

Material Safety Data Sheet

Laundry detergent 95

1 . Product and company identification

Common name	: Laundry detergent 95
Material uses	: Laundry detergent.
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:	: Atrion Regulatory Services, Inc. 08/15/2007

2 . Hazards identification

Physical state	: Solid. [Poudre solide granuleuse.]
Odor	: Citrus.
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. CANCER HAZARD. CONTAINS MATERIAL WHICH CAN CAUSE CANCER. CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: KIDNEYS, BLADDER. MAY BE HARMFUL IF SWALLOWED. Corrosive to the eyes, skin and respiratory system. Causes burns. Harmful if swallowed. Avoid exposure - obtain special instructions before use. Do not ingest. Do not get in eyes or on skin or clothing. Contains material that can cause target organ damage. Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure. 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	
Eyes	: Corrosive to eyes. Causes burns.
Skin	: Corrosive to the skin. Causes burns.
Inhalation	: Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	: May be harmful if swallowed. May cause burns to mouth, throat and stomach.
Potential chronic health effects	: Carcinogenic effects: Classified 3 (Not classifiable for humans.) by IARC [Zeolites, naa]. Classified 2B (Possible for humans.) by IARC [Glycine, n,n-bis(carboxymethyl)-, trisodium salt]. Classified 3 (Not classifiable for humans.) by IARC [D-Limonene]. 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 exposure of the eyes to a low level of dust can produce eye irritation. Repeated or prolonged exposure to the substance can produce target organ damage.
See toxicological information (section 11)	

3 . Composition/information on ingredients

United States

Name	CAS number	%
Sodium chloride	7647-14-5	30 - 60
Sodium carbonate	497-19-8	5 - 10
Disodium metasilicate	6834-92-0	1 - 5
Alcohols, C12-15, Ethoxylated	68131-39-5	1 - 5
Glycine, n,n-bis(carboxymethyl)-, trisodium salt	5064-31-3	1 - 5
Glycerin	56-81-5	0.5 - 1
Silicic acid, aluminum sodium salt	1344-00-9	0.5 - 1

Canada

Name	CAS number	%
Sodium carbonate	497-19-8	5 - 10
Disodium metasilicate	6834-92-0	1 - 5
Alcohols, C12-15, Ethoxylated	68131-39-5	1 - 5
Glycine, n,n-bis(carboxymethyl)-, trisodium salt	5064-31-3	1 - 5
Glycerin	56-81-5	0.5 - 1
Silicic acid, aluminum sodium salt	1344-00-9	0.5 - 1

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 immediately.
- 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** : Non-flammable.
- Products of combustion** : Decomposition products may include the following materials: carbon oxides
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- 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** : Use suitable protective equipment.
- 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** : Place spilled material in an appropriate container for disposal.

7 . Handling and storage

- Handling** : Follow good industrial hygiene practice.
- Storage** : Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

United States

Product name

Glycerin

Exposure limits

ACGIH TLV (United States, 1/2006).

TWA: 10 mg/m³ 8 hour(s). Form: Mist

OSHA PEL (United States, 11/2006).

TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction

TWA: 15 mg/m³ 8 hour(s). Form: Total dust

Silicic acid, aluminum sodium salt

NIOSH REL (United States, 12/2001).

TWA: 2 mg/m³ 10 hour(s). Form: All forms.

ACGIH TLV (United States, 1/2006).

TWA: 2 mg/m³, (as Al) 8 hour(s). Form: Soluble

NIOSH REL (United States, 12/2001).

TWA: 2 mg/m³, (as Al) 10 hour(s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 2 mg/m³, (as Al) 8 hour(s).

Canada

Product name

Glycerin

Exposure limits

ACGIH TLV (United States, 1/2005).

TWA: 10 mg/m³ 8 hour(s). Form: Mist

Silicic acid, aluminum sodium salt

ACGIH TLV (United States, 1/2005).

TWA: 2 mg/m³ 8 hour(s). Form: Soluble

- 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.
- 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** : F
- 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.
- Hygiene measures** : 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	: Solid. [Poudre solide granuleuse.]
Odor	: Citrus.
pH	: 10.4 to 10.9 (Conc. (% w/w): 0.5) [Basic.]
Solubility	: Miscible in water.

10 . Stability and reactivity

Stability and reactivity	: The product is stable.
Incompatibility with various substances	: Reactive with oxidizing materials and acids.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Will not occur.
Conditions of reactivity	: None known.

11 . Toxicological information

Toxicity data

Product/ingredient name	Test / Route	Species	Result
Disodium metasilicate	LD50 Oral	Rat	1153 mg/kg
Alcohols, C12-15, Ethoxylated	LD50 Oral	Rat	>2000 mg/kg
Sodium chloride	LD50 Dermal	Rabbit	>10 g/kg
	LD50 Intraperitoneal	Rat	2600 mg/kg
	LD50 Oral	Rat	3000 mg/kg
Sodium carbonate	LD50 Oral	Rat	4090 mg/kg
Glycine, n,n-bis(carboxymethyl)-, trisodium salt	LD50 Intraperitoneal	Rat	254 mg/kg
	LD50 Oral	Rat	1100 mg/kg
Glycerin	LD50 Dermal	Rabbit	>10 g/kg
	LD50 Intraperitoneal	Rat	4420 mg/kg
	LD50 Intravenous	Rat	5566 mg/kg
	LD50 Oral	Rat	12600 mg/kg
	LD50 Subcutaneous	Rat	100 mg/kg
Silicic acid, aluminum sodium salt	LD50 Oral	Rat	>27 g/kg

Acute Effects

Eyes	: Corrosive to eyes. Causes burns.
Skin	: Corrosive to the skin. Causes burns.
Inhalation	: Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	: May be harmful if swallowed. May cause burns to mouth, throat and stomach.
Potential chronic health effects	: Carcinogenic effects: Classified 3 (Not classifiable for humans.) by IARC [Zeolites, naa]. Classified 2B (Possible for humans.) by IARC [Glycine, n,n-bis(carboxymethyl)-, trisodium salt]. Classified 3 (Not classifiable for humans.) by IARC [D-Limonene]. Mutagenic effects: Not available. Teratogenic effects: Not available.
Target organs	: Contains material which causes damage to the following organs: kidneys, bladder.

12 . Ecological information

Ecotoxicity data

Product/ingredient name	Species	Test	Exposure	Result
Alcohols, C12-15, Ethoxylated	Daphnia	Intoxication	48 hours	Acute EC50 1.4 mg/L
	Daphnia	Intoxication	48 hours	Acute EC50 1.3 mg/L
	Fish	Mortality	96 hours	Acute LC50 1.58 mg/L
	Fish	Mortality	96 hours	Acute LC50 1.4 mg/L
	Fish	Mortality	96 hours	Acute LC50 1.16 mg/L
	Fish	Mortality	96 hours	Acute LC50 1.03 mg/L
Sodium chloride	Daphnia	Intoxication	48 hours	Acute EC50 402.6 mg/L
	Fish	Mortality	96 hours	Acute LC50 7100 mg/L
	Fish	Mortality	96 hours	Acute LC50 7050 mg/L
	Fish	Mortality	96 hours	Acute LC50 6390 mg/L
	Fish	Mortality	96 hours	Acute LC50 6094 mg/L
	Fish	Mortality	96 hours	Acute LC50 7200 mg/L
Sodium carbonate	Fish	Mortality	96 hours	Acute LC50 <850 mg/L
	Fish	Mortality	96 hours	Acute LC50 320 mg/L
	Fish	Mortality	96 hours	Acute LC50 300 mg/L
Glycerin	Fish	Mortality	96 hours	Acute LC50 54000 mg/L

Environmental precautions : No known significant effects or critical hazards.

Products of degradation : Decomposition products may include the following materials: carbon oxides and water, nitrogen oxides, halogenated compounds.

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. 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

14 . Transport information

AERG : Not applicable.

Regulatory information

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

15 . Regulatory information

United States

HCS Classification : Corrosive material
Carcinogen
Target organ effects

U.S. Federal regulations : TSCA : 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: Sodium carbonate; Glycerin; Sodium chloride; Glycine, n,n-bis(carboxymethyl)-, trisodium salt; Disodium metasilicate

SARA 311/312 MSDS distribution - chemical inventory - hazard identification

Sodium carbonate: Immediate (acute) health hazard, Delayed (chronic) health hazard;
Glycerin: Immediate (acute) health hazard, Delayed (chronic) health hazard; Sodium chloride: Immediate (acute) health hazard, Delayed (chronic) health hazard; Glycine, n,n-bis(carboxymethyl)-, trisodium salt: Delayed (chronic) health hazard; Disodium metasilicate: Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.
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 : **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: The following components are listed: Glycine, n,n-bis(carboxymethyl)-, trisodium salt;Glycerin
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: The following components are listed: Glycerin
Rhode Island Hazardous Substances: None of the components are listed.
California prop. 65: No products were found.

Canada WHMIS (Canada)

: Class D-2A: Material causing other toxic effects (Very toxic).
 Class E: Corrosive material



Canada inventory

: **Canada inventory:** All components listed.
CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
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.

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.
 CANCER HAZARD. CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
 CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
 KIDNEYS, BLADDER.
 MAY BE HARMFUL IF SWALLOWED.

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

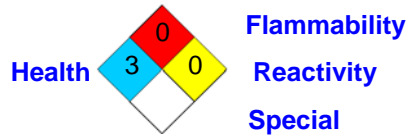
HMIS RATING

Health	*	3
Fire hazard		0
Physical Hazard		0
Personal protection		F

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.

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