



Material Safety Data Sheet

Vortex

Section 1. Chemical Product and Company Identification

Common name	: Vortex		
Supplier	: Dober Group 14461 S. Waverly Ave. Midlothian, IL 60445	Manufacturer	: Dober Group 14461 S. Waverly Ave. Midlothian, IL 60445
Code	: 000999	Validation date	: 2004-12-19.
Trade Name	: Vortex	In case of emergency	
Material Uses	: Industrial laundry detergent.		: ChemTel 1-813-248-0585 1-800-458-5924

Section 2. Composition, Information on Ingredients

Name	CAS #	% by weight	UN Number
Xylenesulfonic Acid, Sodium Salt	1300-72-7	15-30	Not applicable.
Dinonylphenyl polyoxyethylene	9014-93-1	1-3	Not applicable.
Polyethyelene glycol	25322-68-3	1-3	Not applicable.
Tetrasodium EDTA	64-02-8	3-5	Not applicable.
Glycine, n,n-bis(carboxymethyl)-, trisodium salt	5064-31-3	0.1-0.5	UN3262
Glycine, n-(carboxymethyl)-n-[2-[(carboxymethyl)amino]ethyl]-, trisodiumsalt	19019-43-3	0.1-0.5	Not applicable.

This material is classified hazardous under OSHA regulations in the United States, the WHMIS Controlled Product Regulation in Canada and the NOM-018-STPS-2000 in Mexico.

See Section 8 for Exposure Limits.

See Section 11 for Toxicological Data.

See Section 14 for Transport Information.

Section 3. Hazards Identification

Physical State and Appearance	: Liquid. (Viscous liquid.)
Emergency Overview	: CAUTION! CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: EYE, LENS OR CORNEA. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION. POSSIBLE CANCER HAZARD CONTAINS MATERIAL WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA. Risk of cancer depends on duration and level of exposure. Avoid contact with eyes, skin and clothing. Do not ingest. Wash thoroughly after handling.
Routes of Entry	: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Potential Acute Health Effects	<p>Eyes : Hazardous in case of eye contact (irritant).</p> <p>Skin : Hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.</p> <p>Inhalation : Not available.</p> <p>Ingestion : Not available.</p>
Potential Chronic Health Effects	: CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC [Glycine, n,n-bis (carboxymethyl)-, trisodium salt]. Classified 2B (Possible for human.) by IARC [Glycine, n-(carboxymethyl)-n-[2-[(carboxymethyl)amino]ethyl]-, trisodiumsalt]. Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [Hydrogen Chloride (HCl)]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.

Continued on next page

Medical Conditions : Repeated or prolonged exposure is not known to aggravate medical condition.
 Aggravated by Overexposure
 Over-exposure signs/symptoms : Not available.

See Toxicological Information (Section 11)

Section 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 15 minutes. Cold water may be used. Get medical attention
 Skin Contact : Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.
 Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
 Ingestion : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.
 Notes to Physician : No specific antidote. Medical staff must contact Poison Information Center.

Section 5. Fire Fighting Measures

Flammability of the product : May be combustible at high temperature.
 Auto-ignition Temperature : Not available.
 Flash Points : Closed cup: >93.33°C (200°F). (Pensky-Martens.)
 Flammable limits : Not available.
 Products of Combustion : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂), sulfur oxides (SO₂, SO₃). Some metallic oxides.
 Fire hazards in presence of various substances : Not available.
 Explosion hazards in presence of various substances : Risks of explosion of the product in presence of mechanical impact: Not applicable.
 Risks of explosion of the product in presence of static discharge: Not applicable.
 Fire Fighting Media and Instructions : SMALL FIRE: Use dry chemical powder. LARGE FIRE : Use water spray, fog or foam. Do not use water jet.
 Protective clothing (fire) : Be sure to use an approved/certified respirator or equivalent.
 Special remarks on fire hazards : Not available.

Section 6. Accidental Release Measures

Small spill and leak : Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: **Neutralize the residue with a dilute solution of acetic acid.** Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
 Large Spill and Leak : Absorb with an inert material and put the spilled material in an appropriate waste disposal. **Neutralize the residue with a dilute solution of acetic acid.** Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Handling : Avoid contact with eyes, skin and clothing. Do not ingest. Wash thoroughly after handling.
 Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 37.78°C (100°F). Do not allow product to freeze.

Section 8. Exposure Controls, Personal Protection

Engineering controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection
 Eyes : Splash goggles.
 Body : Lab coat.
 Respiratory : Wear appropriate respirator when ventilation is inadequate.

Hands : Rubber gloves. or Neoprene gloves.

Feet : Not applicable.

Protective Clothing
(Pictograms)



Personal Protection in Case of a Large Spill : Splash goggles. Full suit. Boots. Gloves.

Exposure Limits

Product Name

Polyethylene glycol

Exposure Limits

AIHA WEEL (United States, 2003).

TWA: 10 mg/m³ 8 hour(s). Form: Aerosol

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and appearance	: Liquid. (Viscous liquid.)
Color	: Clear.
Odor	: Detergent. (Slight.)
Molecular Weight	: Not applicable.
Molecular Formula	: Not applicable.
pH	: 10 [Basic.]
Boiling/condensation point	: <99°C (210.2°F)
Melting/freezing point	: <0°C (32°F)
Specific Gravity	: 1.12 (Water = 1)
Vapor pressure	: The highest known value is 2.3 kPa (17.5 mm Hg) (at 20°C) (Water).
Vapor density	: The highest known value is 0.62 (Air = 1) (Water).
Volatility	: 40% (v/v).
Odor threshold	: Not available.
Evaporation rate	: Not available.
Viscosity	: Dynamic: 200 cP
LogK _{ow}	: Not available.
Solubility	: Miscible in water.

Section 10. Stability and Reactivity

Stability and Reactivity	: The product is stable.
Conditions of instability	: Not available.
Incompatibility with various substances	: Reactive with oxidizing agents. Slightly reactive with acids.
Hazardous Decomposition Products	: Not available.
Hazardous Polymerization	: Will not occur.

Section 11. Toxicological Information

Toxicity data

Ingredient name	Test	Result	Route	Species
Polyethylene glycol	LD50	600 mg/kg	Oral	Rat
	LD50	1054 mg/kg	Oral	Rat
	LD50	27500 mg/kg	Oral	Rat
Glycine, n,n-bis(carboxymethyl)-, trisodium salt	LD50	1100 mg/kg	Oral	Rat
	LD50	681 mg/kg	Oral	Mouse

Chronic effects on humans : **CARCINOGENIC EFFECTS:** Classified 2B (Possible for human.) by IARC [Glycine, n,n-bis (carboxymethyl)-, trisodium salt]. Classified 2B (Possible for human.) by IARC [Glycine, n-(carboxymethyl)-n-[2-[(carboxymethyl)amino]ethyl]-, trisodiumsalt]. Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [Hydrogen Chloride (HCl)]. Contains material which causes damage to the following organs: eye, lens or cornea.

Other toxic effects on humans : Hazardous in case of skin contact (irritant), of eye contact (irritant).
Non-sensitizer for skin.

Special remarks on toxicity to animals : Not available.

Special remarks on other toxic effects on humans : Not available.

Section 12. Ecological Information

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
Polyethylene glycol	Oncorhynchus mykiss (LC50)	96 hour(s)	>20000 mg/l
Tetrasodium EDTA	Lepomis macrochirus (LC50)	96 hour(s)	486 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	1030 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	2070 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	3092 mg/l

BOD and COD : Not available.

Biodegradable/OECD : Not available.

Mobility : Not available.

Section 13. Disposal Considerations

Waste information : Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Consult your local or regional authorities.

Section 14. Transport Information

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
United States (DOT)	Not regulated.	-	-	-		-
Canada (TDG)	Not regulated.	-	-	-		-
Mexico (NOM-004-SCT2-1994)	Not regulated.	-	-	-		-
IMDG Code	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

NAERG : Not applicable.

Section 15. Regulatory Information

HCS Classification : Irritating material

U.S. Federal Regulations : TSCA 8(a) PAIR: Nonylphenol polyethylene glycol ether
TSCA 8(b) inventory: All components listed.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Sodium hydroxide; Hydrogen Chloride (HCl)
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.
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: Tetrasodium EDTA
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Tetrasodium EDTA:
Immediate (Acute) Health Hazard

SARA 313

Ingredient name	% by weight
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Form R - Reporting requirements	: No products were found.																																			
Supplier notification	: No products were found.																																			
State Regulations	: Rhode Island RTK hazardous substances: Hydrogen Chloride (HCl) Pennsylvania RTK: Sodium hydroxide: (environmental hazard, generic environmental hazard); Hydrogen Chloride (HCl): (environmental hazard) Florida: Hydrogen Chloride (HCl) Minnesota: Hydrogen Chloride (HCl) Massachusetts RTK: Sodium hydroxide; Glycine, n,n-bis(carboxymethyl)-, trisodium salt; Hydrogen Chloride (HCl) New Jersey: Sodium hydroxide; Hydrogen Chloride (HCl)																																			
WHMIS (Canada)	: D-2B: Material causing other toxic effects (TOXIC). CEPA DSL: All components listed, except below. CEPA NDSL: Glycine, n,n'-1,2-ethanediylbis-, disodium salt This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.																																			
Hazardous Ingredients Classification of the Degree of Risk (Mexico)	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>Health</th> <th>Flammability</th> <th>Reactivity</th> <th>Other</th> </tr> </thead> <tbody> <tr> <td>Xylenesulfonic Acid, Sodium Salt</td> <td>1</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>Dinonylphenyl polyoxyethylene</td> <td>1</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>Polyethylene glycol</td> <td>0</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>Tetrasodium EDTA</td> <td>2</td> <td>0</td> <td>0</td> <td>*</td> </tr> <tr> <td>Glycine, n,n-bis(carboxymethyl)-, trisodium salt</td> <td>3</td> <td>0</td> <td>0</td> <td>*</td> </tr> <tr> <td>Glycine, n-(carboxymethyl)-n-[2-[(carboxymethyl)amino]ethyl]-, trisodiumsalt</td> <td>1</td> <td>0</td> <td>0</td> <td></td> </tr> </tbody> </table>	Ingredient name	Health	Flammability	Reactivity	Other	Xylenesulfonic Acid, Sodium Salt	1	0	0		Dinonylphenyl polyoxyethylene	1	0	0		Polyethylene glycol	0	0	0		Tetrasodium EDTA	2	0	0	*	Glycine, n,n-bis(carboxymethyl)-, trisodium salt	3	0	0	*	Glycine, n-(carboxymethyl)-n-[2-[(carboxymethyl)amino]ethyl]-, trisodiumsalt	1	0	0	
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Section 16. Other Information

Label Requirements	: CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: EYE, LENS OR CORNEA. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION. POSSIBLE CANCER HAZARD CONTAINS MATERIAL WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA.
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Hazardous Material Information System (U.S.A.)

Health	*	1
Fire hazard		1
Reactivity		0
Personal protection		C

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



References

- 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. ANSI Z400.1, MSDS Standard, 2001. -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 2002. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994. -Manufacturer's Material Safety Data Sheet.

Responsible name

: Kemika XXI Inc. +1-450-435-7475

Validation date

: 2004-12-19.

Date of previous issue

: Not applicable.

Version

: 1

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.