

1. Product and company identification

Product name	: Torrex
Material uses	: Industrial and Institutional laundering.
Supplier/Manufacturer	: Dober 11230 Katherine's Crossing Woodridge, IL, 60517-5075
Code	: 000275
Validation date	: 03/15/2009
Responsible name	: Atrion Regulatory Services, Inc.
In case of emergency	: ChemTel : 1-813-248-0585 / 1-800-255-3924
Product type	: Liquid.

2. Hazards identification

Physical state	: Liquid.
Odor	: Odorless.
OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Emergency overview	: CAUTION! MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Inhalation	: Moderately irritating to the respiratory system.
Ingestion	: No known significant effects or critical hazards.
Skin	: Moderately irritating to the skin.
Eyes	: Moderately irritating to eyes.
Potential chronic health effects	
Chronic effects	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Over-exposure signs/symptoms	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion	: No specific data.
Skin	: Adverse symptoms may include the following: irritation redness

2. Hazards identification

Eyes : Adverse symptoms may include the following:
irritation
watering
redness

Medical conditions aggravated by over-exposure : None known.

See toxicological information (section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Sodium hexametaphosphate	68915-31-1	15

Canada

Name	CAS number	%
Sodium hexametaphosphate	68915-31-1	15

Mexico

Name	UN number	IDLH	Classification			CAS number	%
			H	F	R		
Sodium hexametaphosphate	Not regulated.	-	2	0	0	68915-31-1	15

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

Skin contact : Wash with soap and water. Get medical attention if symptoms occur.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.

Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product	: Not flammable.
Extinguishing media	
Suitable	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Not suitable	: None known.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: phosphorus oxides metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up	
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

Handling	: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Sodium hexametaphosphate	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Dust

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
Sodium hexametaphosphate	US ACGIH	-	5	-	-	-	-	-	-	-	[a]

Form: [a]Dust

Mexico

Ingredient	Exposure limits
Sodium hexametaphosphate	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Dust

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state	: Liquid.
Color	: Water white.
Odor	: Odorless.
pH	: 6 [Conc. (% w/w): 1%]
Relative density	: 1.28 (Water = 1)
Vapor density	: >1 [Air = 1]
Volatility	: 67% (v/v)
Solubility	: Partially soluble in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: No specific data.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials and acids.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Species	Dose	Result	Exposure
Sodium hexametaphosphate	Rat	3053 mg/kg	LD50 Oral	-
Inhalation	: Moderately irritating to the respiratory system.			
Ingestion	: No known significant effects or critical hazards.			
Skin	: Moderately irritating to the skin.			
Eyes	: Moderately irritating to eyes.			

12. Ecological information

Ecotoxicity	: No known significant effects or critical hazards.
Other adverse effects	: No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal	: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information

DOT/ TDG / Mexico IMDG/ IATA : Not regulated.

15. Regulatory information

United States

HCS Classification	: Not regulated.
U.S. Federal regulations	<ul style="list-style-type: none">United States inventory (TSCA 8b): All components are listed or exempted.SARA 302/304/311/312 extremely hazardous substances: No products were found.SARA 302/304 emergency planning and notification: No products were found.SARA 302/304/311/312 hazardous chemicals: No products were found.SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.Clean Water Act (CWA) 307: No products were found.Clean Water Act (CWA) 311: Sodium hexametaphosphateClean Air Act (CAA) 112 accidental release prevention: No products were found.Clean Air Act (CAA) 112 regulated flammable substances: No products were found.Clean Air Act (CAA) 112 regulated toxic substances: No products were found.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed
State regulations	<ul style="list-style-type: none">Connecticut Carcinogen Reporting: None of the components are listed.Connecticut Hazardous Material Survey: None of the components are listed.Florida substances: None of the components are listed.Illinois Chemical Safety Act: None of the components are listed.Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.Louisiana Reporting: None of the components are listed.Louisiana Spill: None of the components are listed.Massachusetts Spill: None of the components are listed.Massachusetts Substances: None of the components are listed.Michigan Critical Material: None of the components are listed.Minnesota Hazardous Substances: None of the components are listed.New Jersey Hazardous Substances: None of the components are listed.New Jersey Spill: None of the components are listed.New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.New York Acutely Hazardous Substances: None of the components are listed.New York Toxic Chemical Release Reporting: None of the components are listed.Pennsylvania RTK Hazardous Substances: None of the components are listed.Rhode Island Hazardous Substances: None of the components are listed.
California Prop. 65	: No products were found.
Canada	
WHMIS (Canada)	: Not controlled under WHMIS (Canada).

15. Regulatory information

Canadian lists

- CEPA Toxic substances: None of the components are listed.
- Canadian ARET: None of the components are listed.
- Canadian NPRI: The following components are listed: Sodium hexametaphosphate
- Alberta Designated Substances: None of the components are listed.
- Ontario Designated Substances: None of the components are listed.
- Quebec Designated Substances: None of the components are listed.

Canada inventory

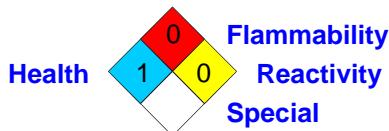
- All components are listed or exempted.

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

Mexico

Classification

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International regulations

International lists

- Australia inventory (AICS): All components are listed or exempted.
- China inventory (IECSC): All components are listed or exempted.
- Japan inventory: Not determined.
- Korea inventory: All components are listed or exempted.
- New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
- Philippines inventory (PICCS): All components are listed or exempted.

Chemical Weapons

Convention List Schedule I Chemicals

- Not listed

Chemical Weapons

Convention List Schedule II Chemicals

- Not listed

Chemical Weapons

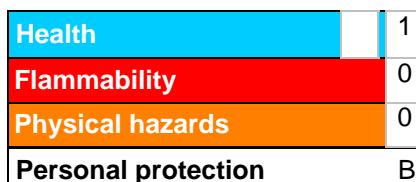
Convention List Schedule III Chemicals

- Not listed

16. Other information

Label requirements : MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

Hazardous Material Information System (U.S.A.) :



The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



Date of issue : 03/15/2009

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16. Other information

Date of previous issue : 05/31/2008
Version : 4

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.