

SECTION 1 - IDENTIFICATION

Product identifier/Trade name: TORNADO

Other means of identification:

Recommended use: LAUNDRY DETERGENT IN POWDER FORM

Restriction on use: For industrial, institutional and food plants use only.

Initial supplier identifier: PHARAO
J7C 5V6
450.420.0022

Emergency phone number: (613) 996-6666 (CANUTEC)

SECTION 2 - HAZARDS IDENTIFICATION

2a WHMIS 2015 - GHS (Globally Harmonized System) classification

This product is classified as an eye irritant category 2

2b Label elements



Pictogram

Precautionary statement

Wash hands thoroughly after handling. Wear eye protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice.

Signal word:

Warning.

Hazard statement

Causes serious eye irritation.



SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (weight)	GHS CLASSIFICATION
Ethoxylated alcohol	68991-48-0	0.1-1.0	Eye irritation, category 2
Sodium carbonate or Soda ash	497-19-8	3-7	Eye irritation, category 2
Sodium metasilicate	6834-92-0	1-2.5	Eye irritation, category 2; Skin irritation category 2 Specific target organ toxicity (single exposure) category 3

SECTION 4 - FIRST AID MEASURES

4a Description of first aid measures**Eye contact:**

Immediately rinse with plenty of water for several minutes, keeping eyelids open. If irritation persists seek medical attention.

Skin contact:

Rinse with water. If irritation develops, consult medical personnel.

Inhalation:

Bring person to fresh air.

Ingestion:

Rinse mouth. Call a doctor if you feel unwell. Never give anything by mouth if the person is unconscious

4b Most important symptoms and effects

Eye: May cause irritation, redness, tears, burning sensation.

Skin: May cause irritation.

Inhalation: May cause irritation to respiratory tract.

Ingestion: May cause slight irritation, headache, abdominal pain, diarrhoea, nausea and vomiting.

4c Immediate medical attention and special treatment needed

No special treatment

SECTION 5 - FIRE FIGHTING MEASURES

5a Extinguishing media

Suitable extinguishing media:

Water (if possible avoid powerful sprays), foam, dry chemicals, carbon dioxide. Product itself is not flammable.

Unsuitable extinguishing media:

None known.

Specific hazards for product

Hazardous combustion products:

Oxides of carbon and other irritating gases.

Special protective equipment and precautions for firefighters

Special fire-fighting procedures/equipment:

During a fire, irritating smoke and fumes may be generated. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from irritating products produced during the combustion. Move

containers from fire area if it can be done without risk. A stream of water directed into the product generates a lot of foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6a Personal precautions, protective equipment and emergency procedures

Personal protection:

Wear gloves and safety glasses. Use adequate aeration and ventilation. Floor will be slippery in case of a spill. Use

appropriate personal protection equipment (see section 8)

6b Methods and materials for containment and cleaning:

Pick up product and put back in containers or into drums for disposal. Resume cleaning by rinsing with water. Caution: floors will be slippery.

6c Environmental precautions:

Product is biodegradable and is phosphate-free.

SECTION 7 - HANDLING AND STORAGE

7a Precautions for Safe handling:

Avoid contact with eyes and prolonged contact with skin. Avoid breathing dust.

7b Condition for safe storage:

Store in a sealed container in a well-ventilated place. Do not store with food products.

7c Special packaging materials: none.

Avoid contact with strong acids.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

8a Control parameters

	Ontario Time-weighted Average Limit (TWA)	Ontario Short-Term Exposure Limit (STEL)	Notations
Ethoxylated alcohol	None established	None established	
Sodium carbonate	None established	None established	
Sodium metasilicate	None established	None established	

8b Engineering controls:

Not required under normal applications.

8c Individual protection measures

Respiratory Protection:

Not required under normal applications. If dust is generated during use, wear mask for dusts.

Skin protection and other protective equipment:

Waterproof boots for large spills. Rubber gloves in case of possible contact.

Eye / face protection:

Not required under normal applications. Safety glasses in case of possible contact.

General hygiene considerations:

KEEP OUT OF REACH OF CHILDREN. Avoid contact with eyes and skin. Never eat, drink, or smoke in work areas. Good hygiene is recommended after use of this product.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odour:	White powder with lemon scent
Odour threshold:	N/Av
pH :	Approximately 12 at 30 g/L
Melting point and freezing point:	Not available
Boiling point:	Not applicable
Flash point:	None
Evaporation rate (n-BuAc =1):	Not applicable
Lower flammable limit (% by volume):	Not applicable
Upper flammable limit (% by volume):	Not applicable
Explosion data - Sensitivity to mechanical impact:	Not sensitive
Explosion data - Sensitivity to static discharge:	Not sensitive
Vapour pressure (mm Hg)	Not applicable
Vapour density:	Not applicable
Specific gravity or density (water = 1 at 4 °C):	Not applicable
Solubility in water:	High solubility
Partition coefficient – n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature	Not available
Viscosity:	Not applicable

SECTION 10 - STABILITY AND REACTIVITY

10a Reactivity:

Not applicable when used as directed.

10b Chemical stability :

Stable at room temperature, in normal handling and storage conditions.

10c Possibility of hazardous reactions:

May react with strong acids.

10d Conditions to avoid:

Avoid contact with strong acids.

10e Incompatible materials

Strong acids

10f Hazardous decomposition products:

With strong acids: heat, water vapour.

SECTION 11 - TOXICOLOGICAL INFORMATION

Primary entry route(s): Eye and ingestion.

Eye: May cause irritation, redness, tears, burning sensation.

Skin: May cause irritation.

Inhalation: Breathing dust may cause irritation of respiratory tract.

Ingestion: May cause slight irritation, headache, abdominal pain, diarrhoea, nausea and vomiting.

Carcinogenicity:	No ingredient listed by IARC as a possible carcinogen.
Teratogenicity, mutagenicity, other reproductive effects:	Mutagenic tests have been negative for ingredients
Skin sensitization:	Ingredients not sensitizing as per OECD 406
Respiratory tract sensitization:	Not available
Synergistic materials:	Not available
Other important hazards:	Not available

Toxicological data: The calculated LD₅₀ for this product is greater than 10,000 mg/Kg, oral, rat; our products are not tested on animals.

Ingredient	LD ₅₀ (route, species)	LC ₅₀ # hours (species)
Sodium carbonate	4,090 mg/kg (oral, rat) 2,210 mg/kg (dermal, lapin)	N/Av
Ethoxylated alcohol	>2,000 mg/kg (oral, rat) >2,000 mg/kg (dermal, rabbit)	N/Av N/Av
Sodium metasilicate	1,153 mg/kg (oral, rat)	N/Av

For more details, refer to Section 3.

SECTION 12 - ECOLOGICAL INFORMATION

12a Ecotoxicity :

TOXICITY (Fish)	Results	Exposure time	Method
Ethoxylated alcohol	70.1 mg/kg	48H	Not available
Sodium carbonate	Trout and salmon: 68-80 mg/L	96H	Not available
Sodium metasilicate	Leuciscus idus: >146 mg/L	48H	Not available

TOXICITY (Daphnia)	Results	Exposure time	Method
Ethoxylated alcohol	5.3 mg/L	48H	Not available
Sodium carbonate	>146mg/L	24H	OCDE 202
Sodium metasilicate	>300 mg/L	48H	Not available

TOXICITY (Algae)	Results	Exposure time	Method
Ethoxylated alcohol	NOT AVAILABLE		
Sodium carbonate	Selenastrum EC50 230 mg/L	96H	Not available
Sodium metasilicate	Desmodesmus subspicatus EC50 207 mg/l	72H	Not available

12b Persistence and degradability: Product is expected to be readily biodegradable as per OECD 301.

12c Bioaccumulation potential: Not available

12d Mobility in soil: There is no test data on this product.

12e Other adverse effect No applicable information found

SECTION 13 - DISPOSAL CONSIDERATIONS

Eliminate according to federal, provincial and local regulations.

SECTION 14 - TRANSPORTATION INFORMATION
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Transportation of Dangerous Goods (TDG) in Canada :

Not regulated	
UN number	Not applicable
Proper shipping name:	Not applicable
Class:	Not applicable
Identification number:	Not applicable
Packing group:	Not applicable
Special case:	Not applicable

SECTION 15 - REGULATORY INFORMATION
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In Canada**WHMIS information:**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and this safety data sheet (SDS) contains all the information required by the HPR.

WHMIS Classification: See section 2a

CEPA information: Ingredients are listed on the DSL inventory.

SECTION 16 - OTHER INFORMATION

Date of latest revision: 2018-12-03

References:

1. Manufacturer'/suppliers' MSDS.
2. Occupational Exposure Limits for Ontario Workplaces required under Regulation 833
3. International Agency for Research on Cancer Monographs
4. The European Chemicals Agency (ECHA) website.

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act
cps	Centipoises
DSL	Domestic Substance List
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal concentration
LD	Lethal Dosage
N/Av	Not available
N/Ap	Not Applicable
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit

TLV
WHMIS

Threshold Limit Value
Workplace Hazardous Materials Information System

End of the SDS