 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
ATE US (oral)	766.000 mg/kg bodyweight
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
	pH: ≤ 0.5
Serious eye damage/irritation	: Causes serious eye damage.
	pH: ≤ 0.5
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Suspected of causing genetic defects.
Carcinogenicity	: May cause cancer.
Hydrochloric Acid 37% w/w (7647-01-0)	

: May cause cancer.	
3 - Not classifiable	
2B - Possibly carcinogenic to humans	
: May damage fertility or the unborn child.	
: Not classified	
: Not classified	
: Not classified	
: Based on available data, the classification criteria are not met.	
: Possible inflammation of the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.	
: Caustic burns/corrosion of the skin. May cause an allergic skin reaction.	
: Causes serious eye damage.	
EN (English)	5/9
	2B - Possibly carcinogenic to humans : May damage fertility or the unborn child. : Not classified : Not classified : Not classified : Not classified : Possible inflammation of the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. : Caustic burns/corrosion of the skin. May cause an allergic skin reaction. : Causes serious eye damage.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/injuries after ingestion : Nausea. Vomiting. Irritation of the gastric/intestinal mucosa. Diarrhoea.

Chronic symptoms : Affection/discolouration of the teeth.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Hydrochloric Acid, 37% w/w (7647-01-0)		
LC50 fishes 1	282 mg/l (96 h; Gambusia affinis; Pure substance)	
EC50 Daphnia 1	< 56 mg/l (72 h; Daphnia magna; Pure substance)	
LC50 fish 2	862 mg/l (Leuciscus idus; Pure substance)	
TLM fish 1	282 ppm (96 h; Gambusia affinis; Pure substance)	
Cobaltous Chloride, Hexahydrate (7791-13-1)		
LC50 fishes 1	22 - 48 ppm (96 h; Pimephales promelas; Cobalt ion)	
EC50 Daphnia 1	1.1 - 3.2 mg/l (48 h; Daphnia magna; Cobalt ion)	
Threshold limit algae 1	0.05 mg/l (72 h; Selenastrum capricornutum; Cobalt)	

12.2. Persistence and degradability

Cobaltous Chloride, 1.2% w/v		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Hydrochloric Acid, 37% w/w (7647-01-0)		
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
Water (7732-18-5)		
Persistence and degradability	Not established.	
Cobaltous Chloride, Hexahydrate (7791-13-1)		
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	

12.3. Bioaccumulative potential

Cobaltous Chloride, 1.2% w/v		
Bioaccumulative potential	Not established.	
Hydrochloric Acid, 37% w/w (7647-01-0)		
Log Pow	0.25 (QSAR)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Water (7732-18-5)		
Bioaccumulative potential	Not established.	

12.4. Mobility in soil

Hydrochloric Acid, 37% w/w (7647-01-0)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
Cobaltous Chloride, Hexahydrate (7791-13-1)	
Ecology - soil	Toxic to flora.

12.5. Other adverse effects

Effect on ozone layer

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

11/05/2014 EN (English) 6/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to comply with local, state and federal regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1789 Hydrochloric acid solution, 8, II

UN-No.(DOT) : UN1789

DOT Proper Shipping Name : Hydrochloric acid

solution

Department of Transportation (DOT) Hazard

Classes

: 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT)

DOT Special Provisions (49 CFR 172.102)

: II - Medium Danger

A3 - For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings.

A6 - For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

B3 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks and DOT 57 portable tanks are not authorized.

B15 - Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

N41 - Metal construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

T8 - 4 178.274(d)(2) Normal..... Prohibited

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP12 - This material is considered highly corrosive to steel.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

DOT Vessel Stowage Location : C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel.

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

11/05/2014 EN (English) 7/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Cobaltous Chloride, 1.2% w/v	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Hydrochloric Acid, 37% w/w (7647-01-0)		
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
Cobalt dichloride (7791-13-1)		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard	

15.2. International regulations

CANADA

Cobaltous Chloride, 1.2% w/v	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class E - Corrosive Material

Hydrochloric Acid, 37% w/w (7647-01-0)		
Listed on the Canadian DSL (Domestic Sustances List)		
WHMIS Classification	Class E - Corrosive Material	
Water (7732-18-5)		
Listed on the Canadian DSL (Domestic Sustances List)		
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria	
Cobalt dichloride (7791-13-1)		
Listed on the Canadian DSL (Domestic Sustances List)		
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects	

EU-Regulations

Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

Not classified

15.2.2. National regulations

Hydrochloric Acid, 37% w/w (7647-01-0)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
Water (7732-18-5)	
Not listed on the Canadian IDL (Ingredient Disclosure List)	
Cobalt dichloride (7791-13-1)	
Listed on the Canadian IDL (Ingredient Disclosure List)	

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Other information : None.

11/05/2014 EN (English) 8/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 1B	Carcinogenicity, Category 1B
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1	Sensitisation — Skin, category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard : 3 - Short exposure could cause serious temporary or

residual injury even though prompt medical attention was

given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated

temperatures and pressures or may react with water with

some release of energy, but not violently.

3 1

HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 0 Minimal Hazard
Physical : 1 Slight Hazard

Personal Protection : H

SDS US (GHS HazCom 2012)

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.

11/05/2014 EN (English) 9/9