MATERIAL SAFETY DATA SHEET

ODOR CONTROL

Revision date: 09/10/2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical Family: Deodorizing Cleaner **Molecular Formula:** Mixture

1MANUFACTURER:

Dynacco, Inc
7461 147TH Street S.E
P O Box 27
Monroe, WA 98272
USA

INFORMATION PHONE: 360-794-8974
24-HOUR EMERGENCY: CHEM-TEL 800-255-3924

II. HAZARDS IDENTIFICATION

Routes of Entry:	Eye contact, Skin contact, Inhalation, Ingestion
Target Organs Potentially Affected by Exposure:	Skin, Respiratory Tract, Eyes, Nervous System, Kidneys
Chemical Interactions That Change Toxicity:	None Known
Medical Conditions Aggravated by Exposure:	Respiratory disease including asthma and bronchitis, Eye disease, Skin disease including eczema and sensitization, Kidney disease

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation:	Can cause respiratory irritation. Irritation may be delayed for several hours.
Skin Contact:	Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Skin Absorption:	No absorption hazard in normal industrial use.
Eye Contact:	Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.
Ingestion Irritation:	Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis.
Ingestion Toxicity:	Harmful if swallowed.

Long-Term (Chronic) Health Effects:

Carcinogenicity:	None of the substances have been shown to cause cancer in long term animal studies. Not a carcinogen according to NTP, IARC, or OSHA.
Reproductive and Developmental Toxicity:	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Mutagenicity:	No data available to indicate product or any components present at greater

than 0.1% is mutagenic or genotoxic.

Inhalation: Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

Skin Contact: Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Skin Absorption: Upon prolonged or repeated exposure, no hazard in normal industrial use.

HMIS Rating: Health: 1 Flammability: 3 Reactivity: 1

III. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%	CAS #	OSHA Exposure Limits
Nonylphenoxypolyethoxyethenol	30 - 60	68412-54-4	No PEL established
Isopropanol	10 - 30	67-63-0	400 ppm TWA; 980 mg/m3 TWA
Quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	3 - 7	68956-79-6	No PEL established
3-Cyclohexene-1-methanol, .alpha.,.alpha.,4-trimethyl-	1 - 5	98-55-5	No PEL established
3-Cyclohexene-1-methanol, .alpha.,.alpha.,4-trimethyl-, 1-acetate	1 - 5	80-26-2	No PEL established
2-Methyl-2,4-pentanediol	1 - 5	107-41-5	No PEL established
Oils, lemongrass	1 - 5	8007-02-1	No PEL established
n-Amyl acetate	1 - 5	628-63-7	100 ppm TWA; 525 mg/m3 TWA
Stoddard solvent	0.5 - 1.5	8052-41-3	500 ppm TWA; 2900 mg/m3 TWA

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

The composition of this product is classified as a trade secret in accordance with CFR 29 1910. 1200 . Ingredients not precisely identified are proprietary or nonhazardous.

V. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

Eyes: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis.

Notes to Doctor: No additional first aid information available

V. FIRE FIGHTING MEASURES

Flammability Summary: Flammable

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.

Fire and/or Explosion Hazards: Vapors may be ignited by sparks, flames or other sources of

	ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.
Fire Fighting Methods and Protection:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide, Toxic fumes., Toxic gases

Flash Point °F (Closed Cup):	75
Autoignition Temperature °F:	Not Available
Upper Flammable/Explosive Limit, % in air:	Not Available
Lower Flammable/Explosive Limit, % in air:	Not Available

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment:	No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section VIII of this MSDS Evaporation of volatile substances can lead to the displacement of air creating an environment that can cause asphyxiation.
Methods for Clean-up:	No special spill clean-up considerations. Collect and discard in regular trash. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

VII. HANDLING AND STORAGE

Handling Technical Measures and Precautions:	Mildly irritating material. Avoid unnecessary exposure. Use spark-proof tools and explosion-proof equipment As with all chemicals, good industrial hygiene practices should be followed when handling this material. Avoid contact with material, avoid breathing dusts or fumes, use only in a well ventilated area. Wash thoroughly after handling Do not get in eyes, on skin and clothing Keep in air-tight containers- material is hygroscopic. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Remove contaminated clothing and wash before reuse Use with adequate ventilation Ground and bond containers when transferring material
Storage Technical Measures and Conditions:	Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition Store in a cool dry place Store in a tightly closed container Keep away from heat, sparks, and flame Store in a cool place in original container and

protect from sunlight Do not store near combustible materials

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures: No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910. Explosion proof exhaust ventilation should be used. Ventilation is required to maintain operator exposure below published exposure limits. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits Facilities storing or using this material should be equipped with an eyewash and safety shower.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator. Wear a NIOSH approved respirator if any exposure is possible.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available. Wear goggles and a Face shield

Skin Protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield

Gloves: No information available

Control Parameters:

Chemical Name	ACGIH TLV-TWA	ACGIH STEL	IDLH
Nonylphenoxypolyethoxyethenol	No TLV		ND
Isopropanol	(400) ppm TWA; (983) mg/m3 TWA	(500) ppm STEL; (1230) mg/m3 STEL	ND
Quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No TLV		ND
3-Cyclohexene-1-methanol, .alpha.,.alpha.,4-trimethyl-	No TLV		ND
3-Cyclohexene-1-methanol, .alpha.,.alpha.,4-trimethyl-, 1-acetate	No TLV		ND
2-Methyl-2,4-pentanediol	No TLV		ND
Oils, lemongrass	No TLV		ND
n-Amyl acetate	100 ppm TWA; 532 mg/m3 TWA		ND
Stoddard solvent	100 ppm TWA; 525 mg/m3 TWA		ND

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Yellow
Odor:	Comparable to Standard
pH:	Not Available
Solubility in Water:	Soluble in Water-Yes
Octanol/Water Partition Coefficient:	0.14
Evaporation Rate:	Not Available
Vapor Density:	> 1
Flash Point °F (Closed Cup):	75
Boiling Point: °F	Not Available
Melting Point: °F	-123
Specific Gravity:	0.9588

X. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures. Contamination Elevated temperatures
Materials to Avoid/Chemical Incompatibility:	Strong oxidizing agents Acetic anhydride Strong acids Strong reducing agents Chlorinated compounds Acids Strong alkalies Nitrogen oxides
Hazardous Decomposition Products:	Carbon dioxide Carbon monoxide Toxic fumes. Toxic gases

XI. TOXICOLOGICAL INFORMATION

Component Toxicology Data:

Chemical Name	CAS Number	LD50/LC50
Isopropyl alcohol	67-63-0	Inhalation LC50 Rat : 16000 ppm/8H; Oral LD50 Rat : 5045 mg/kg; Oral LD50 Mous
2,4-Pentanediol, 2-methyl-	107-41-5	Inhalation LC50 Rat : >310 mg/m3/1H; Oral LD50 Rat : 3700 mg/kg; Oral LD50

XII. ECOLOGICAL INFORMATION

Overview: This material is not expected to be harmful to the ecology.

XIII. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product: Spent or discarded material is a hazardous waste.

Disposal Methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the sole responsibility of the waste generator. As your supplier, we have no control over the management practices or manufacturing processes of parties handling or using this material. The information presented here pertains only to the product when used as intended, according to this MSDS. For unused and uncontaminated product, the preferred options include sending to a licensed and permitted incinerator or other thermal destruction device. Various federal, state or provincial agencies may have specific regulations concerning the

transportation, handling, storage, use or disposal of this product which may not be covered in this MSDS. The user shall have to review these regulations to ensure full compliance with all applicable regulations.

XIV. TRANSPORTATION INFORMATION

US DOT Ground Shipping Description:	UN1266, PERFUMERY PRODUCT, 3, PGIII
IATA Shipping Description:	UN1266, PERFUMERY PRODUCT, 3, PGIII
IMDG Shipping Description:	UN1266, PERFUMERY PRODUCT, 3, PGIII

XV. REGULATORY INFORMATION

TSCA Status All components in this product are on the TSCA Inventory.

Chemical Name	CAS #	Regulation	% Range
No 313-listed chemicals in this product		SARA 313	

XVI. ADDITIONAL INFORMATION

Disclaimer:

Important: While the descriptions, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you perform an assessment to determine the suitability of the product for your particular purpose prior to use. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any laws or regulations. No warranties of any kind, either expressed or implied, including fitness for a particular purpose are made regarding the product described. We assume NO responsibility for any injuries resulting from misuse or misapplication of this product or that might be sustained because of inhalation, ingestion, absorption or other contact with this product. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.