

Material Safety Data Sheet

TNT-100

1 . Product and company identification

Common name : TNT-100
Material uses : Disinfectant cleaner.
Supplier/Manufacturer : V-TO Inc.
 2975, Nelson
 Saint-Hyacinthe
 QC J2S 1Y5
 Tél: (450) 774-6849
 Fax:(450) 774-4334
In case of emergency : CANUTEC (613) 996-6666 (Canada)
MSDS authored by: : Kemika XXI Inc. + 1-450-435-7475 12/30/2006

2 . Hazards identification

Physical state : Liquid.
Odor : Lemon-like.
Color : Green.
Hazard status : This material is classified hazardous under OSHA regulations in the United States and the WHMIS Controlled Product Regulation in Canada.
Emergency overview : DANGER !
 CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.
 MAY BE HARMFUL IF SWALLOWED.
 Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist.
 Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects
Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Corrosive to the respiratory system.
Ingestion : May be harmful if swallowed. May cause burns to mouth, throat and stomach.
Potential chronic health effects : Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
 Mutagenic effects: Not available.
 Teratogenic effects: Not available.
Medical conditions aggravated by over-exposure : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation.
See toxicological information (section 11)

3 . Composition/information on ingredients

United States

Name	CAS number	%
Ethylene oxide-nonylphenol polymer	9016-45-9	5 - 10
Tetrapotassium Pyrophosphate	7320-34-5	1 - 5
Quaternary Ammonium Compounds, C12-18-Alkyl(Ethylphenyl)Methyl]Dimethyl, Chlorides	68956-79-6	1 - 5
Quaternary Ammonium Compounds, Benzyl-C12-18-Alkyldimethyl, Chlorides	68391-01-5	1 - 5
Disodium metasilicate	6834-92-0	1 - 5

Canada

Name	CAS number	%
Ethylene oxide-nonylphenol polymer	9016-45-9	5 - 10
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Quaternary Ammonium Compounds, Benzyl-C12-18-Alkyldimethyl, Chlorides	68391-01-5	1 - 5
Disodium metasilicate	6834-92-0	1 - 5
Ethanol	64-17-5	0.1 - 0.5

4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

5 . Fire-fighting measures

- Flammability of the product** : May be combustible at high temperature.
- Products of combustion** : These products are carbon oxides, phosphates.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
 - Not suitable** : None known.
- Special exposure hazards** : No specific hazard.
- 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** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7 . Handling and storage

- Handling** : Do not ingest. Do not get in eyes or on skin or clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapor or mist. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

United States

Product name

Tetrapotassium Pyrophosphate

Exposure limits
ACGIH TLV (United States).
TWA: 5 mg/m³ 8 hour(s). Form: Dust

Canada

Product name

Tetrapotassium Pyrophosphate

Ethanol

Exposure limits
ACGIH TLV (Canada).
TWA: 5 mg/m³ 8 hour(s). Form: Dust
CSST (Canada, 2001).
TWA: 1880 mg/m³ 8 hour(s).
Engineering measures

: Use only with adequate ventilation. If user operations generate dust, fumes, 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.

Personal protection
Eyes

: Safety glasses.

Skin

: Wear appropriate personal protective suit.

Respiratory

: A respirator is not needed under normal and intended conditions of product use.

Hands

: Nitrile gloves.


HMIS Code/Personal protective equipment

: B

Personal protection in case of a large spill

: Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear. Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

9 . Physical and chemical properties

Physical state

: Liquid.

Color

: Green.

Odor

: Lemon-like.

pH

: 12 to 13 [Basic.]

Solubility

: Easily soluble in cold water, hot water.

10 . Stability and reactivity

Stability and reactivity

: The product is stable.

Incompatibility with various substances

: Reactive with oxidizing materials and acids.

Hazardous polymerization

: Will not occur.

Conditions of reactivity

: Not available.

11 . Toxicological information

Toxicity data

Product/ingredient name	Test	Result	Route	Species
Ethylene oxide-nonylphenol polymer	LD50	1310 mg/kg	Oral	Rat
Tetrapotassium Pyrophosphate	LD50	>4640 mg/kg	Dermal	Rabbit
Disodium metasilicate	LD50	1153 mg/kg	Oral	Rat
	LD50	770 mg/kg	Oral	Mouse

Acute Effects

Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin.
Inhalation	: Corrosive to the respiratory system.
Ingestion	: May be harmful if swallowed. May cause burns to mouth, throat and stomach.
Potential chronic health effects	: Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Mutagenic effects: Not available. Teratogenic effects: Not available.

12 . Ecological information

Ecotoxicity data

Product/ingredient name	Species	Period	Result
Ethylene oxide-nonylphenol polymer	Lepomis macrochirus (LC50)	96 hour(s)	1.3 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	4.7 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	7.6 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	7.9 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>10 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>1000 mg/l




Environmental precautions	: No known significant effects or critical hazards.
Products of degradation	: These products are carbon oxides and water, phosphates.
Toxicity of the products of biodegradation	: The products of degradation are less toxic than the product itself.

13 . Disposal considerations

Waste disposal	: Please refer to the label for waste disposal procedures.
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14 . Transport information

AERG : 153

Regulatory information	Proper shipping name	Class	UN number	PG	Label
UN / IMDG / IATA Classification	DISINFECTANTS, LIQUID, CORROSIVE N.O.S. (Quaternary Ammonium Compounds, C12-18-Alkyl(Ethylphenyl)Methyl]Dimethyl, Chlorides)	8	UN1903	III	
DOT Classification	DISINFECTANTS, LIQUID, CORROSIVE N.O.S. (Quaternary Ammonium Compounds, C12-18-Alkyl(Ethylphenyl)Methyl]Dimethyl, Chlorides)	8	UN1903	III	
TDG Classification	DISINFECTANTS, LIQUID, CORROSIVE N.O.S. (Quaternary Ammonium Compounds, C12-18-Alkyl(Ethylphenyl)Methyl]Dimethyl, Chlorides)	8	UN1903	III	

Additional information

UN

IMDG

IATA

DOT

TDG

Remarks
Limited Quantity
Exemption 5L

Remarks
Limited Quantity
Exemption 5L

15 . Regulatory information

United States

- HCS Classification** : Corrosive material
- U.S. Federal regulations** : TSCA 8(a) PAIR: Ethylene oxide-nonylphenol polymer
TSCA 8(b) inventory: All components listed.
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: Disodium metasilicate
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Disodium metasilicate: Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Sodium hydroxide
Clean 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.
- State regulations** : Pennsylvania RTK: Ethanol: (generic environmental hazard); Sodium hydroxide: (environmental hazard, generic environmental hazard)
Massachusetts RTK: Ethanol; Glycine, n,n-bis(carboxymethyl)-, trisodium salt; Sodium hydroxide
New Jersey: Ethanol; Sodium hydroxide
California prop. 65: No products were found.

Canada

- WHMIS (Canada)** : **WHMIS EXEMPT, This product is registered under the Pest Control Products Act. Registration number 21407.**
DSL : All components listed.

This product has been classified in accordance with the hazard criteria of the Canadian CPR and the United States OSHA. This MSDS contains all the information required by the CPR and OSHA, the American National Standard Institute (ANSI) Z400.1.

- International lists** : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

- Label requirements (U.S.A.)** : CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.
MAY BE HARMFUL IF SWALLOWED.

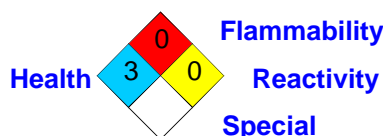
Hazardous Material Information System (U.S.A.)

HMIS RATING	
Health	3
Fire hazard	0
Physical Hazard	0
Personal protection	B

HAZARD RATINGS

4- Extreme
3- Serious
2- Moderate
1- Slight
0- Minimal
See section 8 for more detailed information on personal protection.

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



References : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

Date of issue : 12/30/2006

Version : 1

Notice to reader

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