Revision: 03.21.2017

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

- · 1.1 Product identifier
- · Trade name: Tank Cleaner, Whistle
- 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 Tank Cleaner, Whistle
- · 1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier:

Amega Sciences Inc Lakeland Florida, 33815 (407) 944-0453

· 1.4 Emergency telephone number: CHEMTREC 800 424 9300

SECTION 2: Hazards identification

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

Classifications listed also are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H335-H336.



Eye Dam. 1 H318 Causes serious eye damage.



Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

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



R37/38-41: Irritating to respiratory system and skin. Risk of serious damage to eyes.

R67: Vapours may cause drowsiness and dizziness.

· 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)

Trade name: Tank Cleaner

(Contd. of page 1)

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is additionally classified and labelled according to the Globally Harmonized System within the United States (GHS).

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

Hazard pictograms





GHS05 GHS07

· Signal word Danger

· Hazard-determining components of labelling:

2-aminoethanol

· Hazard statements

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H335-H336.

H315 Causes skin irritation.

H318 Causes serious eve damage.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

breathing.

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

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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

regulations.

· Hazard description:

· WHMIS-symbols:

D2B - Toxic material causing other toxic effects



· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 1 Reactivity = 0

(Contd. on page 3)

Trade name: Tank Cleaner

(Contd. of page 2)

· HMIS-ratings (scale 0 - 4)



· 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: 141-43-5 EINECS: 205-483-3	2-aminoethanol	10-25%
Index number: 603-030-00-8	Skin Corr. 1B, H314 Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332 Aquatic Chronic 3, H412	
CAS: 68584-22-5	Benzenesulfonic acid, C10-16-alkyl derivs. Xi R36	10-25%
CAS: 68131-39-5 NLP: 500-195-7	alcohols, C12-15, ethoxylated X Xi R41; N R50 Eye Dam. 1, H318 Aquatic Acute 1, H400	2,5-10%
CAS: 34590-94-8 EINECS: 252-104-2	(2-methoxymethylethoxy)propanol substance with a Community workplace exposure limit	2,5-10%
CAS: 2809-21-4 EINECS: 220-552-8	(1-hydroxyethane-1,1-diyl)bis(phosphonic acid) Xn R22; Xi R41 Met. Corr.1, H290; Eye Dam. 1, H318 ↑ Acute Tox. 4, H302	2,5-10%
CAS: 68910-32-7 EINECS: 272-734-1	Benzenesulfonic acid, mono-C10-16-alkyl derivs., cmpds. with ethanolamine X i R38-41 ⇒ Eye Dam. 1, H318 → Skin Irrit. 2, H315	2,5-10%
CAS: 68081-81-2	sodium dodecylbenzene sulfonate Xn R22; Xi R38-41 Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315	2,5-10%

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Trade name: Tank Cleaner

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• Additional information: 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: Take affected persons out into the fresh air.
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After skin contact:

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation is experienced, consult a doctor.

· After eve contact:

Protect unharmed eye.

Remove contact lenses if worn.

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

Headache

Dizziness

Coughing

Breathing difficulty

Irritant to skin and mucous membranes.

Strong irritant with the danger of severe eye injury.

May cause respiratory irritation.

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

· Hazards

May be harmful if inhaled.

Danger of severe eye injury.

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

Vapours may cause drowsiness and dizziness.

Medical supervision for at least 48 hours.

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.

(Contd. on page 5)

Trade name: Tank Cleaner

(Contd. of page 4)

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Cool endangered receptacles with water spray.

Use large quantities of foam as it is partially destroyed by the product.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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 aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

- \cdot 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:

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

Provide ventilation for receptacles.

Store only in the original receptacle.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizers, strong acids, strong bases.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Keep container tightly sealed.

(Contd. on page 6)

Trade name: Tank Cleaner

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

(Contd. of page 5)

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

Ingredients v	Ingredients with limit values that require monitoring at the workplace:					
141-43-5 2-ar	ninoethanol					
IOELV (EU)	Short-term value: 7,6 mg/m³, 3 ppm Long-term value: 2,5 mg/m³, 1 ppm Skin					
PEL (USA)	Long-term value: 6 mg/m³, 3 ppm					
REL (USA)	Short-term value: 15 mg/m³, 6 ppm Long-term value: 8 mg/m³, 3 ppm					
TLV (USA)	Short-term value: 15 mg/m³, 6 ppm Long-term value: 7,5 mg/m³, 3 ppm					
EL (Canada)	Short-term value: 6 ppm Long-term value: 3 ppm					
EV (Canada)	Short-term value: 15 mg/m³, 6 ppm Long-term value: 7,5 mg/m³, 3 ppm					
34590-94-8 (2	-methoxymethylethoxy)propanol					
IOELV (EU)	Long-term value: 308 mg/m³, 50 ppm Skin					
PEL (USA)	Long-term value: 600 mg/m³, 100 ppm Skin					
REL (USA)	Short-term value: 900 mg/m³, 150 ppm Long-term value: 600 mg/m³, 100 ppm Skin					
TLV (USA)	Short-term value: 909 mg/m³, 150 ppm Long-term value: 606 mg/m³, 100 ppm Skin					
EL (Canada)	Short-term value: 150 ppm Long-term value: 100 ppm Skin					
EV (Canada)	Short-term value: 910 mg/m³, 150 ppm Long-term value: 605 mg/m³, 100 ppm					
1310-73-2 so	dium hydroxide					
PEL (USA)	Long-term value: 2 mg/m³					
REL (USA)	Ceiling limit: 2 mg/m³					
TLV (USA)	Ceiling limit: 2 mg/m³					
EL (Canada)	Ceiling limit: 2 mg/m³					
EV (Canada)	Ceiling limit: 2 mg/m³					

Trade name: Tank Cleaner

	(Contd. of page 6)				
7664-93-9 su	7664-93-9 sulphuric acid				
IOELV (EU)	Long-term value: 0,05 mg/m³				
PEL (USA)	Long-term value: 1 mg/m³				
REL (USA)	Long-term value: 1 mg/m³				
TLV (USA)	Long-term value: 0,2* mg/m³ *as thoracic fraction				
EL (Canada)	Long-term value: 0,2 mg/m³ ACGIH A2; IARC 1				
EV (Canada)	Long-term value: 0,2 mg/m³				

- · **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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present.

Use suitable respiratory protective device when aerosol or mist is formed.

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 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.

(Contd. on page 8)

(Contd. of page 7)

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

Trade name: Tank Cleaner

· Eye protection:

Contact lenses should not be worn.



Safety glasses

- · Body protection: Alkaline resistant protective 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.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Yellow liquid.
Colour: Faint, characteristic
Odour: Not determined.

· Odour threshold:

• **pH-value at 20 °C:** 10.5

· Change in condition

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

> Flash point:
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. Upper: Not determined.

• Vapour pressure: Not determined.

Density at 20 °C: 1.044

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not determined

(Contd. on page 9)

Trade name: Tank Cleaner

(Contd. of page 8)

· Solubility in / Miscibility with

water: Soluble.

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

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

• 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

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

Reacts with strong acids and alkali.

Reacts with strong oxidising agents.

· 10.4 Conditions to avoid

Store away from oxidising agents.

Keep away from heat and direct sunlight.

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

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Sulphur oxides (SOx)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:

· LD/LC5	· LD/LC50 values relevant for classification:				
141-43-5 2-aminoethanol					
Oral	LD50	2050 mg/kg (rat)			
Dermal	LD50	1000 mg/kg (rabbit)			
1	1310-73-2 sodium hydroxide				
Oral	LD50	2000 mg/kg (rat)			

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.
- Sensitisation: No sensitising effects known.

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Trade name: Tank Cleaner

(Contd. of page 9)

· 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:

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

- · Acute effects (acute toxicity, irritation and corrosivity): Vapours have narcotic effect.
- · Repeated dose toxicity: Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability biodegradable
- 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 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- 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

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

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

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Trade name: Tank Cleaner

(Contd. of page 10)

· 14.3 Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA

· Class Not Regulated

· 14.4 Packing group

· DOT, ADR, IMDG, IATA Not Regulated

· 14.5 Environmental hazards:

· Marine pollutant: No

• 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):

7664-93-9 sulphuric acid

Section 313 (Specific toxic chemical listings):

None of the 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)

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

7664-93-9 sulphuric acid

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Trade name: Tank Cleaner

(Contd. of page 11)

· 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.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%)

141-43-5 2-aminoethanol

34590-94-8 (2-methoxymethylethoxy)propanol

· 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

H290 May be	corrosive	to	metals.
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- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

- R22 Harmful if swallowed.
- R34 Causes burns.
- R36 Irritating to eyes.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R50 Very toxic to aquatic organisms.

· 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

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Trade name: Tank Cleaner

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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

Met. Corr.1: Corrosive to metals, Hazard Category 1 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. 2: Serious eye damage/eye irritation, Hazard Category 2

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

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

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

Sources

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