	HEALTH FLAMMABILIT PHYSICAL PPE	1 Y 0 0 B	Flammability Instability Health Special Hazard	Printed: 01/10/2012 Revision: 01/10/2012
1. Pro	oduct and	Compa	any Identification	
Product Code:	00021			
Product Name:	Green Sol			
Manufacturer Information				
Company Name:	Skyrex Inc.			
	109 Aldene R	oad		
	Roselle, NJ 0	07203		
Emergency Contact:	ChemTel		(800)255-3924	
2. Hazards Identification				
GHS Classification				
GHS Classification	Placard	Key wore	d GHS Hazard	
Skin Corrosion/Irritation, Category 3	none	Warning	Causes mild skin irritation	
Serious Eye Damage/Eye Irritation, Categor	y none	Warning	Causes eye irritation	

GHS Hazard Phrases

2B

Causes mild skin irritation. Causes eye irritation.

GHS Precaution Phrases

Wash hands thoroughly after handling.

GHS Response Phrases

If skin irritation occurs, get medical advice/attention. 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/attention.

GHS Storage and Disposal Phrases

Emergency Overview

Warning! Harmful if swallowed, inhaled, or absorbed through the skin. Causes eye and skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Danger! Harmful if swallowed. Hygroscopic (absorbs moisture from the air). Causes eye and skin burns. May cause severe digestive tract irritation with possible burns. Causes respiratory tract irritation. May cause kidney damage.

Potential Health Effects (Acute and Chronic)

Causes eye irritation. Causes redness and pain. Causes eye burns.

Skin: Causes skin irritation. Skin sensitization testing with human volunteers produced negative results. Prolonged or repeated skin contact may cause dermatitis. May cause burns to the digestive tract. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause severe and permanent damage to the digestive tract.

Causes symptoms similar to those of inhalation. Inhalation: May cause central nervous system effects such as nausea and headache. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

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Chronic: Chronic exposure may cause effects similar to those of acute exposure. Effects may be delayed.

LD 50 / LC 50

Ingredient CAS# 111-76-2, Ethanol, 2-Butoxy-: CAS# 111-76-2: Dermal, guinea pig: LD50 = 230 uL/kg; Draize test, rabbit, eye: 100 mg Severe; Draize test, rabbit, eye: 100 mg/24H Moderate; Inhalation, Mouse: LC50 = 700 ppm/7H Inhalation, Mouse: LC50 = 3380 mg/m3/7H Inhalation, rat: LC50 = 450 ppm/4H. Inhalation, rat: LC50 = 2900 mg/m3/7H. Oral, mouse: LD50 = 1230 mg/kg; Oral, mouse: LD50 = 1167 mg/kg; Oral, Rabbit: LD50 = 300 mg/kg; Oral, Rabbit: LD50 = 320 mg/kg; Oral, rat: LD50 = 470 mg/kg;

Skin, Rabbit: LD50 = 220 Humans are less susceptible than rodents to 2-butoxyethanol 2-Butoxyethanol gives toxic results when tested on rabbits and rats. It does not behave the same when humans are exposed to it. This is explained by the different makeup of the red blood cells of test animals vs. humans. Test animal red blood cells are hypersensitive to 2-butoxyethanol when compared to humans.

Ingredient CAS# 64742-94-5, Solvent naphtha (petroleum), Heavy arom.: CAS# 64742-94-5: Draize test, rabbit, skin: 500 uL/24H Mild; Skin, Rabbit: LD50 = 2 mL/kg;

Ingredient CAS# 27176-87-0, Dodecylbenzenesulfonic acid: CAS# 27176-87-0: Oral, Rat: LD50 = 650 mg/kg

Ingredient CAS# 1310-73-2, Sodium hydroxide: CAS# 1310-73-2: Draize test, rabbit, eye: 400 ug Mild; Draize test, rabbit, eye: 1% Severe; Draize test, rabbit, eye: 50 ug/24H Severe; Draize test, rabbit, eye: 1 mg/24H Severe; Draize test, rabbit, skin: 500 mg/24H Severe;

Ingredient CAS# 60-00-4, Ethylenediamine Tetraacetic Acid: CAS# 60-00-4: Oral, Mouse: LD50 = 30 mg/kg;.

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8	Com	nosition/	Informa	tion on	Ingredients
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На	zardous Components (Chemical Name)	CAS #	Concentration
1.	Ethanol, 2-Butoxy-	111-76-2	10 - 15 %
2.	Solvent naphtha (petroleum), Heavy arom.	64742-94-5	5.0 - 10 %

На	zardous Components (Chemical Name)	CAS #	Concentration
3.	Dodecylbenzenesulfonic acid	27176-87-0	5.0 - 10 %
4.	Sodium hydroxide	1310-73-2	<5.0 %
5.	Ethylenediamine Tetraacetic Acid	60-00-4	<5.0 %

4. First Aid Measures

Emergency and First Aid Procedures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Wash clothing before reuse.

Ingestion: Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If victim is fully conscious, give a cupful of water.

Inhalation: Remove from exposure and move to fresh air immediately.

Note to Physician

Treat symptomatically and supportively.

Signs and Symptoms Of Exposure

5. Fire Fighting Measures				
Flash Pt:	NE			
Explosive Limits:	LEL:	UEL:		
Autoignition Pt:	NE			

Fire Fighting Instructions

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated. Use water with caution and in flooding amounts. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials. Dusts at sufficient concentrations can form explosive mixtures with air.

Flammable Properties and Hazards

Suitable Extinguishing Media

Use water spray to cool fire-exposed containers. Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Unsuitable Extinguishing Media

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Do not let this chemical enter the environment. Avoid runoff into storm sewers and ditches which lead to waterways. Provide ventilation. Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid

generating dusty conditions. Do not get water on spilled substances or inside containers.

7. Handling and Storage

Precautions To Be Taken in Handling

Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Wash thoroughly after handling. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not breathe spray or mist. Avoid ingestion and inhalation.

Precautions To Be Taken in Storing

Store in a cool, dry place. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep container closed when not in use. Keep from contact with oxidizing materials. Containers must be tightly closed to prevent the conversion of NaOH to sodium carbonate by the CO2 in air. Do not store in direct sunlight.

8. Exposure Controls/Personal Protection				
Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TWA	Other Limits
1. Ethanol, 2-Butoxy-	111-76-2	PEL: 50 ppm	TLV: 20 ppm	
2. Solvent naphtha (petroleum), Heavy arom.	64742-94-5			
3. Dodecylbenzenesulfonic acid	27176-87-0			
4. Sodium hydroxide	1310-73-2	PEL: 2 mg/m3	CEIL: 2 mg/m3	
5. Ethylenediamine Tetraacetic Acid	60-00-4			

Respiratory Equipment (Specify Type)

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Eye Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Wear chemical splash goggles.

Protective Gloves

Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing

Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.)

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood. Use adequate ventilation to keep airborne concentrations low.

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Work/Hygienic/Maintenance Practices

9.	Physical a	and Chem	ical Prop
Physical States:	[] Gas	[X] Liquid	[] Solid
Freezing Point:	< 0 C		
Boiling Point:	> 100 C		
Decomposition Temperature:	NE		
Autoignition Pt:	NE		
Flash Pt:	NE		

Specific Gravity (Water = 1):	~ 0.95
Vapor Pressure (vs. Air or mm Hg):	
Vapor Density (vs. Air = 1):	
Evaporation Rate:	< 0.05 (BuAC=1)
Solubility in Water:	misible
Percent Volatile:	~ 70 % by weight.
pH:	7 - 8
Appearance and Odor	
Annoonon Clean green Liquid	1

Appearance: Clear. green. Liquid. Odor: solvent odor.

10. Stability and Reactivity

Stability:

Unstable [] Stable [X]

Conditions To Avoid - Instability

Incompatibility - Materials To Avoid

acids, Zinc, gelatin, nitromethane, organic halogens.

Hazardous Decomposition Or Byproducts

Carbon monoxide, oxides of sulfur, Nitrogen oxides.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions

11. Toxicological Information

Epidemiology: No information found.

Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Neurotoxicity: Epidemiological studies involving petroleum refinery workers indicate persons with routine exposure to petroleum or one of its constituents may be at an increased risk to the development of benign neoplasms, digestive tract cancer, and skin cancer.

No data available.

See actual entry in RTECS for complete information.

No information available.

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Oral, rat: TDLo = 7632mg/kg Specific Developmental Abnormalities: Cardiovascular, Craniofacial, Musculoskeletal, Respiratory, and Urogenital. Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Cytogenetic Analysis: intraperitoneal-mouse = $\{50 \text{ mmol/L}\}$. DNA Inhibition: hamster fibroblast 500ug/L, rabbit kidney 250umol/L.EDTA leads to morphological changes of chromatin & chromosome structure in plant & animal cells.A weak induction of gene mutations has been reported.

Carcinogenicity/Other Information

CAS# 111-76-2: ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans.

California: Not listed.

NTP: Not listed.

IARC: Not listed. CAS# 64742-94-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 27176-87-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 1310-73-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 60-00-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Ethanol, 2-Butoxy-	111-76-2			A3	

На	zardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
2.	Solvent naphtha (petroleum), Heavy arom.	64742-94-5				
3.	Dodecylbenzenesulfonic acid	27176-87-0				
4.	Sodium hydroxide	1310-73-2				
5.	Ethylenediamine Tetraacetic Acid	60-00-4				

12. Ecological Information

Ecotoxicity: No data available. 24-Hr. LC50; goldfish: 1650 mg/L 96-Hr. LC50; bluegill sunfish: 1490 mg/L96-Hr. LC50; tidewater silversides: 1250 mg/L

Environmental: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67,, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.

Physical: No information found.

Other: An estimated BCF value of 2.5,, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme. No information available. Fish: Rainbow trout: LC50 = 10.8 mg/L; 96 Hr. ; Static conditionsWater flea Daphnia: EC50 = 11-23 mg/L; 48 Hr. Unspecified No data available.

Aquatic: Water temperature affects biodegration. The rate of sodium-C12 linear alkylbenzene sulfonic acids biodegradation in Chesapeake Bay water was max at 25-30 deg C and decreased at lower incubation temperatures. Sodium-C12 linear alkylbenzene sulfonic acids. Terrestrial: The adsorption of sodium-C12 linear alkylbenzene sulfonic acids is affected by the type of soil. The affinity of the soil for surfactants competes with microbial attack, slowing biodegradation.

Other: The biodegradation of linear sodium alkylbenzenesulfonic acid. by marine bacteria. was degraded by some (unspecified) species of marine bacteria when it was present as a sole carbon source, but only when massive aeration was employed . /Linear sodium alkylbenzenesulfonic acid. Sesquioxides such as ferric oxide, and aluminum oxide are important in the sorption of linear alkylbenzenesulfonic acid. /Linear alkylbenzenesulfonic acid. Fish: Channel catfish: LC50 = 129-159 mg/L; 96Hr; UnspecifiedFish: Rainbow trout: LC50 = 340 mg/L; 24Hr; UnspecifiedFish: Bluegill/Sunfish: LC50 = 129-159 mg/L; 96Hr; UnspecifiedFish: Fathead Minnow: 100% Lethal = 750 ppm; 96 Hr; Static bioassayWater flea Daphnia: LC50 100 ppm; 96 Hr; Static bioassay If released to soil, EDTA is expected to complex with trace metals and alkaline earth metals present in the soil, thereby causing an increase in the total solubility of the metals. EDTA may eventually predominate as the Fe(III) chelate in acidic soils and as the Ca chelate in alkaline soils. Biodegradation of EDTA in aerobic soils is the dominant removal mechanism, although biodegradation in anaerobic soils is negligible. glycine. EDTA is not expected to bioaccumulate in aquatic organisms, adsorb to suspended solids or sediments or volatilize from water surfaces. EDTA and its chelates are expected to leach readily through soil and significant volatilization from soil is not expected. If released to water, EDTA is expected to complex with trace metals and alkaline earth metals. Biodegradation of EDTA is expected to take place relatively slowly under aerobic conditions and to be negligible under anaerobic conditions. Cometabolism has been suggested as the mechanism for EDTA biodegradation. EDTA may react with photochemically generated hydroxyl radicals (half-life 229 days) and it may photodegrade. Physical: Compounds identified as possible biodegradation products of the ammonium ferric chelate of EDTA are as follows: ethylenediamine triacetic acid (ED3A), iminodiacetic acid (IDA), N,N-ethylenediamine diacetic acid (N,N-EDDA), N,N'-EDDA, ethylenediamine monoacetic acid (EDMA), nitrilotriacetic acid (NTA) and glycine. The following photodegradation products of Fe(III)-EDTA have been identified: carbon monoxide, formaldehyde, ED3A, N,N-EDDA, N,N'-EDDA, IDA, EDMA and glycine. Other: None.

13. Disposal Considerations

Waste Disposal Method

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. Transport Information

Globally Harmonized System of Classification and Labelling

Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name

Detergent Solution.

LAND TRANSPORT (Canadian TDG)

TDG Shipping Name

Not Regulated. No information available. ALKYL SULFONIC ACIDS, LIQUID. SODIUM HYDROXIDE, SOLID.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Ethanol, 2-Butoxy-	111-76-2	No	No	Yes-Cat. N230	No
2. Solvent naphtha (petroleum), Heavy arom.	64742-94-5	No	No	No	No
3. Dodecylbenzenesulfonic acid	27176-87-0	No	Yes 1000 LB	No	No
4. Sodium hydroxide	1310-73-2	No	Yes 1000 LB	No	No
5. Ethylenediamine Tetraacetic Acid	60-00-4	No	Yes 5000 LB	No	No
Other US EPA or State Lists					
Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. Ethanol, 2-Butoxy-	111-76-2	No	No	Inventory	No
2. Solvent naphtha (petroleum), Heavy arom.	64742-94-5	No	No	Inventory	No
3. Dodecylbenzenesulfonic acid	27176-87-0	No	No	Inventory	No
4. Sodium hydroxide	1310-73-2	No	No	Inventory	No
5. Ethylenediamine Tetraacetic Acid	60-00-4	No	No	Inventory	No
Hazardous Components (Chemical Name)	CAS #	CA TAC, Title 8	MA Oil/HazMat	MI CMR, Part 5	NC TAP
1. Ethanol, 2-Butoxy-	111-76-2	TAC, Title 8	Yes	No	No
2. Solvent naphtha (petroleum), Heavy arom.	64742-94-5	No	No	No	No
3. Dodecylbenzenesulfonic acid	27176-87-0	Title 8	Yes	Part 5	No
4. Sodium hydroxide	1310-73-2	TAC, Title 8	Yes	Part 5	No
5. Ethylenediamine Tetraacetic Acid	60-00-4	Title 8	Yes	Part 5	No
Hazardous Components (Chemical Name)	CAS #	NJ EHS	NY Part 597	PA HSL	SC TAP
1. Ethanol, 2-Butoxy-	111-76-2	Yes - 0275	No	Yes - 1	No
2. Solvent naphtha (petroleum), Heavy arom.	64742-94-5	No	No	No	No
3. Dodecylbenzenesulfonic acid	27176-87-0	Yes - 0822	Yes	Yes - E	No
4. Sodium hydroxide	1310-73-2	Yes - 1706	Yes	Yes - E	Yes
5. Ethylenediamine Tetraacetic Acid	60-00-4	Yes - 0876	Yes	Yes - E	No
Hazardous Components (Chemical Name)	CAS #	WI Air			
1. Ethanol, 2-Butoxy-	111-76-2	Yes			

 Hazardous Components (Chemical Name) Solvent naphtha (petroleum), Heavy arom. Dodecylbenzenesulfonic acid Sodium hydroxide Ethylenediamine Tetraacetic Acid SARA (Superfund Amendments and Reauthorization Act of 1986) Lists: 	CAS #WI Air64742-94-5No27176-87-0No1310-73-2Yes60-00-4No
Sec.302:	EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304:	EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Sec.313:	EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
Sec.110:	EPA SARA 110 Superfund Site Priority Contaminant List
TSCA (Toxic Substances Control Act) Lists:	
Inventory:	Chemical Listed in the TSCA Inventory.
5A(2):	Chemical Subject to Significant New Rules (SNURS)
6A:	Commercial Chemical Control Rules
8A:	Toxic Substances Subject To Information Rules on Production
8A CAIR:	Comprehensive Assessment Information Rules - (CAIR)
8A PAIR:	Preliminary Assessment Information Rules - (PAIR)
8C:	Records of Allegations of Significant Adverse Reactions
8D:	Health and Safety Data Reporting Rules
8D TERM:	Health and Safety Data Reporting Rule Terminations
12(b):	Notice of Export
Other Important Lists:	
CWA NPDES:	EPA Clean Water Act NPDES Permit Chemical
CAA HAP:	EPA Clean Air Act Hazardous Air Pollutant
CAA ODC:	EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
CA PROP 65:	California Proposition 65
CA TAC:	California AB 1807 - Toxic Air Contaminants
CA Title 8:	California Hazardous Substances List: Title 8, Sec. 339
MI CMR:	Michigan Critica Materials Register
MI Part 5:	Michigan DEQ WRP Part 5 Pollutants List
NC TAP:	North Carolina Toxic Air Pollutants
NJ EHS:	New Jersey Environmental Hazardous Substances List
NY Part 597:	New York Part 597 List of Hazardous Substances
PA HSL:	Pennsylvania Hazardous Substances List
SC TAP:	South Carolina Toxic Air Pollutants
WI Air:	Wisconsin Reportable Air Contaminants

International Regulatory Lists:

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- [] Yes [X] No Acute (immediate) Health Hazard
- [] Yes [X] No Chronic (delayed) Health Hazard
- [] Yes [X] No Fire Hazard
- [] Yes [X] No Sudden Release of Pressure Hazard
- [] Yes [X] No Reactive Hazard

16. Other Information

Company Policy or Disclaimer

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.

*NOTE: Hazard Determination System (HDS) rating are based on a 0-4 scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.