

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

1.1. Product identifier

Product form : Liquid
 Trade name : Tornax-S
 Product code : D44
 Type of product : Acidic cleaner
 Product group : Detergent

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

1.2.1. Relevant identified uses

Main use category : Industrial/Professional use spec
 Use of the substance/mixture : See product bulletin for detailed information

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

CID LINES NV
 Waterpoortstraat, 2
 B-8900 Ieper - Belgique
 T + 32 57 21 78 77 - F +32 57 21 78 79
sds@cidlines.com - <http://www.cidlines.com>

Importer

Best Veterinary Solutions, Inc
 1716 Detroit St
 P.O. Box 370
 IA 50075 Ellsworth - United States of America
 T 888-378-4045
<https://www.bestvetsolutions.com/>

1.4. Emergency telephone number

Country	Organization/Company	Address	Emergency number	Comment
Canada	CANUTEC Country Organization/Company Address Emergency number Comment		(613) 996-6666	
USA	American Association of Poison Control Centers		1-800-222-1222	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Labelling according to OSHA 29 CFR 1910.1200

Skin corrosion/irritation Category 1A H314
 Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to OSHA 29 CFR 1910.1200

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger
 Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

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Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 - IF INHALED Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. Specific treatment is urgent.
P305+P351+P338 - IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331+P310 - IF SWALLOWED Rinse mouth. Do NOT induce vomiting.. Immediately call a poison center or doctor/physician.
P303+P361+P353 - IF ON SKIN (or hair)Remove/Take off immediately all contaminated clothing.Rinse skin with water/shower.

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phosphoric acid	(CAS-No.) 7664-38-2 (EC-No.) 231-633-2 (EC Index-No.) 15-011-00-6 (REACH-no) 01-2119485924-24	20 - 40	Skin Corr. 1B, H314
Guerbetalcohol, 6-8 EO	(CAS-No.) 160875-66-1 (REACH-no) 02-2119552461-55	5 - 15	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
2-(2-butoxyethoxy)ethanol	(CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8 (REACH-no) 01-2119475104-44	1 - 5	Eye Irrit. 2, H319

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Phosphoric acid	(CAS-No.) 7664-38-2 (EC-No.) 231-633-2 (EC Index-No.) 15-011-00-6 (REACH-no) 01-2119485924-24	(10 =<C < 25) Skin Irrit. 2, H315 (10 =<C < 25) Eye Irrit. 2, H319 (25 =<C < 100) Skin Corr. 1B, H314

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove contaminated clothing and shoes. Flush with plenty of water. Seek medical attention if ill effect or irritation develops.

First-aid measures after eye contact : Rinse immediately with plenty of water. (Keep a bottle of water at hand). Seek medical attention immediately.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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

Symptoms/effects after inhalation : Inhalation of vapor can cause breathing difficulties. Cough. Sore throat.

Symptoms/effects after skin contact : Redness, pain. Causes severe skin burns and eye damage.

Symptoms/effects after eye contact : Redness, pain. Blurred vision. Tears. Serious damage to eyes.

Symptoms/effects after ingestion : Burning sensation. Cough. Cramps. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Swallowing a small quantity of this material will result in serious health hazard.

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

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2). Dry chemical. Foam. Water spray. Do not use a heavy water stream.

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5.2. Special hazards arising from the substance or mixture

Fire hazard	: Not flammable.
Explosion hazard	: Not expected to be a fire/explosion hazard under normal conditions of use.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Corrosive vapors.

5.3. Advice for firefighters

Precautionary measures fire	: Wear fire/flare resistant/retardant clothing. Eliminate all ignition sources if safe to do so.
Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flare resistant/retardant clothing. Heat resistant gloves.
Other information	: On exposure to high temperature, may decompose, releasing toxic gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Stop leak if safe to do so. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
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6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Stop leak, if possible without risk. Collect spillage. Use suitable disposal containers.
Methods for cleaning up	: Clean up any spills as soon as possible, using an absorbent material to collect it.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: When handling product, avoid contact with skin and eyes. Wear personal protective equipment. Do not breathe vapor/aerosol. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Protect from freezing. Keep at temperature not exceeding 50 °C. Keep container closed when not in use.
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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Phosphoric acid (7664-38-2)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	2 mg/m ³
Long-term - local effects, inhalation	1 mg/m ³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	0.73 mg/m ³
2-(2-butoxyethoxy)ethanol (112-34-5)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	101.2 mg/m ³
Long-term - systemic effects, dermal	20 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	67.5 mg/m ³
Long-term - local effects, inhalation	67.5 mg/m ³

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2-(2-butoxyethoxy)ethanol (112-34-5)					
DNEL/DMEL (General population)					
Acute - local effects, inhalation		50.6 mg/m ³			
Long-term - systemic effects, oral		1.25 mg/kg bodyweight/day			
Long-term - systemic effects, inhalation		34 mg/m ³			
Long-term - systemic effects, dermal		10 mg/kg bodyweight/day			
Long-term - local effects, inhalation		34 mg/m ³			
PNEC (Water)					
PNEC aqua (freshwater)		1 mg/l Assessment factor: 100			
PNEC aqua (marine water)		0.1 mg/l Assessment factor: 1000			
PNEC aqua (intermittent, freshwater)		3.9 mg/l Assessment factor: 100			
PNEC (Sediment)					
PNEC sediment (freshwater)		4 mg/kg dwt			
PNEC sediment (marine water)		0.4 mg/kg dwt			
PNEC (Soil)					
PNEC soil		0.4 mg/kg dwt			
PNEC (Oral)					
PNEC oral (secondary poisoning)		0.000056 kg/kg food Assessment factor: 90			
PNEC (STP)					
PNEC sewage treatment plant		200 mg/l Assessment factor: 10			
8.2. Exposure controls					
Materials for protective clothing:					
Condition		Material		Standard	
Good resistance:				EN14605:2005+A1:2009	
Hand protection:					
Type	Material	Permeation	Thickness (mm)	Permeation	Standard
Reusable gloves	Polyvinylchloride (PVC)	6 (> 480 minutes)	0.5	2 (< 1.5)	EN ISO 374
Eye protection:					
Type	Use	Characteristics		Standard	
Safety glasses, Safety goggles, Face shield	Droplet	clear, Plastic		EN 166	
Skin and body protection:					
Type			Standard		
			EN14605:2005+A1:2009		
Respiratory protection:					
Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material					

Personal protective equipment symbol(s):



Other information:

When using do not eat, drink or smoke. Provide local exhaust or general room ventilation.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: colourless to slightly yellow.
Odor	: acid.
Odor threshold	: No data available
pH	: ≈ 2.2 (1%)
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: < -20 °C
Boiling point	: 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: ≈ 1.22 kg/l
Solubility	: Water: 100 %
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Avoid contact with : Strong alkali.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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LD50 oral rat	> 2000 mg/kg
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Guerbetalcohol, 6-8 EO (160875-66-1)

LD50 oral rat	> 500 mg/kg
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Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: ≈ 2.2 (1%)
Serious eye damage/irritation	: Eye damage, category 1, implicit pH: ≈ 2.2 (1%)
Respiratory or skin sensitization	: Not classified

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Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Aquatic acute	: Not classified
Aquatic chronic	: Not classified

Guerbetalcohol, 6-8 EO (160875-66-1)

EC50 Daphnia 1	> 10 - 100 mg/l 48h
EC50 other aquatic organisms 1	> 10 - 100 mg/l 72h

12.2. Persistence and degradability

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Persistence and degradability	The surfactant contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
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12.3. Bioaccumulative potential

Phosphoric acid (7664-38-2)

Log Kow	-1.436
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods	: Dispose of this material and its container at hazardous or special waste collection point. Hazardous waste due to toxicity. Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: When totally empty, containers are recyclable like any other packing. Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.
Ecology - waste materials	: Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	: UN 3264
UN-No. (IMDG)	: UN 3264
UN-No. (IATA)	: UN 3264
UN-No. (ADN)	: UN 3264
UN-No. (RID)	: UN 3264

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Proper Shipping Name (IMDG)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Proper Shipping Name (IATA)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Proper Shipping Name (ADN)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Proper Shipping Name (RID)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Transport document description (ADR)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (), 8, III, (E)
Transport document description (IMDG)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid), 8, III
Transport document description (IATA)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid), 8, III
Transport document description (ADN)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid), 8, III

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Transport document description (RID) : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid), 8, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8

Hazard labels (ADR) : 8



IMDG

Transport hazard class(es) (IMDG) : 8

Hazard labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8

Hazard labels (IATA) : 8



ADN

Transport hazard class(es) (ADN) : 8

Hazard labels (ADN) : 8



RID

Transport hazard class(es) (RID) : 8

Hazard labels (RID) : 8



14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : Clean up even minor leaks or spills, if possible, without unnecessary risk

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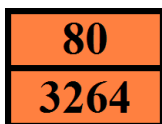
According to OSHA 29 CFR 1910.1200

14.6. Special precautions for user

Special transport precautions : Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency, No naked flames, sparks, and do not smoke, Keep public away from danger area, NOTIFY POLICE AND FIRE BRIGADE IMMEDIATELY

Overland transport

Classification code (ADR) : C1
Special provision (ADR) : 274
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP1, TP28
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E

Transport by sea

Special provision (IMDG) : 223, 274
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP1, TP28
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW2
MFAg-No : 154

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y841
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 852
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 856
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A3
ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C1
Special provision (ADN) : 274
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

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Rail transport

Classification code (RID)	: C1
Special provision (RID)	: 274
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP28
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Tornax-S is not on the REACH Candidate List

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

Other regulations, restrictions and prohibition regulations : Ensure all national/local regulations are observed. PIC Regulation EU (649/2012) - Export and Import of hazardous chemicals. {0} is subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information : **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-phrases:	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H302	Harmful if swallowed

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H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation

SDS_U

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.