Keltan®

Material Safety Data Sheet

Keltan Elastomer

1. GENERAL INFORMATION

Chemical Name:	Ethylene, Propylene, Diene, Terpolymer Rubber, Oil-extended
CAS Number:	Mixture-NA
CAS Name (Rubber Only):	[4, 7- Methano-1H-indene, 3a, 4, 7, 7a- tetrahydro-, polymer with ethene and 1-propene] or [Bicyclo(2,2,1)hept-2-ene, 5-ethylidene-, polymer with ethene and 1-propene]
Applicable Grades:	P557, P558, P597, 5251A, 480x100, 5531D, 512x50, 708x15, 509x100, 5441A Note: 5251A was previously marketed as MDE248; 5531D was previously marketed as MDE239; 5441 was previously marketed as DE256.
Product Use:	Rubber and rubber modified articles
Telephone No.:	(504) 355-5655
Manufactured by:	DSM Copolymer, Inc.
Street Address:	5955 Scenic Highway, Baton Rouge, LA 70805
Mailing Address:	P. O. Box 2591, Baton Rouge, LA 70821
Date Prepared:	May 26, 1993
Supersedes:	CR2260(R9/90)

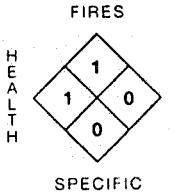
2. CHEMICAL COMPOSITION

Ingredient	CAS #	Wt.% Maximum	Hazard Classification
EPDM	25034-71-3 or 25038-36-2 or 27026-53-5	75	NH
Petroleum Oil severely treated (see Note 1)	64741-88-4 & 64742-01-4	50	NH

3. FIRE AND EXPLOSION HAZARD DATA

Flash Point Method:	240 °C (465 °F) COC (see Note 2)
Auto Ignition Temperature:	In the range 350-380 °C (662-716 °F)
Ignition Temperature:	Above 200 °C (392 °F)
Combustible:	No, but the product will burn if ignited.
Upper/Lower Flammable Limits:	NE
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, products from incomplete combustion, and various hydrocarbons.
Extinguishing Media:	All fire extinguishing media permitted - foam or water fog recommended.
Special Fire Fighting Procedure:	During emergency conditions, exposure to thermal decomposition products may cause a health hazard. Use of NIOSH approved self contained breathing apparatus is recommended.
Upper/Lower Explosive Level:	NA
Sensitivity to Impact/Shock:	NA
Sensitivity to Static Discharge:	NA

NFPA FIRE HAZARDS IDENTIFICATION SYSTEM



4 - Extreme
3 - High
2 - Moderate
1 - Slight
0 - Insignificant

MARKETED BY

HARWICK STANDARD DISTRIBUTION CORPORATION

60 S. Seiberling Street • Akron, Ohio 44305

CR2260 issued 9/93

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(CR2260 continued from reverse.)

4. PHYSICAL DATA

Physical State:	Solid, bales
Appearance:	Pale yellow to amber
Odor:	Slight
Odor Threshold:	NE
Melting/Freezing Points:	NA
Specific Gravity:	0.86-0.87
Boiling Point:	NA
Vapor Pressure:	NA
Vapor Density:	NA
Volatiles (% by weight, @105 °C):	0.75 max
Solubility in Water at 20 °C:	Insoluble
Coefficient in Water/Oil Distribution:	NE
pH:	NA
Evaporation rate:	NA

5. SPECIAL REGULATORY HAZARD-HEALTH, SAFETY, AND FOOD

OSHA:	The Petroleum Oil Component in this product, if present as an oil mist, is regulated under Hazard Communication Standard 29 CFR Part 1910.1000 (see Section 7 and Note 3).
TSCA:	Components of this product are listed under TSCA Chemical Substance Inventory.
FDA:	Grades P557, P558, P597, 5531D can be used in complying with 21CFR 177.2600, 'Rubber Articles Intended for Repeated Use'.
DOT:	**United States:** Designation and labeling not applicable as product is not defined or designated as a hazardous material by U.S. Department of Transportation under Title 49 of CFR. **Canada:** This product is not regulated under the Canadian Transportation of Dangerous Goods Regulations.
SARA Title III:	**Section 302/304:** Extremely Hazardous Substances - None. **Section 311:** Hazardous Substances - Not Applicable. **Section 313:** This product is not subject to reporting requirements (See 40 CFR372).
WHMIS:	This product is not considered a Controlled Product under Canada's Workplace Hazardous Material Information System.
CEPA:	Components of this product are included in Canada's DSL.
EEC:	This product are not considered hazardous by the European Economic Community.

6. TOXICOLOGY AND HEALTH DATA

Specific Hazard:	No acute or chronic hazards or effects are known.
Medical Conditions Aggravated by Exposure:	Some individuals with specific sensitivities may exhibit eye, nose, throat or thermal irritation with prolonged exposure to processing fumes or vapors.
Routes of Exposure:	**Eye Contact:** Not a probable route of exposure. Particulates may scratch eye surface or cause mild irritation. **Skin Contact:** A single prolonged exposure is not likely to result in material being absorbed through the skin in harmful amounts. Repeated prolonged exposure may cause mild skin irritation in some individuals. Exposure to hot material may cause thermal burns. **Ingestion:** Not a probable route of exposure. **Inhalation:** Not a probable route of exposure under conditions of normal use. Hot fumes or vapors which may form during processing can cause irritation to the respiratory tract.
Toxicology Information:	LD50 = >15g/kg, rat; LC50 = NA (see Note 2) **Reproductive Effects:** None reported **Teratogenicity:** None reported **Mutagenicity:** None reported **Carcinogenicity:** None reported **Other:** Skin Irritant: LD50 >8000mg/kg, rabbit (see Note 2)

7. PROTECTIVE AND PREVENTIVE MEASURES

Personal Protective Equipment:	**Eye:** Wear safety glasses. **Skin:** Wear clothing appropriate to prevent skin contact. Where contact may occur with hot material, wear thermal resistant gloves, arm protection, and a face shield. **Respiratory:** Not normally required at ambient temperatures. If processing in area where ventilation is inadequate, wear a NIOSH approved organic vapor respirator with mechanical filtration.
Handling Procedures and Equipment:	Avoid skin and eye contact, practice good personal hygiene. Avoid inhalation of fumes/ vapors from hot rubbers, compounds and vulcanizates.

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Engineering Controls: Local exhaust ventilation is recommended during all hot processing operations.

Exposure Guidelines:

	PEL (OSHA)	TLV (ACGIH)
Petroleum Oil as Oil Mist (see Note 3)	5 mg/m³	5 mg/m³

8. EMERGENCY AND FIRST AID PROCEDURES

Eye Contact: Remove as for any foreign object. Flush with clean water for 15 minutes. Obtain medical attention if irritation persists.

Skin Contact: Wash with soap and water. If thermal irritation, flush affected area with cold water to dissipate heat, then cover with clean cotton sheeting or gauze and get prompt medical attention.

Inhalation: If fumes/vapors are inhaled, move to fresh air, aid breathing if necessary. Obtain medical attention if irritation persists.

Ingestion: Unlikely to occur.

9. CHEMICAL REACTIVITY

Chemical Stability: Product is stable at ambient temperature and pressure.

Conditions to Avoid: High temperatures, 300-350 °C (572-662 °F) will cause thermal decomposition; ignition source.

Incompatibility with other Materials: None known.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, various hydrocarbons, and products from incomplete combustion.

Hazardous Polymerization: Will not occur.

10. SPILLS, DISPOSAL, STORAGE GUIDELINES

Spill and Release Information: Repackage uncontaminated rubber. Reuse or dispose of as noted below if contaminated.

Disposal Information: Reuse if possible. Dispose in accordance with local, state, and federal regulations and applicable environmental regulations. Material as supplied is not characterized as hazardous under RCRA.

Storage: Store below 35 °C (95 °F) in dry area and in the absence of direct, natural, or artificial light.

11. LABELS

OSHA: NA

WHMIS: NA

12. ADDITIONAL INFORMATION

Note 1: This particular grade of paraffinic oil is blended from the severely solvent refined heavy paraffinic distillate, CAS #64741-88-4, and the severely solvent refined residuum, CAS #64742-01-4. It contains less than 0.1 weight percent polynuclear aromatic compounds and therefore is not considered as carcinogenic under Hazard Communication Standard Title 29 CFR 1910.1200.

Note 2: This data represents the lowest possible limit and is for the Petroleum Oil ingredient in this product. The Petroleum Oil is soluble in the EPDM component and data on the blend has not been established.

Note 3: Specific exposure standards for this product and its components have not been established. The limits shown in Section 7 are suggested as minimum control guidelines. These exposure limits apply only if aerosols are emitted from this product.

(Continued on reverse.)

(CR2260 continued from reverse.)

DSM Elastomers

Abbreviations:

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS:	Chemical Abstract Service
CEPA:	Canadian Environmental Protection Act
CFR:	Code of Federal Regulations
DOT:	Department of Transportation
DSL:	Domestic Substance List
EEC:	European Economic Community
EPA:	Environmental Protection Agency
FDA:	Food and Drug Administration (U.S.)
IARC:	International Agency for Research on Cancer
LC50:	The concentration in air that causes death in 50% of the animals exposed
LD50:	The dose that causes death in 50% of the animals exposed
mg/m^3:	Milligrams (mg) of substance per cubic meter (m^3) of air; method of expressing the concentration of a substance in air
NA:	Not applicable
NE:	Not established
NH:	Not hazardous
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limits
RCRA:	Resource and Conservation Recovery Act
SARA:	Superfund Amendments and Reauthorization Act
TLV:	Threshold Limit Value
TSCA:	Toxic Substance Control Act
WHMIS:	Workplace Hazardous Material Information System

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Notice: *Although the information contained in this MSDS is believed to be correct as of the date hereof, DSM Copolymer makes no representations as to the completeness or accuracy thereof. Those who utilize the product described herein are responsible for determining (a) the suitability of the product for the intended use and (b) the appropriate manner of processing the product to ensure safety and quality. In no event will DSM Copolymer be responsible for damages of any nature resulting from the use of or reliance upon the information contained herein.*

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