






1. Identifying elements of the society and of the substance*

Producer	PLAST
Product name	Fittings in polyethylene (PE)
Expected use	Pipe systems connection for the carriage of drinkable water, gas, and industrial fluids, via butt fusion welding or via electro-fusion.
Identifying elements of the society	Plastitalia S.p.A. Via Ferrara 98061 Brolo (ME) Italia tel.: +39.0941.562862 fax.:+39.0941.561476 <i>E-mail address of the competent person responsible for the safety data sheet:</i> uff.qualita@plastitaliaspa.com (website: www.plastitaliaspa.com)
Emergency Telephone number	Tel.: +39.0941.562862 / +39.0941.536311(working hours)
Use limit	Nominal pressure PN / Maximum operative pressure MOP: see the marking product
Registration number REACH:	not applicable
CAS Number:	not applicable

2. Indication of dangers*

By normal temperature of use and conditions of employment for which it is used, products do not present any special risks and/or dangers
Both raw materials and products are in conformity with hygiene and health regulations in accordance with the Ministerial Decree n. 174 dated 06 April 2004.

CE classification	The product is not classified as dangerous and it has no need to be labelled in accordance with the Directive n.67/548/CEE and subsequent amendments.
Physical risks - chemicals	The product is not classified as flammable, but it could decompose for strong heating (>130°C) producing toxic smokes and irritating smokes, which cause danger of fire and explosion. It reacts violently with fluorine. It reacts with strong acids, strong oxidants. Combustible if exposed to flames.
Risks related to humans	By normal conditions of use, the risk of generating dusts that would irritate the respiratory tract and ocular mucous is absent. The contact with hot material could cause cutaneous burns. At high temperature, it can develop smokes, that can cause irritation to the respiratory tract and cough. Please do not weld it in the presence of potentially explosive atmosphere.
Risks related to environment	By normal conditions of use, the product in contact with the ground, underground, air and water, do not cause environmental dangers. The product is completely recyclable. The product is not biodegradable.
Residual risks analysis	<p> Electrocutation: weld the fitting only at low safety voltage.</p> <p> Electro-magnetic: Pace-Maker carriers must keep away from fittings during the welding.</p> <p> Explosive atmosphere: in the presence of gas do not start the welding.</p> <p> Projection fused polyethylene: burning, precurcing</p> <p> Fire primer: Polyethylene is a derivative of hydrocarbons and burns in presence of air/oxygen. It is recommended to comply with the welding instructions. By welding empty pipes and placing them in a vertical position, use stoppers at the beginning and at the end of the stroke to avoid the generation of draughts. After the cutting and scraping phase, all the residues of polyethylene must be removed from the area nearby the welding.</p>

3. Composition/information of the components*

Products in object are composed of:	Polyethylene at high density PE 80 o PE 100
Expected use:	Pipe systems for the carriage of water, gas, industrial fluids. No dangerous in accordance with the Directives CE 1999/45/EC or 1272/2008/EC

Substance	Symbol	Concentration	EINECS	CAS	Classification	Danger symbols	Risk phrases	Safety advise phrase
POLYETHYLENE	PE 80	100%	-	-	No dangerous	-	-	-
	PE 100	100%	-	-	No dangerous	-	-	-

4. First aid measures

Inhalation:	Exposure to aerosol, smokes and vapours of the hot or burning product: move the injured to fresh air and call a physician.
Contact with the skin:	Exposure to projections of hot product: immediately cool the hit part with cold water (by immersion or aspersion); do not try to remove your dirty clothes. In case of severe burns, apply surgical gauze soaked in non-irritant disinfectant and consult a physician.
Contact with the eyes:	Flush with plenty of water for a few minutes (remove any contact lenses, if it is possible do it comfortably). If necessary, consult a physician.
Ingestion:	This product is considered inert. Normally first aid measures are not necessary.
Special first aid measures:	No hazards which require special first aid measures.

5. Fire-fighting measures*

Class of inflammability:	combustion of solid materials, principally of organic nature, that burn without flame.
Suitable extinguishing media:	<i>In case of light fire:</i> Carbon dioxide (CO ₂), dry powders, water. <i>In case of serious fire:</i> synthetic foam, nebulized water to cool the exposed surfaces to fire. If the product is connected to the welding voltage: use CO ₂ extinguisher.
Unsuitable extinguishing media for security reasons:	never use fire-fighting lances, for they could favour to propagate the flames.
Special hazards arising from exposure to the substance or preparation, to combustion products, gases produced:	<i>During the combustion:</i> in presence of air excess, form carbon dioxide and water vapour. <i>For incomplete combustion:</i> monoxide of carbon (CO), soot and products of decomposition: aldehydes, ketones, hydrocarbon, and volatile fatty acid. In the case there is the risk of an overexposure to the smoke, must use suitable clothes and breathing necessary apparatus. Wear fire and eyes protection media.
Technical measures for qualified personnel involved in fire:	stop the fire. Immediately contact the Firefighters. Keep away non-qualified personnel. If the product is connected to the welding voltage: remove the electricity supply, disable the primary supply, or disable the control unit (welding machine).

6. Accidental release measures*

Individual precautions:	specific interventions aimed to the product are not necessary. Wear eventually the protective gloves for hand and the accident-prevention shoes.
Environmental precautions:	the product is completely recyclable. Do not disperse in drains.
Methods of cleaning:	<i>ground:</i> the product is for subterranean installations; pick up manually or mechanically the dissipated product in suitable containers for a possible reuse or disposal. <i>water:</i> inform authorities in case of floating or dispersed products in a course of water or in a drain.
Other indications	see point 8 and 13

7. Manipulation and storage*

Manipulation	In case the weight is higher to the limits established by the laws in force, raise with mechanical means.
Storage	Store in dry and well airy places. Protect the exposure from the sunbeams and heat sources. Avoid temperature changes. Do not store with easy inflammable materials. Maintain the storage conditions with cardboard packaging and/or plastic bag, until the installation.

Specific use Products must be installed by qualified personnel according to the law UNI 9737.

8. Control of the exposure/personal protection

Exposure limits	The product does not have exposure limits.
Control of the exposure	
Control of the professional exposure	<i>Respiratory protection:</i> by normal conditions of use, it is not necessary any special protection <i>Hands protection:</i> protective gloves <i>Skin protection:</i> protective suit <i>Eye protection:</i> when there is a risk of protection of drops of fused material, wear safety <i>Other means of individual protection:</i> accidental-prevention shoes protection It is recommended to take notice of all the measures indicated in the safety operation plan laid down for the construction works
Control of the environmental exposure	No control for the environmental exposure

9. Physical and chemical properties

Physical condition:	solid
Aspect:	variable geometry (see catalogue)
Odour:	odourless
Fusion interval:	from 85°C to 140°C
Temperature of self-ignition:	300-410 °C
Point of inflammability:	>300 °C
Boiling point/range:	decomposition starting from 300°C
Oxidising properties:	not applicable
Vapor pressure:	negligible
Viscosity:	not applicable
Density:	0.91-1.00 g/cm ³
Aqueous solubility:	insoluble in water
Partition coefficient n-octanol/water:	not applicable
Vapor density:	not applicable
Evaporation rate:	negligible
VOC level (Volatile Organic Carbon):	negligible
Explosive properties:	not determined

10. Stability and reactivity

. Hazardous reactions: combustible if exposed to flames.

Stability	Stable by normal conditions of use.
Condition to avoid	Do not heat with a temperature above 80°C. Avoid the closeness of flames or sparks. Avoid any other end-use of the product than subterranean. Do not expose the product to flames.
Matters to avoid	Reacts with fluorine, acids and strong oxidants.
Hazardous decomposition products	None.

11. Toxicological information

Acute toxicity	Low toxicity degree. If swallowed it can cause occlusion. It is considered physiologically inert.
Primary irritation	
- on skin:	for his composition the product is considered not irritating. No risk at inferior temperatures than 60°C. The contact with the hot product can cause serious burns. The products of thermal decomposition which forms at high temperature could be irritating.

- on eyes:	the fine powders can cause ocular irritations; the projection of fused drops causes serious injuries.
- inhalation:	negligible risk for inferior temperatures to 60 °C. At higher temperatures than 235°C, it can develop smokes, that can cause irritation to the respiratory tract, cough and breathlessness feeling. The powder can cause irritation to the respiratory system.
Sensitization	No sensitizing effects.
Other toxicological data	The product has not classification obligation according to the method of calculation of the general directive of the Community about the classification of preparations in its latest valid form. Since our experiences and available information, the product is not dangerous if handled correctly and used according to the rules.
Immediate, delayed, chronic effects due to short/long-term exposures	No information about effects caused by the product in cases of exposures. The product is not classified like cancerogenic for the man.

12. Ecological information

Ecotoxicity	The product is not ecotoxic and does not damage both aquatic micro-organisms and macro-organism
Mobility	<i>water/air:</i> the product has a low volatility. Organic compound volatile <0.5% <i>ground/sediment:</i> Consider its physical – chemicals characteristics, the product has a limited mobility in the ground. <i>Water:</i> in case of accidental spreading, the product floats on the surface, it not dissolves, and its evaporation in the air is practically nothing, nevertheless it can be persistent in the environment
Persistence and degradability	This substance is difficultly biodegradable
Potential of bioaccumulation	The potential of bioaccumulation of this product in the environment is very low
PBT Evaluation results	Not applicable
Other deleterious effects	Use according to good working practices, avoid release the product to the environment. The products are recyclable.

13. Considerations about the disposal

Waste disposal:	the products are completely recyclable, class PP or PE plastic material. At the end of usable life, it is suggested to destine the product and packaging (cardboard, plastic bags) for recovery, rather than disposal. Avoid release to the environment. Disposal in conformity with general provisions.
EWC waste disposal no:	it is suggested E.R.C. 17.02.13 plastic (17 waste from construction and demolition operations – 17.02 wood, glass and plastic). This code is given according to the common use of this product and it cannot consider possible contaminants deriving from the effective use.

14. Transport information

Via road/railway (ADR):	no limitation for the transport
Via airplane (ICAO/IATA):	no limitation for the transport
Via see (IMDG):	no limitation for the transport
ONU Number:	not applicable
Marine pollutant:	the product does not damage marine organisms
Class of danger:	not applicable
Packing group:	not applicable
Further information:	for fittings ≥ 25 kg weight, do not transport manually for risks related to heavy load.

15. Regulatory information

Labelling (Symbols CEE):	it is not classified dangerous according to the directives 67/548/CEE, 99/45/CE and their updating.
Community and National legislations:	D.M. 6 April 2004 n. 174, Legislative Decree 81/08

16. Other information*

Risk phrases:	none
Precautionary statement:	none
Symbols of chemical risks:	none
Training information:	the use of this product requires qualification according to the norm UNI 9737. The worker must be trained on the use of personal protective equipment. For professional use by qualified personnel. Do not allow children and handicapped persons to use it. ONLY QUALIFIED, TRAINED AND KNOWLEDGEABLE PERSONNEL ON THE RISKS, HAZARDS AND PROPER WELDING PROCEDURES MAY USE THIS PRODUCT.
Using procedure:	laws about butt fusion welding or electro-fusion. See technical book for welding machine. Furnitures must be preserved and conform to the norms of the product. The welding position is horizontal. For small diameters, within 63 mm, it is possible to weld even in vertical position if safety precautions will be adopted to maintain the fitting fixed during the welding. For larger diameters, contact, for any informational purposes, our technical office tel.: +390941536311
Further information:	upon request the modalities of use and of installation of the acquired products, certifications and data sheets are available. Before using the product, in case of welding via electro-fusion, consult the safety data sheet for the cleaning agent of the surfaces to weld.

The contained information in this schedule of safety are based on our current knowledge and are supplied in compliance with the prescription of the: annex II EC Regulation n. 1907/2006; art.16 D.Lgs 65 from 14/03/2003; D.M. from 04/04/1997 implementation from D.Lgs. n.52 del 3/02/1997.

We don't take the responsibility for whatever illegitimate use of the materials object of this schedule; therefore, it is drawn the attention of users about risks that they can incur if the product is used for different uses than those for which it is intended for.

It is the responsibility of the user to conform to the regulations of hygiene, safety and of protection of the environment provided by the laws in force.

It is the responsibility of the user to provide to all those who can come into contact with the product (use, storage, cleaning of the containers, different interventions) all the necessary information for the safety of the work, the protection of health and the environment by transmitting them a copy of this Safety data Sheet.

The contained information in this schedule are mean like description of the characteristics of the products to the ends of the safety: they are not therefore to consider guarantee of the property of the same products.

This sheet cannot be use or reproduced for prevention and safety purposes.

The reference to legislative, regulatory and administrative texts must not be regarded as exhaustive.

The (*) indicates the changes from the previous version.