I. Product and Supplier Information

Product Name: **Sulfree OS 6100** MSDS Number: GP Sc2
Product Number: NA Publication Date: April 1, 2009
Product Synonyms: None Replaces: New

Chemical Family or Formula: Not applicable for mixtures

Supplier: Guard Products Phone: 800-369-8056
980 77th Avenue Fax: 510-777-3450
Oakland, CA 94621 email: sales@guardproducts.com
Product Information: 800-369-8056
Transportation Emergency: 800-424-9300

Note: The purpose of this MSDS is to provide safe handling, shipping and disposal information for users of the product. It is not intended to, nor does it, provide complete or extensive toxicological data on the product or its components. Users who require this information are referred to primary suppliers of the ingredients of interest.

II. Composition and Information on Ingredients

CAS #	SARA 313	Material or Component	RQ#	Exposure Limits TWA*	STEL*	WEEL*
mixture	No	Organo imino complex	None	NE	NE	NE

Other than those listed, there are no ingredients with ACGIH exposure limits present at 1% or more, and no known carcinogens present at 0.1% or more. Components listed in Title III, Sec. 313 (EPCRA) are indicated by "Yes".
*TWA= Time Weighted Average; STEL= Short Term Exposure Limit; WEEL= Workplace Employee Exposure Level. NE + Not evaluated. NA + Not applicable.

III. Hazards Identification

OSHA Hazard Classification: Immediate (acute) health hazard. Harmful
Harmful if swallowed and by inhalation. Irritating to eyes, skin and respiratory system.

Hazard description:
Moderate health hazard. Severe eye irritant. Mucous membrane irritant. Inhalation hazard. Ingestion hazard.

Particular dangers:
Harmful if swallowed and by inhalation. Irritating to eyes, skin and respiratory system.

Routes of Entry: Eye, inhalation, skin
Chemical Interactions: Avoid contact with all oxidizing agents, acids and soft metals aluminum, etc.
Medical Conditions Aggravated:
May affect mucous tissue and/or aggravate mucous membrane disorder.

Human Threshold Response Data
Odor Threshold: Not established
Irritation Threshold: Not established

Hazard Category Classifications and Ratings

Hazard Categories:	Health	Fire	Pressure	Reactivity	Reference 49 CFR 171.8,
Immediate	Yes	Yes	No	No	OSHA 29 CFR 1910.1200 and
Delayed	No	No	No	No	SARA 302/311/312/313.
HMIS Hazard Ratings: Health 2 Fire 3 Instability 0 Other B (Goggles, gloves)					
NFPA 704 Hazard Ratings: Health 2 Flammability 2 Reactivity 0 Special NA					
Hazard Ratings: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4					
"No*" in Delayed Fire hazard category indicates lack of a spontaneous combustion hazard.					

Immediate (Acute) Health Effects
Inhalation Toxicity:
Harmful if inhaled or swallowed.

Inhalation Irritation:
Harmful if inhaled or swallowed.

Skin Contact:
Repetitive exposure will de-fat, dry and irritate the skin.
Skin Absorption:
Not a recognized hazard.
Eye Contact
Exposure may cause severe irritation including a burning sensation, tearing, redness and swelling.

Ingestion Irritation:
Can cause gastrointestinal discomfort including nausea, vomiting, lethargy and diarrhea.
Ingestion Toxicity:
See Section XI.
Acute Target Organ Toxicity:
Liver function impaired.
Prolonged (Chronic) Health Effects
Carcinogenicity:
This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
Reproductive and Developmental Toxicity:
Reproductive effects have been observed on tests with laboratory animals. (MEA)
Mutagenic effects have been observed with human lymphocytes. (MEA)
Sensitization:
None known.
Inhalation:
See above entry for Acute Effects.
Skin Contact:
Prolonged or repeated skin exposure may cause irritation.
Skin Absorption:
Not a recognized hazard.
Ingestion:
Chronic ingestion unlikely. Symptoms similar to those for chronic inhalation.
General :
Prolonged or repeated exposure may cause eye, liver, kidney or lung damage.
Chronic Target Organ Toxicity:
Skin, respiratory tract, kidney, liver.
Supplemental Health Hazard Information:
Acute and chronic toxicity of this material is not considered to be fully known.

IV. First Aid

General:
After adequate first aid, no further treatment is required unless symptoms reappear.
Inhalation:
Remove individual to fresh air. If not breathing, give artificial respiration or oxygen as appropriate. Seek immediate medical attention. Prompt action is essential.
Skin Contact:
Flush with water for 15 minutes. Remove contaminated clothing. Wash shoes and clothing before reuse
Eyes:
Immediately flush with plenty of water for at least 15 minutes while holding eyelids apart. Consult a doctor.
Ingestion:
Immediately drink water to dilute. Do not induce vomiting: risk of lung damage exceeds poisoning risk. Never give anything by mouth to an unconscious person. Obtain emergency medical attention.

V. Fire Fighting Measures

Flammability Summary (OSHA):

Flammable Properties:
Flash Point: >225° F- Tag Closed cup

Autoignition Temperature: Not determined
Lower Flammable/Explosive Limit, % in air: Not determined
Upper Flammable/Explosive Limit, % in air: Not determined
Fire/Explosion Hazards: Vapor can travel distances to ignition sources and flash back.
Hot organic chemical vapors or mists are susceptible to spontaneous combustion when mixed with air. Ignition may occur at temperatures below published ignition temperatures. Ignition temperatures decrease with increasing vapor volume and vapor/air contact time and are influenced by pressure changes. Ignition may occur at typical elevated temperature process conditions, especially in processes operating under vacuum if subjected to the sudden ingress of air, or with sudden escape of hot vapors into outside air.
Extinguishing Media: Treat as Class III A fire.
Water Mist, foam, dry chemical or CO2. Do NOT use solid stream of water.
Do not allow contaminated water to enter sewers or waterways.
Fire Fighting Instructions:
In case of fire, use normal fire fighting equipment including a NIOSH approved self-contained breathing breathing apparatus (SCBA). Use water to cool containers. Product may float on water if spilled.
Hazardous Combustion Products:
Oxides of carbon and nitrogen.

VI. Accidental Release Measures

Personal Protection for Emergency Situations:
Evacuate the area of all unnecessary personnel. Eliminate any ignition sources.
Spill Mitigation Procedures
Air Release:
Hazardous concentrations in air may be found in local spill area and immediately downwind. Vapors may be suppressed by the use of water fog. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste. Do not flush to sewer! US regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of stipulated quantities. US Coast Guard National Response Center is 800-424-8802.
Water Release:
This material is partially soluble in water. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste. Notify all downstream users of possible contamination.
Land Release:
Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Decontaminate all clothing and the spill area using a detergent and flush with large amounts of water. Contain all contaminated water for disposal and/or treatment.
Additional Spill Information:
Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section XIII, Disposal Considerations.

VII. Handling and Storage

Handling: Store as an NFPA Class III A liquid.
Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash with water. Avoid breathing vapor, mist or gas. Electrically ground all equipment when handling this product. Retained residue may make empty containers hazardous. USE CAUTION!
Storage Keep container closed. Store in a cool, ventilated area away from ignition sources, acids and oxidizers. Store as an NFPA Class III A liquid.

VIII. Exposure Controls and Personal Protection

Ventilation:
Local exhaust ventilation or other engineering controls are normally not required when handling or using this product. Rather, use general exhaust ventilation if that is sufficient for general worker safety and comfort. A NIOSH/MSHA approved air supplied respirator is advised in the absence of adequate ventilation.

Protective Equipment for Routine Use of Product
Respiratory Protection:
See previous paragraph. Material should be handled or transferred in an approved fume hood or with adequate ventilation. For open use of the product, minimize exposed wet area and stay out of the fume direction.

Respirator Type(s):

Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin: Wear impervious gloves (butyl rubber, Viton, e.g.) to avoid skin contact. Practice good industrial hygiene.
Eyes: Use chemical safety glasses with side shields, and/or a full face shield if splashing is possible.
Protective Clothing Type: Impervious

Exposure Limit Data : See Section II

Chemical Name	NIOSH Level Immediately Dangerous to Life or Health:
	Not found

IX. Physical Data

Physical State:	Liquid
Color:	Slight yellow
Odor:	Characteristic

Molecular Weight:	Not applicable
pH (@ 25 Deg. C):	Water dispersion typically about 11 pH.
Octanol/Water Coeff:	No data

Solubility in Water:	Complete
Bulk Density:	Not applicable
Specific Gravity:	1.03 approx.

Vapor Density (Air = 1):	Not determined
Vapor Pressure: (@ 25 Deg. C):	.96 PSI
Evaporation Rate (Butyl acetate =1):	Not determined
Volatiles % by vol.:	Not determined
Boiling Point:	Not determined
Freezing Point:	Not determined

X. Stability and Reactivity

Stability and Reactivity Summary:

Stable under normal conditions.

Reactive Properties:

Sensitivity to mechanical shock:	None
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	High temperatures, exposure to air to avoid absorption of carbon dioxide. Contact with acids or soft metals.
Chemical Incompatibility:	Oxidizers, acids and soft metals.
Incompatible materials:	Will soften or attack some plastics and paints.
Hazardous Decomposition Products:	CO, CO2, NOx, amine vapors
Decomposition Temperature:	No data
Product May Be Unstable At Temperatures Above:	No data

XI. Toxicological Information

Component Animal Toxicology

Aquatic Toxicity:

LC-50/96-rainbow trout- 67 ppm

Component Animal Toxicology

Oral LD50 value mg/kg::	No data.
Dermal LD50 value mg/kg:	No data.
Inhalation LCLo value:	No data.
Irritation of skin: moderate:	No information found for such a dilute solution of these materials.
Irritation of eyes: moderate:	No information found for such a dilute solution of these materials.
Inhalation LC50 value:	No information found for such a dilute solution of these materials.

Skin Irritation:

This material is expected to be slightly irritating.

Eye Irritation:

This material is expected to be moderarely irritating.

Reproductive and Developmental Toxicity:

No reproductive or developmental risk to humans is expected from exposure to this product.

Sub acute to chronic toxicity:

To the best of our knowledge the acute and chronic toxicity of this material is not fully known.
OSHA, NTP, or EPA.

Carcinogenicity:

This chemical is not known or reported to be carcinogenic by any reference source including
IARC, OSHA, NTP, or EPA.

XII. Ecological Information

Ecological Toxicity Values:

Environmental fate: Expected to be inherently biodegradable from studies on similar materials.
Environmental Toxicity: No information found

XIII. Disposal Considerations

Care must be taken to avoid environmental contamination from the use of the use of this material.
The user of this material has the responsibility to dispose of unused material, residues, and containers in compliance with all relevant local, state and federal laws.

Waste Disposal Summary:

Product as made has none of the characteristics of a hazardous waste.

Disposal Methods:

Dispose of in accordance with local, state and federal regulations.
Incineration is preferred.

Components subject to land ban restrictions:

No components subject to land ban restrictions. Do not release to environment without appropriate permits.

XIV. Transportation Information

Proper Shipping Name, Hazard Class, UN/NA Number Packing Group, Emergency Response Guide Number		
		Non Regulated
Labels required per 49 CFR 172.101:		None Required
Size for "Limited quantity" per 49 CFR 173.150-.155:		None established
Reportable Quantity ("RQ") per 49 CFR172.101:		Not applicable
CFR 173:	Passenger aircraft / rail:	None established
	Cargo aircraft only:	None established
	Vessel stowage:	None established
	Other:	

XV. Regulatory Information

UNITED STATES:

Toxic Substances Control Act (TSCA):

The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

Pesticide acceptance indication: US EPA Registration Number:

Not applicable

Superfund Amendments and Reauthorization Act (SARA) Title III:

See Section III of this MSDS.

Hazard Categories Sections 311/312 (40 CFR 370.2):

Health:

Acute Yes
Chronic Yes

Physical: Flammable

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

Not applicable

Reportable Quantity (40 CFR 302.4):

None

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

See Section II above

State Right-to-Know Regulations Status of Ingredients

Pennsylvania: No information
New Jersey: No information
Massachusetts: No information

XVI. Additional Information

This Material Safety Data Sheet (MSDS) has been prepared in compliance with the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200, and ANSI Z400.1-2004. This information should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. We believe this information to be reliable and up to date as of its publication date., but make no warranty that it is. If this MSDS is more than three years old you should contact the supplier to make sure the information is still current.