Vista Chemical Company

900 Threadneedle
Houston, Texas 77079
(713) 588-3000

P.O. Box 19029
Houston, Texas 77224
Fax (713) 588-3236

TGG: ICL ERT: MJH: AJO: RF

XF:

VISTA

November 10, 1989

Mr. Frank Motley
Vice President
National Wire & Cable
136 San Fernando Rd.
Los Angeles, CA 90031

Dear Frank:

As we have discussed, the information below is provided in response to your concerns regarding the hazards of emissions from PVC compound, specifically 309.

The specific recipe for this compound contains two substances which are capable of becoming airborne. These substances are the plasticizer, a trimellitate ester, and the stabilizer, epoxidized soybean oil. Both of these materials are considered non-hazardous under normal handling conditions. Processing temperatures may result in emissions of these substances at levels that would be detectable by odor, but not at levels that would be anticipated to cause irritation or illness. I have enclosed MSDS's for these two additives. The other compound additives are encapsulated in the PVC matrix and based on our experience do not become airborne in detectable quantities during processing. The product formulation is attached.

In regards to California Proposition 65, Vista PVC compound does contain residual vinyl chloride monomer and lead which are listed by Proposition 65.

The residual VCM levels are typically less than 1.0 ppm. The residual levels will be lower depending on storage time and additional processing steps. The lead is encapsulated in the PVC and based on our experience and sampling does not present an exposure potential.

Lastly, as you are aware, we have analyzed samples obtained from your plant to determine if the product may have contained a contaminant and if it met specifications. Based on the results, the sample product met specifications. Chemical analysis indicated a trace amount of what is believed to be a plasticizer range alcohol.

This contamination, if significant, could result in a higher odor, but would also be relatively non-toxic at any anticipated airborne levels resulting from handling of the compound.

Sincerely,

Thomas G. Grumbles, C.I.H.
Environmental Quality Manager

dlj

Attachment

cc: F. Tasby, E. Ingram-Aber, J. Telford-Santa Ana

309 FORMULATION CONSTITUENTS

TRADE NAME	Generic Name	Use
Vista 5415	Poly (Vinyl Chloride)	Resin
NONDTM	Tri(n-octyl n-decyl) trimellitate	Plasticizer
ESO	Epoxidized Soybean Oil	Plasticizer/stabilizer
Dythal XL	Dibasic Lead Phthalate	Heat Stabilizer
DS-207	Dibasic Lead Stearate	Heat Stabilizer
$CaCO_3$	Calcium Carbonate	Filler
Sb_2O_3	Antimony Trioxide	Flame Reduction
Bisphenol A	2, 2 bis (di hydroxy phenyl) Propane	Antioxidant

STAFLEX SPECIALTY ESTERS, INC.

MATERIAL SAFETY DATA SHEET

Section I

Identity: Staflex NONDTM	Synonyms: N-octyl, n-decyl Trimellitate; 1,2,4 Benzenetricarboxylic acid,decyl,octyl ester
Product Code: ~~8~~-690	Chemical Family: Trimellitate ester
CAS #: 34870-88-7	Chemical Formula: $C_{36}H_{60}O_6$

Section II

Manufacturer's Name: Staflex Specialty Esters, Inc.	Emergency Telephone Number: CHEMTREC: 1-800-424-9300
Address: Middlesex Avenue Carteret, NJ 07008	Telephone Number for Information: Staflex: 201/541-4201
Date Prepared: 10/1/87	Supercedes (date): 9/85 By Reichhold Chemical Co.
Prepared By: Tom Schmidt	Title: Technical Manager

ction III: Warning Statement

Caution! Liquid and vapors from heating may cause irritation of skin, eyes, nose, and throat.

Section IV: Hazardous Ingredients/Identity Information

Hazardous Components Specific Chemical Identity/Common Name:	OSHA. PEL	ACGIH TLV	Other Limits Recommended
None as defined by OSHA CFR 1910.1200	None established		
Staflex NONDTM is listed on the TSCA inventory			

VVV 000007041

Section V: Physical/Chemical Characteristics

Boiling Point: 335 C at 10mm Hg	Specific Gravity: (H_2O = 1) 0.974
Vapor Pressure: 0.2mm Hg at 20 C	Melting Point: Not applicable
Vapor Density: (Air =1) Not known	Evaporation Rate: (Butyl Acetate =1) Not known
Solubility in Water: <0.01% at 20 C	Appearance and Odor: Clear, pale yellow liquid with slight odor.

Identity: Staflex NONDTM Product Code: 48-690 Date: 10/1/87

Section VI: Fire and Explosion Hazard Data

Flash Point (Method Used): >230 F (S.F.C.C.)	Flammable Limits: Not known Flammability Class: 3B

Extinguishing Media:
Foam, carbon dioxide, or dry chemical.

Special Fire Fighting Procedures:
None known; firefighters should wear self-contained breathing apparatus to avoid inhalation of smoke or vapors.

Unusual Fire and Explosion Hazards:
Treat as an oil fire.

Section VII: Reactivity Data

Stability	Unstable		Conditions to Avoid: Not applicable
	Stable	X	

Incompatibility (Materials to Avoid):
Strong oxidizing agents.

Hazardous Decomposition or Byproducts: Under severe thermal degradation, carbon monoxide and low molecular weight organic compounds may form.

Hazardous Polymerization	May Occur		Conditions to Avoid: Not applicable.
	Will Not Occur	X	

Section VIII: Health Hazard Data

Primary Routes of Entry:	Inhalation	Skin	Ingestion
	X	X	

Health Hazard (Acute Exposure):
Heated vapors and mists may irritate eyes and upper respiratory tract.

Health Hazard (Chronic Exposure):
Potential skin sensitizer which may cause skin rash with repeated or prolonged contact.

Carcinogenicity:	NTP	IARC Monographs	OSHA Regulation
	No	No	No

Signs and Symptoms of Exposure:
Irritation of eyes, skin, and upper respiratory tract.

Medical Conditions Generally Aggravated by Exposure:
Skin disorders.

VVV 000007042

Emergency and First Aid Procedures:

Inhalation:	Move to fresh air. Apply artificial respiration if breathing has stopped. Get medical attention.
Skin Contact:	Wash with soap and water at first opportunity.
Eye Contact:	Flush with water for 15 minutes. Get medical attention.
Ingestion:	Get medical attention.

Identity: Staflex NONDTM Product Code: 48-690 Date: 10/1/87

Section IX Precautions for Safe Handling and Use

Steps to be Taken in Case Material Is Released or Spilled:

Ventilate area. Spread absorbent material and place absorbed material in a closed container. Wear protective equipment during cleanup.

Precautions to Be Taken in Handling and Storing:

Avoid prolonged or repeated inhalation of spray mists or heated vapors. Avoid prolonged or repeated skin contact.

Waste Disposal Method:

Incinerate or dispose in an approved facility in accordance with current federal, state, and local regulations.

Other Precautions:

None known.

Section X Control Measures

Respiratory Protection (Specific Type):

Use a NIOSH approved full face respirator with mist pad if material is used in poorly ventilated areas or if material is sprayed or heated.

Ventilation	Local Exhaust: May be required if material is sprayed or heated.	Special: --
	Mechanical (General): Recommended.	Other: --

Protective Gloves:
Impervious chemical resistant gloves.

Eye Protection:
Chemical goggles.

Other Protective Clothing or Equipment:
As required to prevent wetting skin.

Work/Hygienic Practices:
Wash hands before eating or smoking.

Section XI Transportation Data

VVV 000007043

Shipping Name:
Plasticizers or solvents.

DOT Classification:
Non-hazardous, non-flammable.

DOT ID Number:
Not applicable.

REPRESENTED BY:

LEXAPE CHEMICALS, INC.

(201) 469-7310

UNION CARBIDE CORPORATION

Solvents & Coatings Materials Division

MATERIAL SAFETY DATA SHEET

EFFECTIVE DATE: 11/01/87

Union Carbide urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

To promote safe handling, each customer or recipient should: (1) notify its employees, agents, contractors and others whom it knows or believes will use this material of the information in this MSDS and any other information regarding hazards or safety; (2) furnish this same information to each of its customers for the product; and (3) request its customers to notify their employees, customers, and other users of the product of this information.

I. IDENTIFICATION

PRODUCT NAME: FLEXOL PLASTICIZER EPO

CHEMICAL NAME: Soybean Oil, Epoxidized

CHEMICAL FAMILY: Soybean Oil, Epoxidized

FORMULA: $C_{57}H_{76}O_{18}$ (approximately) MOLECULAR WEIGHT: ~ 1000

SYNONYMS: None

CAS # and CAS NAME: 8013-07-8 Soybean oil, epoxidized

II. PHYSICAL DATA

BOILING POINT, 760 mm Hg: Decomposes

FREEZING POINT: Pour point: -4 C (24 F)

SPECIFIC GRAVITY (H2O = 1): 0.993 at 25/20 C

VAPOR PRESSURE AT 20°C: <0.1 mm Hg @ 20 C

VAPOR DENSITY (air = 1): >1

SOLUBILITY IN WATER by wt: <0.1

EVAPORATION RATE (Butyl Acetate = 1): <0.1

APPEARANCE AND ODOR: Clear, very pale yellow liquid; mild & characteristic odor

PERCENT VOLATILES (BY VOLUME): Nil

EMERGENCY PHONE NUMBER: 1-800-UCC-HELP (Number available at all times)

UNION CARBIDE CORPORATION
Solvents & Coatings Materials Division
39 Old Ridgebury Road, Danbury, CT. 06817-0001

PRODUCT NAME: FLEXOL PLASTICIZER EPO

III. INGREDIENTS

MATERIAL	%	EXPOSURE LIMITS	HAZARD
Soybean Oil, Epoxidized (CAS# 8013-07-8)	100	None established	None currently known.

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 314 F (157 C), Pensky-Martens Closed Cup, ASTM D 93
600 F (315 C), Cleveland Open Cup, ASTM D 92

FLAMMABLE LIMITS IN AIR, % by volume: LOWER: Not determined (nonvolatile fluid)
UPPER: Not determined (nonvolatile fluid)

EXTINGUISHING MEDIA: Use water spray, carbon dioxide, dry chemical, alcohol-type, or universal-type foams applied by manufacturers' recommended techniques.

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

V. HEALTH HAZARD DATA

TLV AND SOURCE: None established by ACGIH or OSHA.

EFFECTS OF ACUTE OVEREXPOSURE:

SWALLOWING: No evidence of adverse effects from available information.

SKIN ABSORPTION: No evidence of adverse effects from available information.

INHALATION: No evidence of adverse effects from available information.

SKIN CONTACT: May cause temporary local reddening of skin.

EYE CONTACT: No evidence of adverse effects from available information.

EFFECTS OF REPEATED OVEREXPOSURE:
No evidence of adverse effects from available information.

OTHER HEALTH HAZARDS:
Overexposure to vapors generated at high temperatures may result in eye and respiratory tract irritation and in the inhalation of harmful amounts of material.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:
None currently known.

VVV 000007045

EMERGENCY AND FIRST AID PROCEDURES:

PRODUCT NAME: FLEXOL PLASTICIZER EPO

SWALLOWING:	No harmful effects expected.
SKIN:	Wash with soap and water.
INHALATION:	No emergency care anticipated.
EYES:	Flush with water.
NOTES TO PHYSICIAN:	Toxicology studies have shown the material to be of very low acute toxicity. There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition.

VI. REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY (materials to avoid):
Avoid strong acids, alkalies, amines.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:
Burning can produce carbon monoxide and/or carbon dioxide.

HAZARDOUS POLYMERIZATION: Will Not Occur

CONDITIONS TO AVOID: None

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Small spills: Cover with absorbent material and physically remove to a waste container. Larger spills: Collect for disposal (See Section IX).

WASTE DISPOSAL METHOD: Incinerate in a furnace or bury in a suitable landfill where permitted under appropriate Federal, State, and local regulations.

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
None required in normal use (see below)

VENTILATION: General room ventilation is suitable for storage and handling at normal room temperature. Special local ventilation is recommended where EPO is processed at elevated temperatures and where vapors can be expected to escape to the air.

PROTECTIVE GLOVES: Plastic or rubber

EYE PROTECTION: Safety glasses

PRODUCT NAME: FLEXOL PLASTICIZER EPO

OTHER PROTECTIVE EQUIPMENT:
Eye bath, safety shower

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Normal precautions common to good manufacturing practice should be followed in handling and storage.

OTHER PRECAUTIONS: This product is essentially insoluble in water and can float on the surface; avoid discharge to sewers or waterways.

X. REGULATORY INFORMATION

STATUS ON SUBSTANCE LISTS:

The concentrations shown are maximum or ceiling levels (weight %) to be used for calculations for regulations. Trade Secrets are indicated by "TS".

FEDERAL EPA

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4.

Components present in this product at a level which could require reporting under the statute are:
None

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III
requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:
None

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III
requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:
None

STATE RIGHT-TO-KNOW

CALIFORNIA Proposition 65
None

MASSACHUSETTS Right-To-Know, Substance List (MSL) Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:
None

PRODUCT NAME: FLEXOL PLASTICIZER EPO

PENNSYLVANIA Right-To-Know, Hazardous Substance List Hazardous Substances and Special Hazardous Substances on the List must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:
None

Toxic Substances Control Act(TSCA) STATUS:

The ingredients of this product are on the TSCA inventory.

CALIFORNIA SCAQMD RULE 443.1 VOC'S:

VOC 931 g/l, Vapor pressure <0.1 mm Hg @ 20 C

OTHER REGULATORY INFORMATION:

None

NOTE ----

The opinions expressed herein are those of qualified experts within Union Carbide Corporation. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of Union Carbide Corporation, it is the user's obligation to determine the conditions of safe use of the product.

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