

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade name	*	SARLINK®
Grades	*	4139DB, 4139DN, 4149DB, 4149DN, X4145N, 4155B, 4155N, X4755B-42, 4165B, 4165N, X4165B-07, 4175B, 4175N, X4175N-40, 4180B, 4180N, 4190B, 4190N, 4765B, 4765B-40, X4765B-42, 4775B, 4775B-40, X4775B-42, 4780B, X4785B-42, 4790B, 4739DB, 4749DB, X4855B.
Company	*	DSM Thermoplastic Elastomers B.V. Oude Postbaan 5, 6160 AP Geleen P.O. Box 43, 6130 AA Sittard The Netherlands
Information telephone no.	*	+(31) 46 4773362
Information fax no.	*	+(31) 46 4761050
Emergency telephone no.	*	+(31) 46 4765555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal components	*	All Sarlink materials covered by this MSDS are Polyolefin Elastomer Blends.
CAS Registry Numbers	*	Proprietary blends. Not identified by CAS number. Main components: 25038-36-2 and 9003-07-0
Components presenting a significant hazard	*	none

3. HAZARDS IDENTIFICATION

Risks	*	Sarlink materials covered by this MSDS are not considered to be hazardous materials.
--------------	---	--

4. FIRST AID MEASURES

<u>Routes of entry</u> Inhalation	*	Negligible hazard at ambient temperatures. Inhalation of fine particles of dust may cause mild irritation. Exposure to vapours released at high extrusion and moulding temperatures may cause irritation to the respiratory tract. If respiratory irritation occurs, remove affected personnel from the work area into fresh air. Obtain medical attention if irritation persists.
Ingestion	*	No known health hazard appears to be posed by the ingestion of small amounts of TPE. A physician should be consulted if large amounts are ingested.

All information supplied by or on behalf of DSM in relation to its products, whether in nature of data, recommendations or otherwise, is supported by research and believed reliable, but DSM assumes no liability whatsoever in respect of application, processing or use made of the aforementioned information or products, or any consequence thereof. The buyer undertakes all liability in respect of the application, processing or use of the aforementioned information or products, whose quality and other properties he shall verify, or any consequence thereof. No liability whatsoever shall attach to DSM for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the aforementioned information or products by the buyer.
© SARLINK® is a registered trademark of DSM, The Netherlands

- | | | |
|---------------------|---|---|
| Eye contact | * | Irritation may result from the physical presence of any particles in the eye. Flush with plenty of clear water. Vapours produced during extrusion and moulding may cause slight eye irritation. |
| Skin contact | * | Contact with molten alloy will burn unprotected skin. Cool immediately and obtain, if necessary, medical assistance. Do not remove molten product from burned skin. This should be done by a physician. |
| | * | If regrounding operations occur, protective coveralls with long sleeves, gloves and safety glasses should be worn. In case of skin contact: wash the contaminated areas with water and soap. |

5. FIRE-FIGHTING MEASURES

- | | | |
|--|---|---|
| Extinguishing media | * | Water spray, foam or CO ₂ . |
| Special Firefighting Procedures | * | Full emergency equipment with self-contained breathing apparatus should be worn to protect fire fighters from any hazardous decomposition or combustion products. |
| Specific Hazards | * | In case of fire appreciable quantities of carbon monoxide are released in combination with irritating and/or toxic substances |

6. ACCIDENTAL RELEASE MEASURES

- | | | |
|--|---|--|
| Steps to be taken in case material is released or spilled | * | A slipping hazard may be created if the material is spilled. Repackage uncontaminated product. Contaminated material should be collected (prevent fine dust formation) and handled as an inert material. |
|--|---|--|

7. HANDLING AND STORAGE

- | | | |
|-----------------|---|--|
| Storage | * | The material should be stored in a cool place, and away from direct light and ignition sources. |
| Handling | * | Normal industrial hygiene procedures should be followed. Further instructions for drying and processing the materials can be found on the product data sheets. Small amounts of fines or dust may be formed from pelletised product impacting with material handling systems. If permitted to accumulate, these fines or dusts can, under certain conditions, pose an explosion hazard. Every effort should be made to prevent the suspension, concentration or accumulation of fines or dusts in or around material handling systems. |

Equipment and conveying lines must be well grounded to eliminate any build-up of static electricity. Housekeeping practices must keep dust levels under control. Eliminate ignition sources in dustprone areas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

General measures	*	Provide local and general ventilation to ensure airborne dusts and process vapours remain below occupational exposure limits. Ventilation systems must be designed in accordance with applicable engineering standards. Cool molten waste material with water.
Respiratory protection	*	No special precautions under normal conditions. The use of respiratory protection is recommended when airborne dust concentrations or decomposition products cannot be adequately controlled by ventilation.
Eye protection	*	Safety glasses with side shields should be worn.
Hand protection	*	Material can be handled without the use of gloves or other protective equipment at normal temperatures. Heat resistant gloves should be worn when handling molten product.
Skin and body protection	*	The use of protective coveralls with long sleeves, gloves and safety glasses is recommended, but is up to the decision of the processor.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	*	solid
Appearance	*	black, natural or white pellets
Odour	*	not significant
Specific gravity	*	0.90 – 1.01
Softening point	*	ca. 150°C
Decomposition temperature	*	ca. 280°C
Flashpoint	*	not applicable
Explosion properties	*	the material as such is not explosive. For dust explosions see section 7.
Solubility in water	*	insoluble

10. STABILITY AND REACTIVITY

Stability	*	Stable
Conditions to avoid	*	Temperatures over 280°C may cause degradation.
Incompatibility	*	Contact with strong oxidising agents should be avoided. Polyacetals (POM) and Sarlink are incompatible at processing temperatures.
Hazardous decomposition or byproducts	*	At processing temperature some degree of thermal degradation will occur. Although it is highly dependent on temperature and environmental conditions, traces of a variety of toxic and/or irritating gases can be released.

11. TOXICOLOGICAL INFORMATION

Carcinogenity	*	not to be considered carcinogenic.
Health hazards (acute and chronic)	*	not to be considered an acute or chronic health hazard.
Signs and symptoms of exposure	*	Harmless at ambient temperatures. During processing see section 4.

12. ECOLOGICAL INFORMATION

Bio-degradability	*	Sarlink materials are not bio-degradable.
Mobility	*	The materials are considered inert, no dangerous diffusion is expected.

13. DISPOSAL CONSIDERATIONS

Waste disposal	*	Incineration or controlled deposit on a landfill, both in accordance with state and local regulations. Be aware of combustion products which may be produced during incineration.
-----------------------	---	---

14. TRANSPORT INFORMATION

Classification	*	Sarlink materials are polymeric materials, not classified as dangerous materials. No special precautions during transport need to be taken.
-----------------------	---	---

15. REGULATORY INFORMATION

- EEC** * No health hazard classification according to Directive **67/548/EEC**.
The preparation is not classified as dangerous according to Directive **1999/45/EC** and its amendments.
This MSDS is prepared according Directive 2001/58/EC.
- Product notification status** * EEC: All monomers, reactants and ingredients are listed in EINECS.
USA: All ingredients are on the TSCA Chemical Substance Inventory.
Canada: Components of these products are included in Canada Domestic Substance List.
- General** * Compliance with other federal, state and local safety regulations should be examined individually.

16. OTHER INFORMATION

- Date of issue** * April 2005

DSM Thermoplastic Elastomers B.V.
P.O. box 43
6130 AA Sittard
The Netherlands
Telephone: +(31) 46 4773362
Fax: +(31) 46 4761050