Printing date 12.03.2014 Revision: 30.04.2017

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

· 1.1 Product identifier

· Trade name: ICE MAX

· Article number: 50004

· 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

Acidic cleaner. Scale inhibitor Corrosion inhibitors

· 1.3 Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Highside Chemicals, Inc. 11114 Reichold Road Gulfport, MS 39503 USA

Phone: (228) 896-9220

· 1.4 Emergency telephone number:

ChemTel Inc.

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

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.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

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



R36/38: Irritating to eyes and skin.

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.

(Contd. on page 2)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 1)

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

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GH301

- · Signal word Warning
- · Hazard statements

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

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P280 Wear protective gloves / eye protection.
P273 Avoid release to the environment.
P264 Wash thoroughly after handling.

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. P302+P352 IF ON SKIN: Wash with plenty of soap and water.

- · Hazard description:
- · WHMIS-symbols:

D2B - Toxic material causing other toxic effects

E - Corrosive material



· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 1

· HMIS-ratings (scale 0 - 4)



· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

(Contd. on page 3)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 2)

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

3 Composition/information on ingredients

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

· Dangerous components:		
CAS: 5329-14-6	sulphamidic acid	50-100%
EINECS: 226-218-8	X i R36/38	
Index number: 016-026-00-0	R52/53	
	Skin Irrit. 2, H315; Eye Irrit. 2, H319 Aquatic Chronic 3, H412	
CAS: 77-92-9	citric acid	< 10%
EINECS: 201-069-1	Xi R36	
	(t) Eye Irrit. 2, H319	

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

4 First aid measures

- · 4.1 Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

Provide oxygen treatment if affected person has difficulty breathing.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Brush off loose particles from skin.

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

Seek immediate medical help for blistering or open wounds.

· After eye contact:

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. Then 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

Irritant to skin and mucous membranes.

Irritant to eyes.

Breathing difficulty

Coughing

(Contd. on page 4)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 3)

· Hazards

Danger of severe eye injury. Danger of impaired breathing.

• 4.3 Indication of any immediate medical attention and special treatment needed If necessary oxygen respiration treatment.

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.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid formation of dust.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Clean the affected area carefully; suitable cleaners are:

Warm water

· 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.

7 Handling and storage

· 7.1 Precautions for safe handling

Use only in well ventilated areas.

Prevent formation of dust.

· Information about fire - and explosion protection: No special measures required.

(Contd. on page 5)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 4)

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Protect from humidity and water.

Avoid storage near extreme heat, ignition sources or open flame.

· Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Store away from foodstuffs.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

· 7.3 Specific end use(s) No further relevant information available.

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · **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.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

· Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

For spills, respiratory protection may be advisable.

· Protection of hands:



Protective gloves

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.

· Material of 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

(Contd. on page 6)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 5)

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.

· For the permanent contact gloves made of the following materials are suitable:

Neoprene gloves Nitrile rubber, NBR Butyl rubber, BR

· Eye protection:



Safety glasses

- · Body protection: Protective work clothing
- · 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.

9 Physical and chemical properties

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

· Appearance:

Form:
Colour:
Vhitish
Odourless
Odour threshold:
Not determined.

Powder
Whitish
Odourless
Not determined.

· Change in condition

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

Flash point:
Not applicable.

Flammability (solid, gaseous):
Auto/Self-ignition temperature:
Not determined.

Not determined.

Not determined.

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

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

· Explosion limits:

Lower: Not determined.

(Contd. on page 7)

Revision: 30.04.2017 Printing date 12.03.2014

Not determined.

Trade name: ICE MAX

(Contd. of page 6)

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

· Solubility in / Miscibility with

Soluble. water:

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

· Viscosity:

Dynamic: Not applicable. Kinematic: Not applicable.

· 9.2 Other information No further relevant information available.

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 alkali (lyes).

Reacts with certain metals.

Toxic fumes may be released if heated above the decomposition point.

- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

Nitrogen oxides (NOx) Sulphur oxides (SOx)

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification:

5329-14-6 sulphamidic acid

Oral LD50 3160 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.

(Contd. on page 8)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 7)

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 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.
- · 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.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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

13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water only.

14 Transport information

· 14.1 UN-Number

· DOT, ADR, IMDG, IATA UN2967

· 14.2 UN proper shipping name

• **DOT** Sulfamic acid, mixture

· ADR 2967 SULPHAMIC ACID, mixture

(Contd. on page 9)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 8) · IMDG, IATA SULPHAMIC ACID, mixture · 14.3 Transport hazard class(es) · DOT · Class 8 Corrosive substances. · Label · ADR · Class 8 (C2) Corrosive substances. · Label · IMDG, IATA · Class 8 Corrosive substances. · Label · 14.4 Packing group · DOT, ADR, IMDG, IATA Ш · 14.5 Environmental hazards: · Marine pollutant: · 14.6 Special precautions for user Warning: Corrosive substances. · Danger code (Kemler): F-A,S-B · EMS Number: · Segregation groups Acids · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: · ADR · Limited quantities (LQ) 5 kg · Transport category 3 · Tunnel restriction code · UN "Model Regulation": UN2967, SULPHAMIC ACID, mixture, 8, III

(Contd. on page 10)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 9)

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 is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is 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 is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic Categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

(Contd. on page 11)

Printing date 12.03.2014 Revision: 30.04.2017

Trade name: ICE MAX

(Contd. of page 10)

· Other regulations, limitations and prohibitive regulations

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

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

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

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

R52/53 Harmful 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 Harmonized 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

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

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

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