



Safety Data Sheet

GRAFF - X

Section 1 - Chemical Product and Company Identification

Supplier's Information:

Superco Specialty Products

25041 Anza Drive
Valencia, CA 91355
(661) 775-8877

Product Name: Graf - X

Product Code: 3110, 1003, 311041

Date of Issue: January 4, 2016

Use Dilution Information: Use at full Strength

Section 2 - Hazard Identification

Product as a Concentrate

GHS Overview:

Flammable liquids, acute toxicity, skin irritation, eye irritation, skin sensitization, acute aquatic toxicity

GHS Label Elements:

Signal Word: Warning

Symbol:



Hazard Statements:

- H226 Flammable liquid and vapor
- H303 May be harmful if swallowed
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H400 Very toxic to aquatic life

Precautionary Statements

- H273 Avoid release to the environment
- P280 Wear protective gloves
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Potential Health Effects

- Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.
- Skin:** May be harmful if absorbed through the skin. Causes irritation.
- Eyes:** Causes eye irritation.
- Ingestion:** May be harmful if swallowed.

Section 3 - Composition / Information on Ingredients

Product as a Concentrate

Hazardous Ingredients	Concentration Range	CAS Number
d-Limonene	2 - 4 %	5989 - 27 - 5
Odorless Mineral Spirits	30 - 50 %	64742-88-7
2 - Methyl Pyrillidone	30 - 50 %	7732-18-5 & 872-50-4

Section 4 - First Aid Procedures

Product as a Concentrate:

Skin Contact: If skin comes in contact with product: Flush exposed area with cool water for 15 minutes. Consult a physician if irritation persists.

Eye Contact: If this product comes in contact with eyes, flush eyes with luke warm water for 30 minutes and consult a physician if irritation persists.

Ingestion: DO NOT INDUCE VOMITING. Have patient drink large amounts of milk or plain water. Consult a physician immediately.

Inhalation: Remove to clean atmosphere and consult physician immediately

Protection of First Responders:

No action shall be taken involving personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth to mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Note to Physician:

Treat symptomatically. Contact poison treatment specialist if large quantities have been ingested or inhaled.

Section 5 - Fire Fighting Information

Product as a Concentrate:

Conditions of Flammability: Flammable in the presence of source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface.

Suitable Fire Extinguishing Media: Use dry chemical or carbon dioxide.

Hazardous Thermal Decomposition Products: Hazardous decomposition products formed under fire conditions: Carbon oxides.

Specific Fire - Fighting Methods: Promptly isolate the scene by removing all persons from the area if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further Information: Use water spray to cool unopened containers

Section 6 - Accidental Spill Procedures

Product as a Concentrate:

Personal Precautions: Initiate company's spill response procedures immediately. Keep people out of the area. Put on appropriate personal protective equipment (See Section 8). Do not touch or walk through spilled material.

Environmental Precautions: Avoid contact with spilled material and prevent runoff contact with soil and surface waterways.

Methods for Cleaning Up: Follow company's spill response procedures. Keep people away from spill area. Put on appropriate personal protective equipment (See Section 8). Absorb / Neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a water rinse for a final clean-up.

Section 7 - Handling and Storage

Product as a Concentrate

Handling: Do not get in eyes, on skin, or on clothing. Do not breathe vapor or fumes. Use only in adequately ventilated areas. Wash thoroughly after handling.

Storage: Keep out of the reach of children. Keep container tightly closed. Store between the following temperatures: -25oC and 40oC.

Section 8 - Exposure Controls / Personal Protection

Control Parameters:

Ingredients Name

d-Limonene

Odorless Mineral Spirits

2 Methyl Prillidone

Exposure Limits

ACGIH TLV: 2 mg/m³

NIOSH TWA: 10 mg/m³

ACGIH TLV: 200 mg/m³

NIOSH TWA: 200 mg/m³

ACGIH TLV: 2 mg/m³

NIOSH TWA: 10 mg/m³

Appropriate Engineering Controls: Use only in adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines

Citrus Terpenes	8h TWA (Time Weighted Average) = 30ppm (AIHA Standard)
Eye Protection:	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US or EN 166 (EU).
Hand Protection:	Use chemical resistant, impervious gloves.
Skin Protection:	Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance.
Respiratory Protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEEN (EU)
Hygiene Measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and using lavatory and at the end of working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 - Physical and Chemical Properties

Product as a Concentrate:

Physical State:	Liquid
Color:	Clear pale yellow
Odor:	Petroleum Odor
pH:	Not Applicable
Flash Point:	76°C (170°F) - closed cup
Explosion Limits:	0.7% (V) - 6.1% (V)
Flammability:	Class 3A
Melting Point:	< -94°C (-132°F)
Boiling Point:	390° - 480°F
Evaporation Rate:	Not Determined
Vapor Pressure:	< 2 mmHg at 20°C (68°F)
Vapor Density:	0.838 to 0.843 at 20°C (68°F)
Specific Gravity:	0.81 +/- 0.02
Solubility:	Insoluble
Viscosity:	Same as water
Autoignition Temp:	440°F

Section 10 - Stability and Reactivity

Product as a Concentrate

Stability: Stable under recommended storage condition

Possibility of Hazardous Reactions: To prevent oxidation prevent long term exposure to air. If storing in a partially filled container fill headspace with an inert gas such as nitrogen.

Conditions to Avoid: Heat, flame, sparks

Materials to Avoid: Extremely reactive or incompatible materials such as acids.

Reactive or incompatible with the following materials: Oxidizers.

Slightly reactive or incompatible with the following materials: Metals.

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions. Carbon oxides.

Section 11 - Toxicological Information

Routes of Exposure: Skin Contact, Eye Contact, Inhalation, Ingestion.

Product as a Concentrate

Symptoms

Skin Contact: Adverse symptoms may include the following: Pain or irritation, redness, rash. Blistering may occur.

Eye Contact: Adverse symptoms may include the following: Pain or irritation, redness, watering.

Inhalation: Adverse symptoms may include the following: Coughing, respiratory tract irritation.

Ingestion: Adverse symptoms may include the following: Stomach pains, diarrhea.

Acute Effects

Citrus terpenes have been shown to have low oral toxicity (LD50 > 5 g/kg) and low dermal toxicity (LD50 > 5g/kg) when tested on rabbits. Citrus terpenes also showed low toxicity by inhalation (RD50 > 1g/kg) when tested on mice. The skin irritancy of limonene in guinea pigs and rabbits is considered moderate and low, respectively. Inhalation may cause irritation of the nose, throat, and respiratory tract.

Chronic Effects

This product is not classified as a carcinogen by OSHA, IARC, ACGIH, or NTP. This product has not been shown to produce genetic changes when tested on bacterial or animal cells. This product does not contain known reproductive or developmental toxins. Prolonged or repeated exposures can cause drying or dermatitis of skin. Improper storage and handling may lead to the formation of a possible skin sensitizer.

Section 12 - Ecological Information

Product as a Concentrate

Ecotoxicity: There is no information available at this time for this product. However, a spill may produce significant toxicity to aquatic organisms and ecosystems. Some studies have shown that certain bacteria and fungi have the ability to degrade terpenes, decreasing their toxicity to fish. When spilled, this product may act as an oil, causing a film sheen, emulsion or sludge at or beneath the surface of a body of water.

Persistence/Degradability: Product is expected to be readily biodegradable.

Bioaccumulation/Accumulation: No appropriate bioconcentration is expected in the environment.

Mobility in Environment: Citrus terpenes volatilize rapidly.

Aquatic and Terrestrial Toxicity

Product / Ingredient Name	Results	Species	Exposure
d-Limonene - (At this time there is no data available concerning the environmental impact of this ingredient).			
Odorless Mineral Spirits	Acute LC50 - 1000 mg/l	Rainbow Trout	96 Hours
	Acute LC50 - 3000 mg/kg	Rat	24 Hours
2 Methyl Pyrillidone	Acute LC50 - 700 mg/l	Rainbow Trout	96 Hours
	Acute LC50 - 2700 mg/kg	Rat	24 hours

Other Adverse Effects: No known significant effects or critical hazards.

Section 13 - Disposal Methods & Considerations

Product as a Concentrate

Disposal Methods: Burn in chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

RCRA Classification: None

Section 14 - Transportation Information

DOT (U.S. Department of Transportation)

UN Number: 2319 Class: 3 Packing Group: III

Proper shipping name: Terpene Hydrocarbons, N.O.S.

Label/Placard: Exception \$173,150(f) applies.

Marine pollutant: Dipentene

Poison Inhalation Hazard: No

ERG No.: 128

IMO / IMDG

UN Number: 2319 Class: 3 Packing group: III EMS-No: F-E, S-D

IMO / IMDG Proper Shipping Name: Terpene Hydrocarbons, N.O.S.

Marine Pollutant: Dipentene

IATA

UN Number: 2319 Class: 3 Packing group: III EMS-No: F-E, S-D

IMO / IMDG Proper Shipping Name: Terpene Hydrocarbons, N.O.S.

Section 15 - Regulatory Information

Product as a Concentrate

Global Inventories

This product is included in the following inventories:

USA (TSCA) 1,2,3

Canada (DSL) 1,2,3

Europe (EINECS/ELINCS/Polymer/NLP) 4

Australia (AICS) 1,2

Korea (KECL) 1,2,3

Phillipines (PICCS)

Japan (ENCS) 1

Listed as CAS 5989-27-5 (d-Limonene)

Listed as CAS 68647-72-3 (Terpenes and Terpenoids, sweet orange-oil)

Listed as CAS 68608-34-4 (Terpenes and Terpenoids, citrus-oil)

Listed as CAS 8028-48-6 (Orangem ext.)

The United States FDA lists d-Limonene as GRAS in 21 CFR sections 182.20 and 182.6.

d-Limonene is a 100% natural, biodegradable product extracted from the peel of citrus fruit

Proposition 65: California Safe Drinking Water and Toxic Information Act of 1986

This product is not known to contain an chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

SARA Title III (Section 313)

This substance contains no material s subjecct to the preoting requirements of SARA Title III (Section 313)

Section 16 - Other Information

Hazardous Material Information System (U.S.A.)

NFPA RATING

- 0 = Non-Hazardous
- 1 = Slight Hazard
- 2 = Hazardous
- 3 = Extreme Hazard
- 4 = Deadly



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

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0
PERSONAL	B

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Prepared By: SHC

Note to Reader:

This above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.