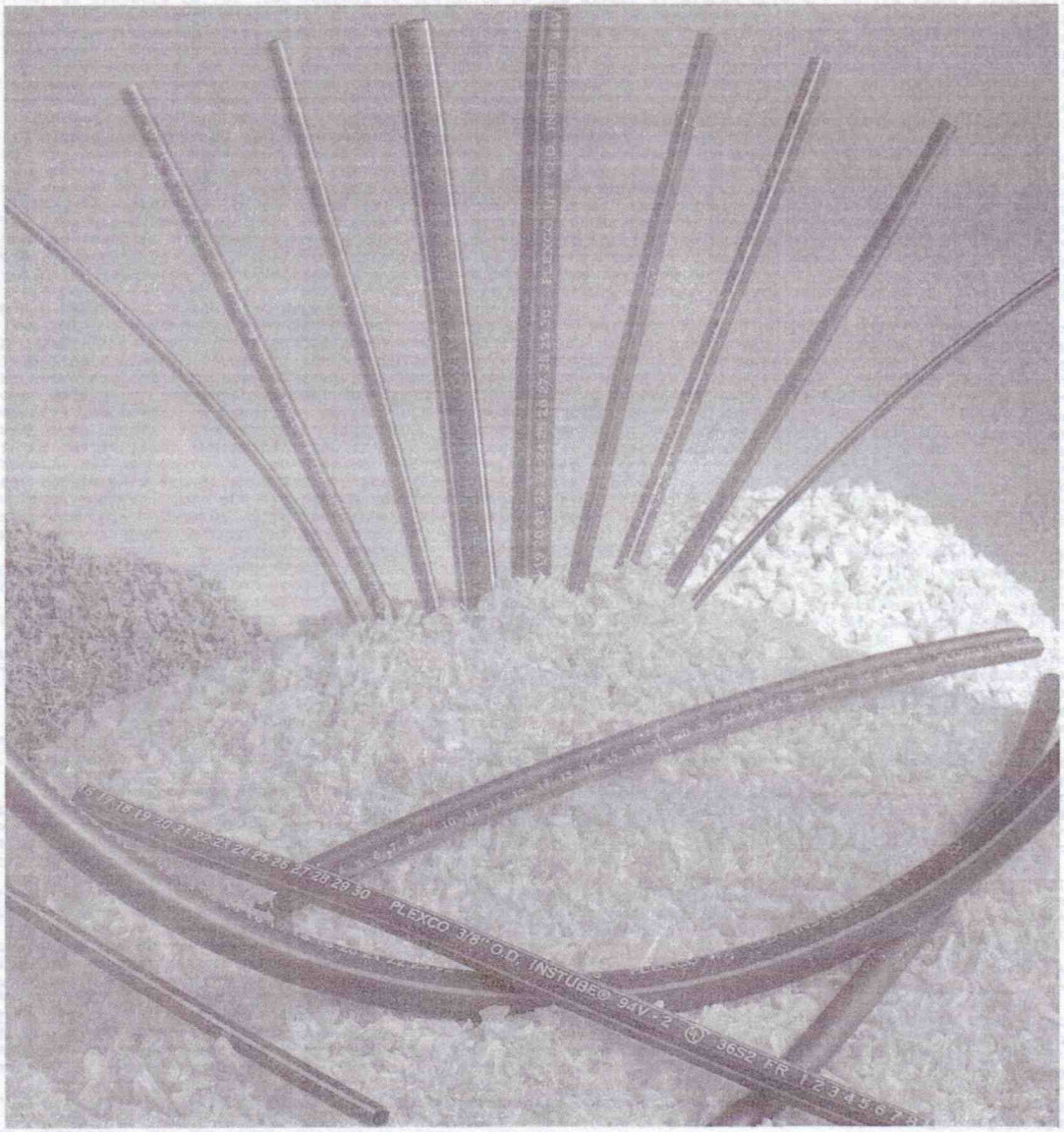
PERFORMANCE PIPE

A Division of Chevron Phillips Chemical Company LP

Flame Retardant Polyethylene Tubing

Classified Under U.L. 1820.



Bulletin: PP 700

PLEXCO® 2600 Instube®

Flame Retardant (FR) Polyethylene Tubing
For Pneumatic Instrument Controls

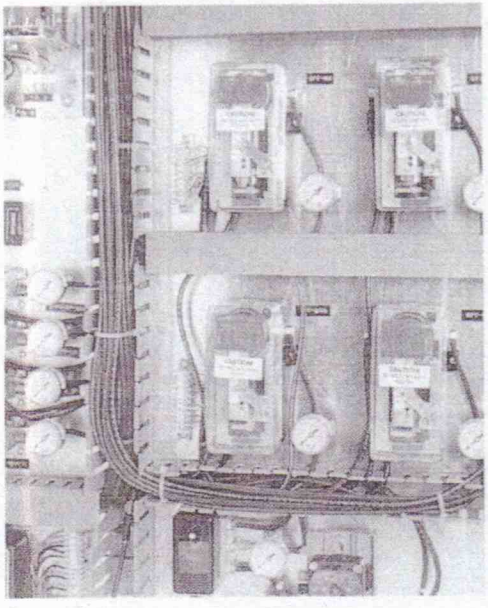
Performance Pipe

PERFORMANCE PIPE is the successor to Plexco[1] and Driscopipe[2]. On July 1, 2000, Chevron Chemical Company and Phillips Chemical Company joined to form Chevron Phillips Chemical Company LP. Performance Pipe, a division of Chevron Phillips Chemical Company LP, succeeds Plexco and Driscopipe as North America's largest producer of polyethylene piping products for gas, industrial, municipal, mining, oilfield, and utility applications.

Performance Pipe tenders more than forty years of polyethylene pipe manufacturing experience with nine manufacturing facilities ISO certified in eight states.

The unmatched quality and performance of Performance Pipe polyethylene piping products is enhanced and strengthened with over four decades of quality polyolefin plastic resin production from Chevron Phillips Chemical Company LP.

A Commitment to Quality and Performance



Flame Retardant (FR) Polyethylene Tubing

Application

Performance Pipe PLEXCO® 2600 Instube® Flame Retardant Polyethylene Tubing is a superior quality, flame retardant, stress crack resistant, exclusively compounded polyethylene tubing product for use in pneumatic instrument control applications.

Marking

PLEXCO® 2600 Instube® is marked with a white ink numbering system over the full length of the tubing. Bright color stripes are extruded dirctly into the outside surface of the tubing and provide permanent color-coding that will not wear or fade.

Identification

When color-coded, the combination of color stripes and printline numbering provides for up to 210 pneumatic circuit lines without duplicating a color stripe-number combination.

[1] Formerly - Plexco, a Division of Chevron Chemical Company
[2] Formerly - Phillips Driscopipe, A Division of Phillips Petroleum Company

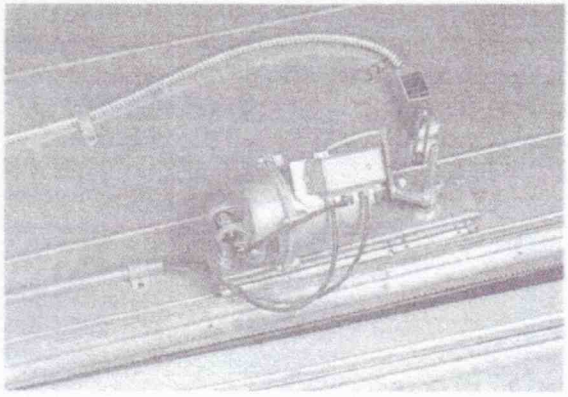
June 2007 Supersedes all previous publications

Stress Crack Resistance

Resistance to stress cracking is critical. The possibility of tubing failure occurring behind skyscraper walls 10 or 15 years in the future is of great concern. Since stress crack resistance is one of the most important physical properties of polyethylene instrumentations tubing, Performance Pipe has devised its own test to determine its true value. ESCR test is patterned after the ASTM D1693 test for "Environmental Stress Cracking of Ethylene plastics" but is a much tougher and more stringent test than ASTM D1693. Our 48-hour, 70°C accelerated aging test produces crystal developments within the polymer that would otherwise take years to develop. Tubing samples are then bent into a "V" shape and aged in a chemical stress cracking solution at 50°C for 200 hours. Stress cracking tests are conducted on every production lot of tubing. PLEXCO® 2600 Instube® is recertified annually for conformance with ESCR requirements.

Flame Retardant

"Flame Retardant" or "self-extinguishing" means that the tubing material has the ability to retard burning and extinguish the flame once the flame source is removed.



Industry tests are used to evaluate the burning characteristics of pneumatic tubing materials. ASTM D 635 Standard Test Method for Rate of Burning and/or Extent/Time of Burning of Plastics in a Horizontal Position test materials for horizontal burn rate. PLEXCO® 2600 Instube® meets or exceeds the requirements of ASTM D 635.

PLEXCO® 2600 Instube® is classified by Underwriters Laboratories. Under UL94 tests conducted by UL to analyze vertical burn characteristics of polymeric materials, PLEXCO® 2600 Instube® has a vertical burn rating of 94V-2.

Plenum Rated Pneumatic Tubing

NFPA 90A Standard for the Installation of Air-Conditioning and Ventilating Systems, permits pneumatic tubing for control systems in ceiling cavity plenums (§2-3.10.1) and raised floor plenums (§2-3.10.5) when it is "listed as having a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 5 ft (1.5 m) or less when tested in accordance with the specified test method." The specified test method is UL1820 Standard for Safety Fire Test of Pneumatic Tubing for Flame and Smoke Characteristics. When pneumatic tubing is listed in accordance with NFPA 90A requirements, it is a "plenum rated" material.

Property	*Test Method*	*Value*
Maximum peak optical density	UL 1820	< 0.5
Average optical density	UL 1820	< 0.15
Maximum flame spread distance	UL 1820	< 5 ft (< 1.5 m)

PLEXCO® 2600 Instube® and PLEXCO® 2600 Plexstripe® are listed as "UL Classified" by Underwriters Laboratories, UL, under UL 1820 as follows:

UNDERWRITERS LABORATORIES INC.
CLASSIFIED
PNEUMATIC TUBING
FOR FLAME AND SMOKE CHARACTERISTICS
ONLY
NFPA 90A

Performance Pipe

a division of Chevron Phillips Chemical Company LP

QNVT.R12275

Type PLEXCO™ 2600 INSTUBE® OR PLEXCO™ 2600 PLEXSTRIPE® nonmetallic tubing in the following trade sizes:

Single Tube: 5/32, 1/4, 3/8 and 1/2 in. OD
Twin Tube: 5/32 and 1/4 in. OD

PLEXCO® 2600 Instube® meet the requirements of the Uniform Building Code, Uniform Mechanical Code, Southern Building Code and B.O.C.A.

Pneumatic Tubing Products

PLEXCO® 2600 Instube® is a high quality, flame retardant pneumatic control tubing with superior stress crack resistance for reliable, long-term performance. PLEXCO® 2600 Instube® tubing is lightweight and flexible for easy handling and installation.

PLEXCO® 2600 Instube® is marked with a white ink numbering system over the full length of the tubing. Cut the lead end at any given number (from 1 to 30) for easy identification of individual pneumatic circuit tubes. Color-coding is available in seven stripe colors. Up to 210 different pneumatic control circuits can be individually identified without repeating a stripe color-number combination.

PLEXCO® 2600 Instube® is produced in the following sizes and coils for pneumatic control applications.

PLEXCO® 2600 Instube® *Product Sizes*
Color Coding for PLEXCO® 2600 Instube®*† Product Sizes*

Nominal Size	*Nominal OD*	*Nominal ID*	*Nominal Wall*	*Weight/CLF*	*Coil Length*	*Master Pack*
5/32" OD	0.156"	0.096"	0.030"	0.60#	500'	2000'
1/4" OD	0.250"	0.170"	0.040"	1.32#	250'/1000'	1000'/2000'
3/8" OD	0.375"	0.250"	0.062"	3.04#	250'/500'	1000'
1/2" OD	0.500"	0.375"	0.062"	4.25#	250'	500'
5/32" Twintube	–	0.096"	0.030"	1.20#	500'	1000'
1/4" Twintube	–	0.170"	0.040"	2.86#	250'	500'

Available in black only.

Nominal Size	*Nominal OD*	*Nominal ID*	*Nominal Wall*	*Weight/CLF*	*Coil Length*	*Master Pack*
5/32" OD	0.156"	0.096"	0.030"	0.60#	500'	2000'
1/4" OD	0.250"	0.170"	0.040"	1.32#	250'/1000'	1000'/2000'
3/8" OD	0.375"	0.250"	0.062"	3.04#	250'/500'	1000'
1/2" OD‡	0.500"	0.375"	0.062"	4.25#	250'	500'

† Available stripe colors: red, white, blue, green, yellow, orange and violet. ‡Available stripe colors: red, white, blue and green only.

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Material and Tubing Specifications

Specifications for PLEXCO™ 2600 Instube® Pneumatic Control Tubing

Property	*Test Method*	*Typical Value*
Flame Retardant Compound		
Melt Index	ASTM D 1238	0.6 ± 0.1 g/10 min
Density	ASTM D 792	1.1 ± 0.005 g/cm^3
Tensile Strength – ultimate (20 in./min)	ASTM D 638	> 2000 psi (> 1.8 MPa)
Tensile Elongation – ultimate (20 in./min.)	ASTM D 638	> 800 %
Flexural Modulus	ASTM D 747	45,000 psi (3,103)
Shore A Hardness	ASTM D 1700	97 ± 3
Shore D Hardness	ASTM D 1700	45 ± 3
Water Absorption	ASTM D 570	5% maximum
Polyethylene Classification	ASTM D 3350	PE 11 or PE 12
Stress-Crack Resistance	ASTM D 1693	> 200 hours non-failure
Brittleness Temperature	ASTM D 745	< -104.8°F (< -76°C)
Pneumatic Instrument Control Tubing		
Burst Pressure	ASTM D 1599	5/32" – > 500 psi (> 3.4 MPa) 1/4" – > 500 psi (> 3.4 MPa) 3/8" – > 500 psi (> 3.4 MPa) 1/2" – > 350 psi (> 3.4 MPa)
Minimum Bend Radius	–	5/32" – 0.50 in. (13 mm) 1/4" – 0.75 in. (19 mm) 3/8" – 1.50 in. (38 mm) 1/2" – 1.88 in. (48 mm)
Maximum Allowable Pulling Load During Installation	–	5/32" – 15 lb. (66 N) 1/4" – 33 lb. (147 N) 3/8" – 76 lb. (338 N) 1/2" – 106 lb. (472 N) 5/32" Twintube – 30 lb. (133 N) 1/4" Twintube – 65 lb. (289 N)
Flammability	UL 94 UL 910	V-2 UL Classified (NFPA 90A)
Flame Propagation	UL 1820	< 5 ft (< 1.5 m)
Smoke Density – Peak Optical Density	UL 1820	< 0.5
Smoke Density – Average Optical Density	UL 1820	< 0.15

NOTICE – This table provides typical physical property information for polyethylene compounds used to manufacture PLEXCO® 2600 Instube® tubing products. It is intended for comparing compounds and tu bing. It is not a product specification, and it does not establish minimum or maximum values or manufacturing tolerances for compounds or tubing. The typical property values for compound were determined using compression -molded plaques prepared from comp ound. Values obtained from tests of specimens taken from tubing can vary from these typical values. Performance Pipe has made every reasonable effort to ensure the accuracy of this information, but this table may not provide all necessary information, pa rticularly with respect to special or unusual applications. This information may be changed from time to time without notice. Contact Performance Pipe to determine if you have the most recent edition.

June 2007 Supersedes all previous publications

PERFORMANCE PIPE
A Division of Chevron Phillips Chemical Company LP

Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Plexco® Flame Retardant Polyethylene Tubing

Product Use: Pneumatic Tubing or Fiber Pathway
Synonyms: Polyethylene Plastic Plexco® Tubing
Product Cas No.: Mixture

Company Identification:
Performance Pipe, A Division of
Chevron Phillips Chemical Company LP
5085 W Park Blvd, Ste 500
PlanoTX 75093

Product Information:
MSDS Requests: 1 - (800) 852-5530
Technical Information: 1 - (800) 527-0662

24-Hour Emergency Telephone Numbers
HEALTH:Chevron Phillips Emergency Information Center 866.442.9628 (North America) and 1.832.813.4984 (International)
TRANSPORTATION: North America: CHEMTREC 800.424.9300 or 703.527.3887
ASIA: +1.703.527.3887
EUROPE: BIG .32.14.584545 (phone) or .32.14.583516 (telefax)
SOUTH AMERICA SOS-Cotec Inside Brazil: 0800.111.767
Outside Brazil: 55.19.3467.1600

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	AMOUNT	EINECS	SYM	R-PHRASES
Polyethylene Butene Copolymer	25087-34-7	> 75.0 % weight	NA	NA	NA
Antimonytrioxide	1309-64-4	< 4 % weight	215-175-0	Xn	R40
Carbon Black	1333-86-4	< 4 % weight	NA	NA	NA
Decabromobiphenyl Oxide	1163-19-5	< 1 % weight	214-604-9	NA	NA

Occupational Exposure Limits:

Component	Limit	TWA	STEL	Ceiling / Peak	Notation
Antimonytrioxide	ACGIH	Not Established	NA	NA	NA
Carbon Black	ACGIH	3.5 mg/m3	NA	NA	NA
Carbon Black	German MAK	6 mg/m3	NA	NA	NA

Carbon Black	OSHA PEL	3.5 mg/m3	NA	NA	NA
Decabromobiphenyl Oxide	ACGIH	Not Established	NA	NA	NA
Polyethylene Butene Copolymer	CPCHEM	Not Established	NA	NA	NA

SECTION 3 HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW

Black Plastic

- FORMALDEHYDE MAY BE PRODUCED AT ELEVATED TEMPERATURE.

****

IMMEDIATE HEALTH EFFECTS:

Eye: Not expected to cause prolonged or significant eye irritation. If this material is heated, thermal burns may result from eye contact.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. If this material is heated, thermal burns may result from skin contact. Thermal burns to the skin: may include pain or feeling of heat, discoloration, swelling, and blistering.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. If this material is heated, fumes may be unpleasant and produce nausea and irritation of the upper respiratory tract.

SECTION 4 FIRST AID MEASURES

Eye: If heated material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses, if worn. Get immediate medical attention.

Skin: If the hot material gets on skin, quickly cool in water. See a doctor for extensive burns. Do not try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The use of vegetable oil, mineral oil, or petroleum jelly is recommended for removal of this material from the skin.

Ingestion: If swallowed, do not induce vomiting. Give the person a glass of water or milk to drink and get immediate medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

SECTION 5 FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

NFPA RATINGS: **Health:** 0 **Flammability:** 0 **Reactivity:** 0

FLAMMABLE PROPERTIES:

Flashpoint: NA

Autoignition: NA

Flammability (Explosive) Limits (% by volume in air): **Lower:** NA **Upper:** NA

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:
Fire Fighting Instructions: If possible, water should be applied as a spray from a fogging nozzle since this is a surface burning material. The application of high velocity water will spread the burning surface layer. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
Combustion Products: Incomplete combustion can also produce formaldehyde. Normal combustion forms carbon dioxide, water vapor and may produce carbon monoxide, original monomer, other hydrocarbons and hydrocarbon oxidation products, depending on temperature and air availability. Combustion may form: Carbon Dioxide, Carbon Monoxide

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.
Spill Management: If heated material is spilled, allow it to cool before proceeding with disposal methods.
Reporting: U.S.A. regulations require reporting spills of this material that could reach any surface waters. Report spills to local authorities and/or the National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL . REFER TO PRODUCT LABEL OR MANUFACTURERS TECHNICAL BULLETINS FOR THE PROPER USE AND HANDLING OF THIS MATERIAL .

Precautionary Measures: Avoid contact of heated material with eyes, skin, and clothing. Avoid breathing vapor or fumes from heated material.
Unusual Handling Hazards: Potentially toxic/irritating fumes may be evolved from heated material. At temperatures (>350F, >177C), polyethylenes can release vapors and gases, which are irritating to the mucous membranes of the eyes, mouth, throat, and lungs. These substances may include acetaldehyde, acetone, acetic acid, formic acid, formaldehyde and acrolein. Based on animal data and limited epidemiological evidence, NTP, IARC (2A), and OSHA have listed formaldehyde as a probable human carcinogen. Following all recommendations within this MSDS should minimize exposure to thermal processing emissions.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:
If heated material generates vapor or fumes, use process enclosures, local exhaust ventilation, or other engineering controls to control exposure.

PERSONAL PROTECTIVE EQUIPMENT:
Eye/Face Protection: Wear eye protection such as safety glasses, chemical goggles, or faceshields if engineering controls or work practices are not adequate to prevent eye contact. If this material is heated, wear chemical goggles or safety glasses and a face shield.

Skin Protection: If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not adequate to prevent skin contact.
Respiratory Protection: If user operations generate harmful levels of airborne material that is not adequately controlled by ventilation, wear a NIOSH approved respirator that provides adequate protection. Use the following elements for air-purifying respirators: Organic Vapor and Formaldehyde.

Occupational Exposure Limits:

Component	Limit	TWA	STEL	Ceiling / Peak	Notation
Antimonytrioxide	ACGIH	Not Established	NA	NA	NA
Carbon Black	ACGIH	3.5 mg/m3	NA	NA	NA
Carbon Black	German MAK	6 mg/m3	NA	NA	NA
Carbon Black	OSHA PEL	3.5 mg/m3	NA	NA	NA
Decabromobiphenyl Oxide	ACGIH	Not Established	NA	NA	NA
Polyethylene Butene Copolymer	CPCHEM	Not Established	NA	NA	NA

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Black Plastic
pH: NA
VAPOR PRESSURE: NA
VAPOR DENSITY (AIR=1): NA
BOILING POINT: NA
SOLUBILITY (in water): Insoluble in water.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to Avoid: heating above recommended processing temperature
Incompatibility With Other Materials: None.
Hazardous Decomposition Products: Carbon Oxides. Low molecular weight hydrocarbons, alcohols, aldehydes, acids and ketones can be formed during thermal processing.
Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS:

Acute Oral Toxicity: LD50 / not known
Acute Dermal Toxicity: LD50 / not known
Acute Inhalation Toxicity: LC50 / not known

Eye Irritation: This material is not expected to be irritating to the eyes.
Skin Irritation: This material is not expected to be irritating to the skin.
Sensitization: Dermal - not a sensitizer / human

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains POLYMERIZED OLEFINS.
During thermal processing (>350F, >177C) polyolefins can release vapors and gases (aldehydes, ketones and organic acids) which are irritating to the mucous membranes of the eyes, mouth, throat, and lungs. Generally these irritant effects are all transitory. However, prolonged exposure to irritating off-gases can lead to pulmonary edema. Formaldehyde (an aldehyde) has been classified as a probable human carcinogen by NTP, IARC (2A), and OSHA based on animal data and limited epidemiological evidence.

Pigments containing carbon black, lead chromate, nickel, antimony,or titanium compounds may have been incorporated into this product. The International Agency for Research on Cancer (IARC) has classified carbon black as a Group 2B carcinogen (possibly carcinogenic to humans) based on sufficient evidence in animals and inadequate evidence inhumans. However, the pigments in this product are bound in a polymer matrix which severely limits its extractability, bioavailability and toxicity. The lead chromate pigment is also silica-encapsulated as well as bound in the polymer matrix. None of these pigments is likely to cause adverse health effects under recommended conditions of use.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY:
This material is not expected to be harmful to aquatic organisms.

ENVIRONMENTAL FATE:
This material is not expected to be readily biodegradable.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material as manufactured is a non hazardous waste but may be contaminated upon use. If this material must be discarded, depending on its use and application, it may meet the criteria of a hazardous waste as defined by the US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make accurate determinations. If this material is subsequently classified as a hazardous waste, federal law requires disposal at a permitted hazardous waste disposal facility.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

Shipping Descriptions per regulatory authority.

US DOT
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

ICAO / IATA
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR

TRANSPORTATION

IMO / IMDG

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

RID / ADR

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

SECTION 15 REGULATORY INFORMATION

SARA 311/312 CATEGORIES:

1.	Immediate (Acute) Health Effects:	NO
2.	Delayed (Chronic) Health Effects:	NO
3.	Fire Hazard:	NO
4.	Sudden Release of Pressure Hazard:	NO
5.	Reactivity Hazard:	NO

REGULATORY LISTS SEARCHED:

01= CA Prop 65	17 = FDA 178	33 = RCRA Waste Appendix VIII
02 = LA RTK	18 = FDA 179	34 = RCRA Waste D-List
03 = MA RTK	19 = FDA 180	35 = RCRA Waste P-List
04 =MN Hazardous Substance	20 = FDA 181	36 = RCRA Waste U-List
05 =NJ RTK	21 = FDA 182	37 = SARA Section 311/312
06 = PA RTK	22 = FDA 184	38 = SARA Section 313
07 = CAA Section 112 HAPs	23 = FDA 186	39 = TSCA 12 (b)
08 = CWA Section 307	24 = FDA 189	40 = TSCA Section 4
09 = CWA Section 311	25 = IARC Group 1	41 = TSCA Section 5(a)
10 =DOT Marine Pollutant	26 = IARC Group 2A	42 = TSCA Section 8(a) CAIR
11 = FDA 172	27 = IARC Group 2B	43 = TSCA Section 8(a) PAIR
12 = FDA 173	28 = IARC Group 3	44 = TSCA Section 8(d)
13 = FDA 174	29 = IARC Group 4	45 = WHIMS - IDL
14 = FDA 175	30 = NTP Carcinogen	46 = Germany D TAL
15 = FDA 176	31 = OSHA Carcinogen	47 = Germany WKG
16 = FDA 177	32 = OSHA Highly Hazardous	48 = DEA List 1
		49 = DEA List 2

The following components of this material are found on the regulatory lists indicated.

Antimonytrioxide	1, 3, 4, 5, 6, 9, 26, 38, 45, 46
Carbon Black	1, 3, 4, 5, 6, 27, 45
Decabromobiphenyl Oxide	3, 4, 5, 6, 38, 39, 40

CERCLA REPORTABLE QUANTITIES(RQ)/SARA 302 THRESHOLD PLANNING QUANTITIES(TPQ):

Component	Component RQ	Component TPQ	Product RQ
Antimonytrioxide	1000 lbs	None	25000 lbs

WHMIS CLASSIFICATION:

This product is not considered a controlled product according to the criteria of the Canadian Controlled

Products Regulations.

CHEMICAL INVENTORY LISTINGS:

AUSTRALIA: All the components of this material are listed on the Australian Inventory of Chemical Substances (AICS).

CANADA: All the components of this material are on the Canadian Domestic Substances List (DSL).

PEOPLE'S REPUBLIC OF CHINA: All the components of this product are listed on the draft Inventory of Existing Chemical Substances in China.

EUROPEAN UNION: All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC.

JAPAN: All the components of this product are on the Existing & New Chemical Substances (ENCS) inventory in Japan, or have an exemption from listing.

KOREA: All the components of this product are on the Existing Chemicals List (ECL) in Korea.

PHILIPPINES: All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

EU Symbols: NA - Not Applicable

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 0 Flammability: 0 Reactivity: 0 Special: NA

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA).

REVISION STATEMENT: This revision updates all sections of the MSDS please review.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	PEL	-	Permissible Exposure Limit
ACGIH	-	American Conference of Government Industrial Hygienists	OSHA	-	Occupational Safety & Health Administration
NIOSH	-	National Institute for Occupational Safety & Health	NFPA	-	National Fire Protection Agency
WHMIS	-	Workplace Hazardous Materials Information System	IARC	-	Intl. Agency for Research on Cancer
EINECS	-	European Inventory of existing Commercial Chemical Substances	RCRA	-	Resource Conservation Recovery Act
SARA	-	Superfund Amendments and Reauthorization Act.	TSCA	-	Toxic Substance Control Act
EC50	-	Effective Concentration	LC50	-	Lethal Concentration
LD50	-	Lethal Dose	CAS	-	Chemical Abstract Service
NDA	-	No Data Available	NA	-	Not Applicable
<=	-	Less Than or Equal To	>=	-	Greater Than or Equal To
CNS	-	Central Nervous System	MAK	-	Germany Maximum Concentration Values

This data sheet is prepared according to the latest adaptation of the EEC Guideline 67/548.
This data sheet is prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200).
This data sheet is prepared according to the ANSI MSDS Standard (Z400.1).
This data sheet was prepared by EHS Product Stewardship Group, Chevron Phillips Chemical Company LP, 10001 Six Pines Drive, The Woodlands, TX 77380.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.