



Safety Data Sheet

Section 1: Identification

Product identifier

- Product Name** • Start Your Engines Fuel System Revitalizer
- Synonyms** • 589092
- Product Code** • 21205; 21206; 21212

Relevant identified uses of the substance or mixture and uses advised against

- Recommended use** • For professional use only
- Restrictions on use** • Read and follow label directions only

Details of the supplier of the safety data sheet

- Manufacturer** • Gold Eagle Co.
4400 S. Kildare Avenue
Chicago, IL 60632-4372
United States
<http://www.goldeagle.com/>
- Telephone (General)** • 773-376-4400

Emergency telephone number

- Manufacturer** • 1-800-535-5053 - (INFOTRAC #22283)

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

- OSHA HCS 2012**
- Flammable Liquids 2
 - Aspiration 1
 - Skin Irritation 2
 - Eye Irritation 2
 - Acute Toxicity Inhalation 4
 - Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
 - Germ Cell Mutagenicity 2
 - Reproductive Toxicity 1B
 - Specific Target Organ Toxicity Repeated Exposure 2

Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • Highly flammable liquid and vapour
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye irritation
Harmful if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
Suspected of causing genetic defects.
May damage fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
Keep container tightly closed.
Ground and/or bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mists, vapours, and/or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • In case of fire: Use appropriate media for extinction.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
If on skin: Wash with plenty of water .
Take off contaminated clothing and wash before reuse.
Specific treatment, see supplemental first aid information.
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.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF exposed or concerned: Get medical advice/attention.

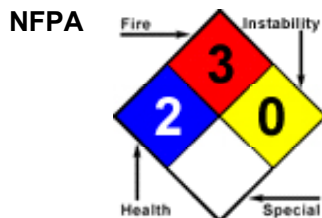
- Storage/Disposal** • Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Supplemental information • 0 - 15 percent of this product consists of an ingredient of unknown toxicity.

Other hazards

- OSHA HCS 2012** • Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Other information



Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive
Meth Tert Butyl Ether	CAS:1634-04-4	0% TO 60%		OSHA HCS 2012:
Xylene	CAS:1330-20-7	0% TO 20%	Ingestion/Oral-Rat LD50 • 4300 mg/kg Inhalation-Rat LC50 • 5000 ppm 4 Hour(s) Skin-Rabbit LD50 • >1700 mg/kg	OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (Inhl); Skin Irrit. 2; Eye Irrit. 2; Repr. 1B (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.
Isopropyl alcohol	CAS:67-63-0	0% TO 20%	Skin-Rabbit LD50 • 12800 mg/kg Ingestion/Oral-Rat LD50 • 5000 mg/kg Inhalation-Rat LC50 • 72600 mg/m ³	OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2; Muta. 2; Repr. 2; STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.; STOT RE 2 (Eyes, Inhl)

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.

Skin

- After contact with skin, take off immediately all contaminated clothing and wash immediately with plenty of fresh water. If irritation develops and persists, get medical attention.

Eye

- If eye irritation persists: Get medical advice/attention. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.

Ingestion

- If swallowed, seek medical advice immediately and show this container or label.

Most important symptoms and effects, both acute and delayed

- No data available

Indication of any immediate medical attention and special treatment needed

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • LARGE FIRES: Dry chemical, CO₂, alcohol-resistant foam or water spray.
SMALL FIRES: Dry chemical, CO₂, water spray or alcohol-resistant foam.

Unsuitable Extinguishing Media

- No data available.

Firefighting Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.
Keep out of low areas.
Keep unauthorized personnel away.
Stay upwind.
Ventilate closed spaces before entering.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- EXTREMELY FLAMMABLE
May be ignited by friction, heat, sparks or flames.
Vapor explosion hazard indoors, outdoors or in sewers.

Hazardous Combustion Products

- Vapor explosion hazard indoors, outdoors or in sewers.

Advice for firefighters

- No data available

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Avoid contact with skin, eyes, and clothing. Use appropriate Personal Protective Equipment (PPE) Ventilate the area before entry. Do not breathe mist, vapours and/or spray.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.
SMALL SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of spill for later disposal.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Avoid contact with heat and ignition sources and oxidizers – No Smoking. Avoid contact with skin, eyes, and clothing. Use only in well ventilated areas. Do not breathe mist, vapours and/or spray.

Conditions for safe storage, including any incompatibilities

Storage

- Store in a well-ventilated place. Keep container tightly closed. Avoid contact with heat and ignition sources. Do not use sparking tools.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Isopropyl alcohol (67-63-0)	TWAs	200 ppm TWA	400 ppm TWA; 980 mg/m3 TWA	400 ppm TWA; 980 mg/m3 TWA
	STELs	400 ppm STEL	500 ppm STEL; 1225 mg/m3 STEL	Not established

Xylene (1330-20-7)	TWAs	100 ppm TWA	Not established	100 ppm TWA; 435 mg/m3 TWA
	STELs	150 ppm STEL	Not established	Not established

Exposure controls

Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use only with adequate ventilation to keep exposures (airborne levels of dust, fume, vapor etc) below recommended exposure limits.

Personal Protective Equipment

Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

- Wear safety glasses.

Hands

- Wear appropriate gloves.

Skin/Body

- No data available.

General Industrial Hygiene Considerations

- Wash thoroughly with soap and water after handling. When using do not smoke, eat, or drink. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Water white to pale yellow solvent blend.
Color	Water-white to pale yellow.	Odor	Solvent
Odor Threshold	No data available		
General Properties			
Boiling Point	160 F(71.1111 C)	Decomposition Temperature	No data available
Specific Gravity/Relative Density	0.79 to 0.804 @ 60 F(15.5556 C) Water=1	Water Solubility	Appreciable 10 to 99 %
Viscosity	3 Centistoke (cSt, cS) or mm2/sec @ 40 C(104 F)		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Wt.)	100 %
VOC (Vol.)	100 %	Volatiles (Wt.)	100 %
Volatiles (Vol.)	100 %		
Flammability			
Flash Point	-19 F(-28.3333 C) TCC (Tagliabue Closed Cup)	UEL	15.1 %
LEL	2.5 %	Autoignition	435.2 F(224 C)

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable

Possibility of hazardous reactions

- Hazardous polymerization not indicated.

Conditions to avoid

- Store below 150 F. Do not apply heat or flame to container. Keep separate from strong oxidizing agents.

Incompatible materials

- Strong oxidants.

Hazardous decomposition products

- Carbon dioxide and carbon monoxide under incomplete combustion.

Section 11 - Toxicological Information

Information on toxicological effects

		Components
Xylene (0% TO 20%)	1330- 20-7	Acute Toxicity: Ingestion/Oral-Rat LD50 • 4300 mg/kg; <i>Liver:Other changes; Kidney, Ureter, and Bladder:Other changes;</i> Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Inhalation-Man LCLo • 10000 ppm 6 Hour(s); <i>Behavioral:General anesthetic; Lungs, Thorax, or Respiration:Cyanosis; Blood:Other changes;</i> Inhalation-Human TCLo • 200 ppm; <i>Sense Organs and Special Senses:Olfaction:Other changes; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Other changes;</i> Skin-Rabbit LD50 • >1700 mg/kg; Irritation: Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Reproductive: Inhalation-Rabbit TCLo • 1 g/m ³ 24 Hour(s)(7-20D preg); <i>Reproductive Effects:Effects on Fertility:Abortion;</i> Inhalation-Rat TCLo • 50 mg/m ³ 6 Hour(s)(1-21D preg); <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Craniofacial (including nose and tongue)</i>
Isopropyl alcohol (0% TO 20%)	67- 63-0	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5000 mg/kg; <i>Behavioral:General anesthetic;</i> Inhalation-Rat LC50 • 16000 ppm 8 Hour(s); Inhalation-Guinea Pig TCLo • 980 mg/m ³ 24 Hour(s); <i>Sense Organs and Special Senses:Ear:Other; Behavioral:General anesthetic; Lungs, Thorax, or Respiration:Other changes;</i> Skin-Rabbit LD50 • 12800 mg/kg; Irritation: Eye-Rabbit • 100 mg • Severe irritation; Skin-Rabbit • 500 mg • Mild irritation; Multi-dose Toxicity: Inhalation-Mouse TCLo • 5000 ppm 6 Hour(s) 13 Week(s)-Intermittent; <i>Behavioral:Somnolence (general depressed activity); Liver:Changes in liver weight; Blood:Pigmented or nucleated red blood cells;</i> Inhalation-Rat TCLo • 1000 mg/m ³ 6 Hour(s) 4 Week(s)-Intermittent; <i>Sense Organs and Special Senses:Eye:Optic nerve neuropathy;</i> Inhalation-Rat TCLo • 500 mg/m ³ 4 Hour(s) 122 Day(s)-Intermittent; <i>Liver:Multiple effects; Kidney, Ureter, and Bladder:Other changes; Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain;</i> Inhalation-Rat TCLo • 20 mg/m ³ 24 Hour(s) 90 Day(s)-Continuous; <i>Brain and Coverings:Other degenerative changes; Lungs, Thorax, or Respiration:Other changes; Liver:Multiple effects;</i> Inhalation-Rat TCLo • 100 mg/m ³ 4 Hour(s) 17 Week(s)-Intermittent; <i>Kidney, Ureter, and Bladder:Other changes in urine composition; Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:True cholinesterase;</i> Mutagen: Cytogenetic analysis • Inhalation-Rat • 1030 µg/m ³ 16 Week(s)-Intermittent; Reproductive: Inhalation-Rat TCLo • 3500 ppm 7 Hour(s)(1-19D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus);</i> Inhalation-Rat TCLo • 10000 ppm 7 Hour(s)(1-19D preg); <i>Reproductive Effects:Effects on Fertility:Pre-implantation mortality; Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetal death;</i> Inhalation-Rat TCLo • 7000 ppm 7 Hour(s)(1-19D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i>
Meth Tert Butyl Ether (0% TO 60%)	1634- 04-4	Acute Toxicity: Ingestion/Oral-Mouse LD50 • 3665 mg/kg; Ingestion/Oral-Rat LD50 • 4 g/kg; Inhalation-Rat LC50 • 41000 mg/m ³ 4 Hour(s)

GHS Properties	Classification
Respiratory sensitization	OSHA HCS 2012 • Data lacking

Serious eye damage/Irritation	OSHA HCS 2012 • Eye Irritation 2
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Inhalation 4 - ATEmix (Inhl) = 7083 ppmV
Aspiration Hazard	OSHA HCS 2012 • Aspiration 1
Carcinogenicity	OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	OSHA HCS 2012 • Skin Irritation 2
Skin sensitization	OSHA HCS 2012 • Data lacking
STOT-RE	OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 2
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Toxicity for Reproduction	OSHA HCS 2012 • Toxic to Reproduction 1B
Germ Cell Mutagenicity	OSHA HCS 2012 • Germ Cell Mutagenicity 2

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause respiratory irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death. Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Repeated and prolonged exposure may be harmful. Repeated and prolonged exposure may cause cancer.

Skin

Acute (Immediate)

- May cause irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death. May cause mild irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may be harmful. Repeated and prolonged exposure may cause irritation.

Eye

Acute (Immediate)

- May cause irritation. Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.

Ingestion

Acute (Immediate)

- May be fatal. May be harmful. Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.

Section 12 - Ecological Information

Toxicity

- No data available

Persistence and degradability

- Non-mandatory section - information about this substance not complied for this reason.

Bioaccumulative potential

- Non-mandatory section - information about this substance not complied for this reason.

Mobility in Soil

- Non-mandatory section - information about this substance not complied for this reason.

Other adverse effects

- Non-mandatory section - information about this substance not complied for this reason.
- No data available.
- No data available.

Ecological Fate

Potential Environmental Effects

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NDA	ORM-D	3	III	NDA
	NDA	ORM-D	NDA	NDA	NDA

Special precautions for user

- None specified. No special precautions.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- Acute, Chronic, Fire

Inventory		
Component	CAS	TSCA
Isopropyl alcohol	67-63-0	Yes
Meth Tert Butyl Ether	1634-04-4	Yes
Xylene	1330-20-7	Yes

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	(isomers and mixtures)
• Meth Tert Butyl Ether	1634-04-4	(listed under Methyl tert butyl ether)

U.S. - CAA (Clean Air Act) - Accidental Release Prevention - Flammable Substances

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - CAA (Clean Air Act) - Accidental Release Prevention - Toxic Substances

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	100 lb final RQ; 45.4 kg final RQ
• Meth Tert Butyl Ether	1634-04-4	1000 lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Isopropyl alcohol	67-63-0	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
• Xylene	1330-20-7	1.0 % de minimis concentration
• Meth Tert Butyl Ether	1634-04-4	1.0 % de minimis concentration

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - CWA (Clean Water Act) - Hazardous Substances

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - CWA (Clean Water Act) - Toxic Pollutants

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Isopropyl alcohol	67-63-0	Not Listed
• Xylene	1330-20-7	Not Listed
• Meth Tert Butyl Ether	1634-04-4	Not Listed

Section 16 - Other Information

Revision Date	• 04/August/2015
Last Revision Date	• 04/August/2015
Preparation Date	• 04/August/2015
Other Information	• Schedule B Number: 2909.19.1400.
Disclaimer/Statement of Liability	• Information presented herein is believed to be factual, as it has been derived from the works and opinions of persons believed to be qualified experts. However, nothing contained in this information is to be taken as warranty or representation for which the Gold Eagle Co. bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.