

1. PRODUCT and COMPANY INFORMATION

PRODUCT	CARLON® STANDARD-CLEAR PVC SOLVENT CEMENT	EMERGENCY TELEPHONE NUMBER	CHEMTREC: 800-424-9300
CATALOG NUMBERS	VC9961P, VC9962, VC9963, VC9962C, VC9965C, VC9963C, VC9963CL, VC9964, VC9964C, VC9965CL	TELEPHONE NUMBER FOR INFORMATION	901-252-5000 ext. 8324
MANUFACTURER / SUPPLIER	THOMAS & BETTS CORPORATION	DATE OF PREPARATION or REVISION	January 24, 2012
ADDRESS	8155 T & B BOULEVARD, MEMPHIS, TENNESSEE 38125		

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS #	Percent
Methyl ethyl ketone	78-93-3	30 - 50
Tetrahydrofuran	109-99-9	30 - 50
Polyvinyl chloride	9002-86-2	12 - 20
Cyclohexanone	14808-60-7	10 - 20
Silica, amorphous, fumed	112945-52-5	1 - 5
Acetone	67-64-1	0 - 5

3. HAZARDS IDENTIFICATION

Physical state Liquid.

Appearance Clear or gray liquid.

Emergency overview WARNING

Flammable liquid and vapor.

Harmful or fatal if swallowed, can enter lungs and cause damage. Causes skin, eye and respiratory tract irritation. Vapors may cause drowsiness and dizziness.

OSHA regulatory status This product is hazardous according to OSHA 29 CFR 1910.1200.

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Eyes Causes eye irritation.

Skin Causes skin irritation. May be absorbed through the skin.

Inhalation Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.

Ingestion Harmful if swallowed. May irritate and cause malaise. Swallowing or vomiting of the liquid may result in aspiration into the lungs.

Target organs Central nervous system. Eyes. Respiratory system. Skin. Kidney. Liver.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. May cause damage to the liver and kidneys. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and symptoms In high concentrations, vapors are narcotic and may cause headache, fatigue, dizziness and nausea. Skin irritation. Irritation of eyes and mucous membranes. Ingestion may cause irritation and malaise.

Potential environmental effects The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

4. FIRST AID MEASURES

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing. Get medical attention if irritation develops or persists.

Skin contact Immediately flush skin with plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if discomfort develops or persists.

Ingestion Call a physician or poison control center immediately. DO NOT induce vomiting. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than the hips to help prevent aspiration.

Notes to physician Treat symptomatically.

General advice Thermal burns: Flush with plenty of water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

Flammable properties The product is highly flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures.

Extinguishing media

Suitable extinguishing media Water fog. Foam. Carbon dioxide (CO2). Alcohol resistant foam. Powder.

Unsuitable extinguishing media None.

Protection of firefighters

Protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Keep unnecessary personnel away. Avoid inhalation of vapors and contact with skin and eyes. Use personal protection as recommended in Section 8 of the MSDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

Methods for cleaning up ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb spillage with non-combustible, absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste.

Other information Clean up in accordance with all applicable regulations.

7. HANDLING and STORAGE

Handling Provide adequate ventilation. Avoid inhalation of vapors and contact with skin and eyes. The product is highly flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. Ground container and transfer equipment to eliminate static electric sparks. Use non-sparking hand tools and explosion-proof electrical equipment. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Storage Follow rules for flammable liquids. Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials. Periodically test for peroxide formation on long-term storage.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components

Acetone (CAS 67-64-1)

Type

Value

Form

STEL

750 ppm

TWA

500 ppm

Cyclohexan one (CAS 108-94-1)

STEL

50 ppm

TWA

20 ppm

Methyl ethyl ketone (CAS 78-93-3)

STEL

300 ppm

TWA

200 ppm

Polyvinyl chloride (CAS 9002-86-2)

TWA

1 mg/m3

Respirable fraction.

Tetrahydro furan (CAS 109-99-9)

STEL

100 ppm

TWA

50 ppm

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components

Polyvinyl chloride (CAS 9002-86-2)

Type

Value

Form

STEL

5 ppm

TWA

1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components

Acetone (CAS 67-64-1)

Type

Value

Form

PEL

2400 mg/m3

1000 ppm

Cyclohexan one (CAS 108-94-1)

PEL

200 mg/m3

50 ppm

Methyl ethyl ketone (CAS 78-93-3)

PEL

590 mg/m3

200 ppm

Polyvinyl chloride (CAS 9002-86-2)

PEL

5 mg/m3

15 mg/m3

Respirable fraction.

Tetrahydro furan (CAS 109-99-9)

PEL

590 mg/m3

200 ppm

Total dust

MATERIAL SAFETY DATA SHEET

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Silica, amorphous, fumed (CAS 112945-52-5)	TWA	0.8 mg/m3	
		20 mppcf	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	1800 mg/m3	
		750 ppm	
Cyclohexan one (CAS 108-94-1)	TWA	1200 mg/m3	
		500 ppm	
Methyl ethyl ketone (CAS 78-93-3)	STEL	200 mg/m3	
		50 ppm	
Polyvinyl chloride (CAS 9002-86-2)	TWA	80 mg/m3	Respirable particles. Total particulate
		20 ppm	
Tetrahydro furan (CAS 109-99-9)	STEL	885 mg/m3	
		300 ppm	
Tetrahydro furan (CAS 109-99-9)	TWA	590 mg/m3	
		200 ppm	
Tetrahydro furan (CAS 109-99-9)	TWA	3 mg/m3	
		10 mg/m3	
Tetrahydro furan (CAS 109-99-9)	STEL	295 mg/m3	
		295 mg/m3	
Tetrahydro furan (CAS 109-99-9)	TWA	147 mg/m3	
		50 ppm	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	500 ppm	
	TWA	250 ppm	
Cyclohexan one (CAS 108-94-1)	STEL	50 ppm	
	TWA	20 ppm	
Methyl ethyl ketone (CAS 78-93-3)	STEL	100 ppm	
	TWA	50 ppm	
Polyvinyl chloride (CAS 9002-86-2)	TWA	1 mg/m3	Respirable
Tetrahydro furan (CAS 109-99-9)	STEL	100 ppm	
	TWA	50 ppm	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Cyclohexan one (CAS 108-94-1)	STEL	50 ppm	
	TWA	20 ppm	
Methyl ethyl ketone (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
Polyvinyl chloride (CAS 9002-86-2)	TWA	1 mg/m3	Respirable fraction
Tetrahydro furan (CAS 109-99-9)	STEL	100 ppm	
	TWA	50 ppm	

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	2380 mg/m3	
		1000 ppm	
	TWA	1190 mg/m3	
Cyclohexan one (CAS 108-94-1)	TAW	500 ppm	
		100 mg/m3	
Methyl ethyl ketone (CAS 78-93-3)	STEL	25 ppm	
		300 mg/m3	
	TWA	100 ppm	
Tetrahydro furan (CAS 109-99-9)	TWA	150 mg/m3	
		50 ppm	
		10 mg/m3	
Polyvinyl chloride (CAS 9002-86-2)	TWA	10 mg/m3	Total dust
Tetrahydro furan (CAS 109-99-9)	TWA	300 mg/m3	
		100 ppm	

Mexico. Occupational Exposure Limit Values

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	3000 mg/m3 1260 ppm	
	TWA	2400 mg/m3 1000 ppm	
Cyclohexan one (CAS 108-94-1)	STEL	400 mg/m3 100 ppm	
	TWA	200 mg/m3 50 ppm	
Methyl ethyl ketone (CAS 78-93-3)	STEL	885 mg/m3 300 ppm	
	TWA	590 mg/m3 200 ppm	
Polyvinyl chloride (CAS 9002-86-2)	TWA	3 mg/m3 10 mg/m3	Respirable dust. Inhalable particulate.
Tetrahydro furan (CAS 109-99-9)	STEL	735 mg/m3 250 mg/m3	
	TWA	590 mg/m3 200 ppm	

Engineering controls Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

Personal protective equipment

Eye / face protection Wear goggles/face shield. Eye wash fountain is recommended.

Skin protection Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier. Wear appropriate chemical resistant clothing.

Respiratory protection Use NIOSH-certified, full-face air-supplied (self-contained breathing apparatus or air-line respirators) respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits.

General hygiene considerations When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance Clear or gray liquid.

Physical state Liquid.

Form Liquid.

Color Clear or gray.

Odor Ether-like.

Odor threshold Not available.

pH Not available.

Vapor pressure 145 mm Hg (20°C)

Vapor density 2.5 (Air = 1)

Boiling point 151 °F (66.1 °C)

Melting point/Freezing point Not available.

Solubility (water) Not available.

Specific gravity 0.93 ± 0.02 (20°C)

Flash point 14 - 23 °F (-10 - -5 °C)

Flammability limits in air, upper, % by volume 11.8 %

Flammability limits in air, lower, % by volume 1.8 %

Auto-ignition temperature Not available.

VOC 80 - 84 %

Evaporation rate 5.5 - 8 (Butyl acetate = 1)

10. STABILITY and REACTIVITY

Chemical stability Stable at normal conditions.

Conditions to avoid Heat, sparks, flames, elevated temperatures. Protect against direct sunlight.

Incompatible materials Strong oxidizing agents. Alkalis. Amines. Ammonia. Acids. Chlorine. Chlorinated inorganics (potassium, calcium and sodium hypochlorite). Hydrogen peroxide (H2O2).

Hazardous decomposition products Carbon oxides. Hydrogen chloride.

Possibility of hazardous reactions Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological data

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 20000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 50 mg/m1, 8 hours
<i>Oral</i>		
LD50	Rat	> 5800 mg/kg
Cyclohexanone (CAS 108-94-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	948 mg/kg
<i>Inhalation</i>		
LC50	Rat	8000 ppm, 4 hours
<i>Oral</i>		
LD50	Rat	1540 mg/kg
Methyl ethyl ketone (CAS 78-93-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 8000 mg/kg
<i>Inhalation</i>		
LC50	Rat	11700 mg/m1, 4 hours
<i>Oral</i>		
LD50	Rat	2300 - 3500 mg/kg
Tetrahydrofuran (CAS 109-99-9)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2100 mg/kg
<i>Inhalation</i>		
LC50	Rat	18000 - 22000 mg/m1, 4 hours
<i>Oral</i>		
LD50	Rat	1650 mg/kg

Sensitization Not classified.

Acute effects Harmful or fatal if swallowed can enter lungs and cause damage.

Local effects Causes skin, eye and respiratory tract irritation.

US. ACGIH Threshold Limit Values

Cyclohexanone (CAS 108-94-1) Can be absorbed through the skin.

Tetrahydrofuran (CAS 109-99-9) Can be absorbed through the skin.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue) and/or damage. May cause damage to the liver and kidneys. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Carcinogenicity

ACGIH Carcinogens

Acetone (CAS 67-64-1) A4 Not classifiable as a human carcinogen.

Cyclohexanone (CAS 108-94-1) A3 Confirmed animal carcinogen with unknown relevance to humans.

Polyvinyl chloride (CAS 9002-86-2) A4 Not classifiable as a human carcinogen.

Tetrahydrofuran (CAS 109-99-9) A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cyclohexanone (CAS 108-94-1) 3 Not classifiable as to carcinogenicity to humans.

Polyvinyl chloride (CAS 9002-86-2) 3 Not classifiable as to carcinogenicity to humans.

Silica, amorphous, fumed (CAS 112945-52-5) 3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Polyvinyl chloride (CAS 9002-86-2) Potential cancer hazard.

Epidemiology No epidemiological data is available for this product.

MATERIAL SAFETY DATA SHEET

Mutagenicity Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, methyl ethyl ketone and tetrahydrofuran are generally thought not to be mutagenic.

Reproductive effects Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Acetone and tetrahydrofuran has been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother.

Further information May be absorbed through the skin.

12. ECOLOGICAL INFORMATION

Ecotoxicological data

Product	Species	Test Results
CARLON® STANDARD CLEAR PVC SOLVENT CEMENT (CAS Mixture)		
Aquatic		
Crustacea EC50	Daphnia	11177.6372 mg/l, 48 hours, estimated
Fish LC50	Fish	1941.6462 mg/l, 96 hours, estimated

Components

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Aquatic		
Fish LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Cyclohexanone (CAS 108-94-1)		
Aquatic		
Fish LC50	Fathead minnow (Pimephales promelas)	481 - 578 mg/l, 96 hours
Methyl ethyl ketone (CAS 78-93-3)		
Aquatic		
Crustacea EC50	Water flea (Daphnia magna)	4025 - 6440 mg/l, 48 hours
Fish LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours
Tetrahydrofuran (CAS 109-99-9)		
Aquatic		
Fish LC50	Fathead minnow (Pimephales promelas)	2160 mg/l, 96 Hours

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulation/Accumulation No data available.

Partition coefficient

- Acetone (CAS 67-64-1) -0.24
- Methyl ethyl ketone (CAS 78-93-3) 0.29
- Tetrahydrofuran (CAS 109-99-9) 0.46
- Cyclohexanone (CAS 108-94-1) 0.81

Mobility in environmental media The product is miscible with water. May spread in water systems

13. DISPOSAL CONSIDERATION

Waste codes D001

- D035: Waste Methyl ethyl ketone
- F003: Waste Spent non-halogenated solvents
- F005: Waste spent non-halogenated solvents
- U002: Waste Acetone
- U057: Waste Cyclohexanone (l)
- U159: Waste Methyl ethyl ketone (MEK)
- U213: Waste Furan, tetrahydro-(l)

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations. This material and its container must be disposed of as hazardous waste.

Waste from residues / unused products Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION**DOT**

UN number UN1133

Basic shipping requirements:

Proper shipping name Adhesives, containing a flammable liquid

Hazard class 3

Packing group III

Special provisions B1, B52, IB3, T2, TP1

Additional information:

Packaging exceptions 150

Packaging non bulk 173

Packaging bulk 242

IATA

UN number UN1133

UN proper shipping name Adhesives, containing a flammable liquid

Transport hazard class(es) 3

Packing group III

Labels required 3

IMDG

UN number UN1133

UN proper shipping name Adhesives, containing a flammable liquid

Transport hazard class(es) 3

Packing group III

Labels required 3

TDG

Proper shipping name Adhesives, containing a flammable liquid

Hazard class 3

UN number UN1133

Packing group III

Special provisions B1, B52, IB3, T2, TP1

Labels required 3

Packaging exceptions 150

Packaging non bulk 173

Packaging bulk 242

General DOT Class Consumer Commodity ORM-D up to 1 liter (0.3 gallon)

15. REGULATORY INFORMATION**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)** Not regulated.**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List** Not regulated.**CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)**

Methyl ethyl ketone: 5000

Tetrahydrofuran: 1000

Cyclohexanone: 5000

Acetone: 5000

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A) No**Section 311/312 (40 CFR 370)** No**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)** Not controlled**Canadian regulations** 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.**WHMIS status** Controlled

WHMIS classification B2 - Flammable Liquids
 D1B - Immediate/Serious-TOXIC
 D2A - Other Toxic Effects-VERY TOXIC
 D2B - Other Toxic Effects-TOXIC

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations

US - California Hazardous Substances (Director's): Listed substance

- Acetone (CAS 67-64-1) Listed.
- Cyclohexanone (CAS 108-94-1) Listed.
- Methyl ethyl ketone (CAS 78-93-3) Listed.
- Silica, amorphous, fumed (CAS 112945-52-5) Listed.
- Tetrahydrofuran (CAS 109-99-9) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US - New Jersey RTK - Substances: Listed substance

- Acetone (CAS 67-64-1) Listed.
- Cyclohexanone (CAS 108-94-1) Listed.
- Methyl ethyl ketone (CAS 78-93-3) Listed.
- Polyvinyl chloride (CAS 9002-86-2) Listed.
- Tetrahydrofuran (CAS 109-99-9) Listed.

US. Massachusetts RTK - Substance List

- Acetone (CAS 67-64-1) Listed.
- Cyclohexanone (CAS 108-94-1) Listed.
- Methyl ethyl ketone (CAS 78-93-3) Listed.
- Silica, amorphous, fumed (CAS 112945-52-5) Listed.
- Tetrahydrofuran (CAS 109-99-9) Listed.

US. New Jersey Worker and Community Right-to-Know Act

Polyvinyl chloride (CAS 9002-86-2) 500 LBS

US. Pennsylvania RTK - Hazardous Substances

- Acetone (CAS 67-64-1) Listed.
- Cyclohexanone (CAS 108-94-1) Listed.
- Methyl ethyl ketone (CAS 78-93-3) Listed.
- Silica, amorphous, fumed (CAS 112945-52-5) Listed.
- Tetrahydrofuran (CAS 109-99-9) Listed.

Mexico regulations This safety data sheet was prepared in accordance with the Official Mexican Standard NOM-018-STPS-2000).

16. OTHER INFORMATION

	HMIS	NFPA	KEY
HEALTH	2	2	4 = SEVERE
FLAMMABILITY	3	3	3 = SERIOUS
INSTABILITY		0	2 = MODERATE
PHYSICAL HAZARD	3		1 = SLIGHT
			0 = MINIMAL