MATERIAL SAFETY DATA SHEET

(According to Dir. 93/112/EC)

CALPRENE H 6171

1. PRODUCT IDENTIFICATION		
Company: DYNASOL GESTIÓN, S.A. **Address: P^{o} de la Castellana, 257 1^{a}** **28046 - MADRID** **Fax # +34 91 348 54 54**	**Commercial name:** CALPRENE H 6171 **Chemical name:** Ethylene-butylene-styrene block polymer.	
	Synonyms:	
	Molecular formula:	**CAS #** 66070-58-4
Emergency telephone: **Santander: +34 942 298 100** **Instituto Nacional de Toxicología:** **Emergency tel.: +34 91 562 04 20**	**EC (EINECS) #** NP	**Annex I (Dir. 67/548/EEC) #** NP

2. COMPOSITION			
General composition: Ethylene-butylene-styrene block polymer.			
Dangerous components:	**Range %**	**Classification**	
		R	**S**
NP			

3. HAZARD IDENTIFICATION	
PHYSICAL / CHEMICAL	**TOXICITY / SYMPTOMS**
When heated it emits flammable and irritant fumes.	**Inhalation:** Vapours from melted product may result irritating to the respiratory tract and it may cause dizziness or difficult breathing.
Floats on water. May obstruct sewers and water intakes.	**Ingestion/aspiration:** Ingestion is easy to prevent and not frequent.
	Contact skin/eyes: Exposure to melted product causes burns. Vapours from melted product may be irritating to eyes.
	General toxic effects: Vapours from melted product may cause irritation to the respiratory tract and eyes. Exposure to melted product causes burns.

4. FIRST AID

Inhalation: Move the affected to fresh air. If breathing is difficult give oxygen. Call for medical attention.

Ingestion/aspiration: Not frequent. Intestinal absorption is very low. Call for medical attention.

Contact skin/eyes: In case of melted product burns, cool the material quickly with plenty of water. Do not remove the solidified product without the assistance of medical aid. Call a doctor and treat as a normal hot-burn. In case of contact with eyes, if it is necessary flush with large amounts of water for 15 min, holding eyelids open. Call for medical attention.

General measures: Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing agents: Foams, dry chemicals, CO_2 and water spray.

Non suitable extinguishing agents: Stream water applied directly may disperse the material.

Combustion products: CO_2, H_2O and CO (in defect of air).

Special measures: NP

Special hazards: Melted product may propagate fire. Fire may produce irritating gases.

Protective equipment: Heat-resistant suit and gloves. Self-contained breathing apparatus because heavy fumes are produced.

6. ACCIDENTAL RELEASE MEASURES

Precautions for the environment: Isolate discharged material and keep away from water sources.	**Personal precautions:** Avoid contact with melted product and inhalation of vapours. Keep unnecessary people away.
Cleanup methods: Solid spillages are shovelled into containers for later recovery or disposal. Liquid spillages are removed after solidifying.	**Personal protection:** Wear goggles and appropriate gloves to avoid contact with melted product. In presence of vapours from melted product, respiratory protective mask is recommended.

7. HANDLING AND STORAGE

Handling:

General precautions: If working with hot material avoids contact and vapours inhalation. Product may accumulate static charge during handling. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. Do not smoke, drink or eat during handling. Wash hands using liquid detergent.

Specific conditions: Good local exhaust ventilation when product is heated in processing. Respiratory protective mask in presence of vapours from melted product.

Uses: Consult technical information.

Storage:

Temperature and decomposition products: Not applicable in standard storage conditions.

Dangerous reactions: NP

Storage conditions: Storage at room temperature in cool and well-ventilated places, away from heat and ignition sources.

Incompatible materials: Strong oxidant materials.

8. PERSONAL PROTECTION/EXPOSURE CONTROLS

Personnel protection:

Respiratory protection: In presence of vapours, use suitable respiratory protective mask.

Skin protection: Gloves and appropriate protective clothing.

Eye protection: Face-shield to avoid contact with splashes from melted product in case of projection risk.

Other protective equipment: Eyes washers and showers in working area.

General precautions: Local exhaust ventilation when hot material is handling. Avoid contact with the melted product and vapours inhalation.

Specific hygiene measures: Good work practices and the adoption of good personal hygiene measures reduce unnecessary exposures. Washing/Showering facilities with a non-solvent based skin cleaner, hot water and soap must be provided and used. Use skin reconditioning cream after work.

Exposure controls: NP

9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance: Solid **Colour:** White	**pH:** NP **Odour:**
Boiling point: NP	**Melting point:** NP
Flash point: NP	**Autoignition temperature:**
Explosive properties: NP	**Oxidizing properties:** NP
Vapour pressure: NP	**Density:** 0.91 g/cm^3
Vapour density: NP	**Heat of combustion:** 10 Mc/Kg
Surface tension: NP	**Partition coefficient (n-octanol/water):**
Water solubility: Insoluble	**Solubility:** Organic solvents
Other data:	

10. STABILITY AND REACTIVITY	
Stability: Materials with thermal and oxidative stability higher than 1,3-butadiene-styrene block polymer.	**Conditions to avoid:** Avoid high temperatures.
Materials to avoid: Strong oxidant materials.	
Hazardous decomposition: The decomposition products from this material may include carbon dioxide, carbon monoxide; aldehydes; ketones; hydrocarbons; particles.	
Polymerization risk: NP	**Conditions to avoid:** NP

11. TOXICOLOGICAL INFORMATION
Routes of exposure: Inhalation of vapours from melted product and direct contact with skin and eyes. Ingestion is not probable.
Acute and chronic effects: Exposure to melted product causes burns. Vapours from melted product may cause irritation to the respiratory tract and eyes.
Carcinogenicity: IARC classification: **Group 3** (The agent is not classifiable as to carcinogenic to humans).
Reproductive toxicity: There are no data available.
Medical conditions which increase hazard to exposure: Respiratory, ocular and dermatological problems.

12. ECOLOGICAL INFORMATION

Pollutant potential:

Persistence and degradability: The product has long hydrocarbon insoluble chains. No biodegradation processes are known. It is not readily removed from water or soil and it has a high persistence environment.

Mobility potential: No bioaccumulative problems in living organisms or incidence in the food webs.

Ecotoxicological effects: There are no data available on the ecotoxicological effects.

13. DISPOSAL CONSIDERATIONS

Disposal methods (surplus): Recycling and recovery of the material when possible.

Waste:

Disposal: Controlled combustion.
Handling: Labelled and sealed containers.
Community provisions: Companies which recover, dispose, store, transport or handle waste should comply with Dir. 91/156/EEC on waste or other local, national or community provisions.

14. TRANSPORT INFORMATION

Special precautions: Stable at room temperature and during transport. To avoid spilling, transport in secure containers. Use properly labelled and sealed containers.

Additional information:
UN number: NP
Hazard identification number: NP

ADR / RID: NP
IATA-DGR: NP
IMDG: NP

15. REGULATORY INFORMATION

CLASSIFICATION	LABELLING
NP	**Symbols:** NP **Phrases R:** NP **Phrases S:** NP

Other regulations: This product complies with FDA requirements regarding rubber articles intended for repeated use (177.2600). According to its composition it may be used in contact with food according to German (except for fatty foods), French (categories A, B, C, D), Italian and Dutch (categories I, II, III) regulations. Ethylene-butylene-styrene block polymer is listed in TSCA Chemical Inventory.

16. OTHER INFORMATION

Data bases consulted:

EINECS: European Inventory of Existing Commercial Substances.
HSDB: US National Library of Medicine
RTECS: US Dept. of Health & Human Services.

Legislation consulted:

Dir. 67/548/EEC of dangerous substances (including amendments and adaptations in force).
Dir. 1999/45/EC of dangerous preparations (including amendments and adaptations in force).
Dir. 91/689/EEC dangerous waste; Dir. 91/156/EEC waste management.
Royal Decree 363/95: Regulation about notification of new substances and classification, packaging and labelling of dangerous substances.
Royal Decree 255/2003: Regulation about classification, packaging and labelling of dangerous preparations.
European Agreement concerning the international carriage of dangerous goods by road (ADR).
Regulation on the international transport of dangerous goods on the railway. (RID)
International maritime code of dangerous goods. (IMDG)
International Air Transport Association (IATA) regulation pertaining to air shipment.

GLOSSARY:

CAS: Chemical Abstract Service
IARC: International Agency for Research on Cancer
TLV: Threshold Limit Value
TWA: Time Weighted Average
STEL: Short-Term Exposure Level
REL: Recommendable Exposure Limit
PEL: Permissible Exposure Limit
VLA: Valor Límite Ambiental
LD_{50}: Lethal Dose Medium
LC_{50}: Lethal Concentration Medium
EC_{50}: Effective Concentration Medium
IC_{50}: Inhibitory Concentration Medium
BOD: Biological Oxygen Demand
NP: Not Pertinent
½ : Changes from the last revision.

The information given in this document has been compiled based on the best existing information sources, latest available knowledge and according to the current requirements on classification, packaging and labelling of hazardous substances. It does not imply the information is exhaustive or accurate in all cases. It is the user's responsibility to determine the validity of the information contained in this Material Safety Data Sheet to apply depending on the case.