The preparation mentioned in this document does not legally require an SDS. This document was prepared according article 32: Duty to communicate information down the supply chain for substances on their own or in preparations for which a safety data sheet is not required.

1. Identification of the preparation and manufacturer

1.1) Identification of the preparation	**ISOTER**
1.2) Use of the preparation	The list of products that are covered by this safety information data sheet can be found in the **appendix on the last page**. USE: Synthetic polymer based on acrylonitrile-butadyene-styrene with dispersed fillers, additives and colourants, used only in the industrial activities of injection molding and extrusion. Sector of use: SU 12 Manufacture of plastics products, including compounding and conversion. Product category: PC 32 Polymer preparations and compounds. Process category: PROC 14 Production of preparations or articles by tabletting, compression, extrusion, pelletisation. Uses advised against : No other uses are known or allowed for this product.
1.3) Company identification	SIRMAX SpA. - Registerd office: via Fabbrega 18 Isola Vicentina (VI) Manufacturer: • SIRMAX SpA - via Dell'Artigianato, 42 Cittadella (PD) – IT • SIRMAX SpA - Via Decime, 10 Tombolo (PD) - IT • Sirmax Polska Sp. z o.o.- ul. Holenderska 8, 99-300 Kutno – PL Safety data sheet emission: Quality Office: via Dell'Artigianato, 42 Cittadella PD, tel. o.h. 049 9441111 - fax 049 9441112 - mfabris@sirmax.it
1.4) Emergency telephone	Quality Office: via dell'artigianato, 42 Cittadella PD, tel. 049 9441183 Emergency: 112

2) Hazards identification

2.1) Classification of preparation	The preparation does not meet the criteria for classification as hazardous in accordance with Regulation (EC) No 1272/2008.
2.2) Label elements 2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]	None required P281 Use personal protective equipment as required. P501 Dispose of contents/container in accordance with local regulation.
2.2.2. Contains:	
2.2.3. Special provisions:	Special hazards are not known or expected.
2.3) Other hazards	The molten product adheres to the skin and causes burns.. High risk of slipping due to leakage/spillage of product.. Possible production of electrostatic chargings when used. The working steams can irritate the eyes as well as the respiratory tract.

3) Composition/Data on components

3.1) Substances ***(for mixtures see 3.2)***	
3.2) Mixtures	Preparation of the following components: • ABS acrylonitrile-butadyene-styrene • Disperse additives. • Mineral filler and/or glass fiber only for the filled/reinforced grades. • Colourants and pigments, only for coloured versions.

4) First aid measures

4.1) First-aid measures	General measures :At room temperature the product is neither an irritant nor gives off hazardous vapours. The measures listed below apply to critical situations (Fire, incorrect process conditions). Skin contact : After contact with molten product, cool rapidly with cold water. Do not attempt to remove molten product from skin because skin will tear easily. Immediately obtain professional medical help! Eye contact : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. If irritation persist, seek professional medical attention.

	Inhalation : Remove patient to fresh air-move out of dangerous area. Obtain professional medical help. Victim should rest in a warm place. If breathing is irregular or respiratory arrest provide artificial respiration. Ingestion: In case of doubt or if feeling unwell seek medical help.
4.2) Symptoms	Skin contact : none Eye contact: Vapours and gases of the product, generated at high temperature can have an irritant effect to the eyes. Inhalation: Vapours and gases of the product, generated at high temperature can have an irritant effect to breathing apparatus. Ingestion: none
4.3) Indication of any immediate medical attention and special treatment needed: none	
5) Fire fighting measures	
5.1) Extinguishing media	Suitable extinguishing media: Carbon dioxide. Dry chemical powder. Alcohol or polymer foam. Unsuitable extinguishing media : -
5.2) Special hazards arising from the mixture	In case of fire it can release : water (H2O), carbon dioxide (CO2), and when lacking oxygen (O2), carbon monoxide (CO). The products of the burning are dangerous.
5.3) Advice for firefighters	Protective actions: In case of fire or heating do not breathe fumes/vapours. Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective clothing for fire-fighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137) .
6) Accidental release measures	
6.1) Personal precautions, protective equipment and emergency procedures	6.1.1. For non-emergency personnel - Protective equipment: Use personal protective equipment (Section 8). Emergency procedures: Ensure adequate ventilation. Keep away from sources of ignition. 6.1.2. For emergency responders: High risk of slipping due to leakage/spillage of product
6.2) Environmental precautions	Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental entry into water or ground occurs, inform responsible authorities.
6.3) Methods and material for containment and cleaning up	6.3.1. For containment: - 6.3.2. For cleaning up: Take up mechanically and collect in suitable container and dispose according to current regulations. 6.3.3. Other information: -
6.4) Reference to other sections	See also sections 8 and 13.
7) Handling and storage	
7.1) Precautions for safe handling	7.1.1. Protective measures Measures to prevent fire: Ensure adequate ventilation. Take precautionary measures against explosion risks, as all types of polymers may develop dust during transporting or grinding of granules. Take precautionary measures against static discharges. Ensure adequate equipment grounding. Measures to prevent aerosol and dust generation: Prevent dusting. Measures to protect the environment: - 7.1.2. Advice on general occupational hygiene No special measures required if the manipulation takes place at room temperature. Avoid spilling/spreading the product as it may cause accidental falls. Use good personal hygiene practices-wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe dust. When bringing the material to processing temperatures gases might develop, forming: propylene hydrocarbon substances with low molecular weight and their oxidation products solvent residues traces of formaldehyde and acrylaldehyde. Traces of acids (Formic acid, acetic acid). Provide appropriate ventilation for such processing conditions. Experimental tests under different application conditions showed maximum limits of formaldehyde, acrylaldehide, formic acid, and acetic acid being significantly below TLV- values. Do not overpass the suggested process conditions (temperatures), since the released gases are dangerous.

7.2) Conditions for safe storage, including any incompatibilities	7.2.1. Technical measures and storage conditions Keep in cool and well ventilated area. Keep in a dry place. Take precautionary measures against static discharges. Ground equipment electrically. Electric safety equipment. Keep away from sources of ignition - No smoking. Protect against heat and direct sunlight. Keep away from food, drink and animal feedingstuffs Storage in a warm place (>60°C) can cause softening of the granules and instability of the bags. Do not stack the big bags or the octabins or the platforms. 7.2.2. Packaging materials Store the product in bags, autosilos, container, or large cartons. 7.2.3. Requirements for storage rooms and vessels: - 7.2.4. Storage class: - 7.2.5. Further information on storage conditions: -
7.3) Specific end use(s)	Recommendations: - Industrial sector specific solutions: -

8) Exposure controls and personal protection

8.1) Control parameters	8.1.1. Occupational Exposure limit values 8.1.2. Information on monitoring procedures: BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. 8.1.3. DNEL values: No information 8.1.4. PNEC values: No information
8.2) Exposure controls	8.2.1. Appropriate engineering control Substance/mixture related measures to prevent exposure during identified uses: Use good personal hygiene practices-wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid the formations–when purging the press–of great agglomerates of molten material. Since the product has a low thermal conductivity, it solidifies quite quickly externally, while the inner part remains molten, at high temperature for prolonged times. This could be the cause for thermal degradation. Always wait for the complete solidification and cooling of the material coming from the press purges before handling them. Solidification in air is slow. Do not underestimate that the inner part stay molten for long times, so do not crash the purged agglomerates. Molten product spill is possible. Technical measures to prevent exposure: Provide good ventilation and local exhaust in the area with increased concentration. Provide system for collecting the vapours which are created during the working process. 8.2.2. Personal protective equipment Eye and face protection: No requirements under normal use conditions. Safety glasses recommended during refilling Tight fitting protective goggles (EN 166). Hand protection: Thermoinsulating gloves (EN 407). Skin protection: Cotton protective clothing (EN ISO 13688) and shoes that cover the entire foot (EN ISO 20345). Respiratory protection: Molten product: In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2. Thermal hazards: - 8.2.3. Environmental exposure controls: -

9) Physical and chemical properties

9.1) General information	
Form:	solid, granulate.
Colour:	as specified in the product designation.
Odour:	odourless
9.2) Relevant information for health, safety and environment:	
pH	Non applicable
Melting point	100-110 °C
Boiling point	Non applicable
Flash point	Not applicable
Explosion danger	Not explosive

Oxidising properties:	None
Density at 23°C:	from 0,90 to 1,55 Kg/dm^3
Solubility:	Insoluble in water, soluble or partially soluble in boiling, aromatic chlorinated solvents
Vapour pressure	Negligible
9.3) Further data:	
Ignition temperature:	> 490 ° C
Decomposition temperature:	> 300 ° C

10) Stability and reactivity

10.1. Reactivity	The product is stable at normal handling, storage and process conditions (require to SIRMAX the process data guidelines). Decomposition begins at temperatures higher than 300°C, with the release of decomposition gases and products.
10.2. Chemical stability	Product is stable under normal conditions according to handling and storage.
10.3. Possibility of hazardous reactions	-
10.4. Conditions to avoid	The product is stable at normal handling, storage and process conditions. Decomposition begins at temperatures higher than 300°C.
10.5. Incompatible materials	Strong oxidizing agents.
10.6. Hazardous decomposition products	In case of fire/explosion vapours dangerous for health are spread.

11) Toxicological information

11.1. Information on toxicological effects	11.1.1. Acute toxicity: No information 11.1.2. Skin corrosion/irritation, serious eye damage/irritation, aspiration hazard Additional information. The product is not classified as irritating to skin and eyes. Vapours and gases of the product, generated at high temperature can have an irritant effect to the eyes and the breathing apparatus. 11.1.3. Respiratory or skin sensitisation: Not classified as sensitizing. 11.1.4. Carcinogenicity, Mutagenicity, Reproductive toxicity Carcinogenicity: No information (Germ cell) mutagenicity: No information Reproductive toxicity: No information Summary of evaluation of the CMR properties: No information 11.1.5. STOT-single and repeated exposure: No information

12) Ecological considerations

12.1. Toxicity	12.1.1. Acute (short-term) toxicity: No information 12.1.2. Chronic (long-term) toxicity: No information
12.2. Persistence and degradability	12.2. Persistence and degradability 12.2.1. Abiotic degradation, physical- and photo-chemical elimination: No information 12.2.2. Biodegradation: No information
12.3. Bioaccumulative potential	12.3.1. Partition coefficient n-octanol/water (log Kow): No information 12.3.2. Bioconcentration factor (BCF): No information
12.4. Mobility	12.4.1. Known or predicted distribution to environmental compartments: No information 12.4.2. Surface tension: No information 12.4.3. Adsorption/Desorption: No information
12.5. Results of PBT and vPvB assessment	No evaluation.
12.6. Other adverse effects	No information
12.7. Additional information	The product is not toxic, but small particles can have physical effects in acquatic and soil organisms. Not biodegradable. No bioaccumulation potential. Prevent contamination.

13) Disposal considerations

13.1. Waste treatment methods	13.1.1. Product / Packaging disposal Waste chemical: Disposal must be made according to official regulations: to leave it to

	authorized collector/remover/transformer of hazardous waste. Suitable for incineration in approved incinerators or appropriate, authorized disposal plants. Packaging: Completely emptied container dispose according to regulations. 13.1.2. Waste treatment-relevant information: - 13.1.3. Sewage disposal-relevant information: - 13.1.4. Other disposal recommendations:-

14) Transport information

14.1. UN number	-
14.2. UN proper shipping name	Not dangerous according to ADR.
14.3. Transport hazard class(es)	-
14.4. Packing group	-
14.5. Environmental hazards	NO
14.6. Special precautions for user	-
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	-

15) Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) - Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures 15.1.1. Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline) not applicable
15.2. Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this mixture by the supplier.

16) Other information

Indication of recent/last changes: document revised according CLP

Key literature references and sources for data: internal data from the company, technical literature.

List of relevant H phrases: none

The information supplied has been based upon the current level of information available, for the purpose of specifying the requirements regarding environment, health and safety in conjunction with the product. They are not to be interpreted as a warranty for specific product characteristics. Sirmax takes no responsibility for inappropriate use, processing and handling by purchasers and users of the product.

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

ANNEX: Alphabetical list of materials to whom this document is applicable

150009	ISOTER A 10 100 GF17 BK2	150020	ISOTER A 15 300 NA	150114	ISOTER A 30 120 ME0460
150056	ISOTER A 10 100 GF17 NA	150119	ISOTER A 15 350 AS BK	150043	ISOTER A 30 150 BK
150021	ISOTER A 10 120 HT BK1015	150063	ISOTER A 15 350 AS GN0395	150045	ISOTER A 30 150 UV WT0710
150028	ISOTER A 10 120 HT GR0838	150135	ISOTER A 15 350 AS GR0384	150133	ISOTER A 30 150 WT1069
150182	ISOTER A 10 150 HT BK	150019	ISOTER A 15 350 AS GR0396	150132	ISOTER A 30 160 WT2008
150124	ISOTER A 10 150 HT BK0780	150091	ISOTER A 15 350 AS ME0867	150166	ISOTER A 30 180 GN2077
150148	ISOTER A 10 170 GR624A	150057	ISOTER A 15 350 AS RD0397	150165	ISOTER A 30 180 GR2078
150118	ISOTER A 10 350 B NA	150104	ISOTER A 15 350 AS WT0839	150067	ISOTER A 30 200 BK
150140	ISOTER A 10 400 BK	150137	ISOTER A 15 60 GF10 WT0399	150088	ISOTER A 30 200 BL1087
150116	ISOTER A 10 400 GR2031	150036	ISOTER A 15 80 GF17 BK	150047	ISOTER A 30 200 GR0896
150126	ISOTER A 10 440 WT1019	150030	ISOTER A 20 150 AS UV WT0403	150154	ISOTER A 30 200 GR1090
150123	ISOTER A 10 60 GF17 HT BK	150037	ISOTER A 20 150 WT0406	150089	ISOTER A 30 200 UV GR0655
150050	ISOTER A 15 180 RD0379	150173	ISOTER A 20 180 BL0737	150115	ISOTER A 30 200 UV ME0230
150161	ISOTER A 15 180 UV IC280	150160	ISOTER A 20 180 UV IC541	150141	ISOTER A 30 200 UV OR2022
150007	ISOTER A 15 230 BK	150017	ISOTER A 20 180 WT0414	150065	ISOTER A 30 200 WT0866
150023	ISOTER A 15 250 AS BK	150004	ISOTER A 20 180 WT0415	150176	ISOTER A 30 200 WT2108
150108	ISOTER A 15 250 AS BL1043	150001	ISOTER A 20 200 BK	150080	ISOTER A 35 130 WT1016
150100	ISOTER A 15 250 AS BL1054	150155	ISOTER A 20 200 BK0979	150046	ISOTER A 35 150 UV BK
150083	ISOTER A 15 250 AS BL381	150094	ISOTER A 20 200 BK1	150179	ISOTER A 35 150 UV BN2119
150090	ISOTER A 15 250 AS GN0382	150129	ISOTER A 20 200 CR GR	150048	ISOTER A 35 150 UV GR0562
150034	ISOTER A 15 250 AS GN0383	150150	ISOTER A 20 200 CR NA	150011	ISOTER A 35 150 UV WT0852
150134	ISOTER A 15 250 AS GN0952	150125	ISOTER A 20 200 GR0806	150149	ISOTER A 35 180 GN0964
150158	ISOTER A 15 250 AS GN0987	150052	ISOTER A 20 200 GR0901	150113	ISOTER A 35 180 GR0505
150122	ISOTER A 15 250 AS GR0384	150164	ISOTER A 20 200 GR2076	150145	ISOTER A 35 180 GR1031
150035	ISOTER A 15 250 AS GR0385	150167	ISOTER A 20 200 LW BK2089	150013	ISOTER A 35 180 UV BL0970
150051	ISOTER A 15 250 AS GR0719	150168	ISOTER A 20 200 LW GR2088	150031	ISOTER A 35 180 UV GR0505
150111	ISOTER A 15 250 AS GR0816	150138	ISOTER A 20 200 NA	150084	ISOTER A 35 180 UV GR0973
150061	ISOTER A 15 250 AS GR0960	150172	ISOTER A 20 200 UV WT2008	150060	ISOTER A 35 180 UV GR0982
150038	ISOTER A 15 250 AS GR0968	150044	ISOTER A 20 200 WT0429	150085	ISOTER A 35 180 UV WT0888
150066	ISOTER A 15 250 AS GR1062	150102	ISOTER A 20 200 WT0429 BLEND	150027	ISOTER A 35 200 B NA
150039	ISOTER A 15 250 AS OR0386	150117	ISOTER A 20 200 WT0431	150093	ISOTER A 35 200 GR0881
150097	ISOTER A 15 250 AS OR1014	150098	ISOTER A 20 200 YL0232	150082	ISOTER A 35 200 K AT UV NA
150005	ISOTER A 15 250 AS RD0387	150131	ISOTER A 20 300 B NA	150006	ISOTER A 35 200 K NA
150109	ISOTER A 15 250 AS RD0986	150055	ISOTER A 20 400 BK	150171	ISOTER A 35 200 UV BL2102
150092	ISOTER A 15 250 AS RD1013	150075	ISOTER A 20 80 RD0647	150136	ISOTER A 35 200 WT1059
150110	ISOTER A 15 250 AS WT0389	150162	ISOTER A 25 150 NA	150040	ISOTER A 40 150 BE0530
150072	ISOTER A 15 250 AS WT0839	150054	ISOTER A 25 150 UV GR0610	150012	ISOTER A 40 150 BK
150018	ISOTER A 15 250 AS YL0390	150096	ISOTER A 25 180 LG WT0443	150077	ISOTER A 40 150 WT0537
150107	ISOTER A 15 250 AS YL1017	150087	ISOTER A 25 180 UV WT0443	150022	ISOTER A 40 150 WT0538
150174	ISOTER A 15 250 RD0387	150032	ISOTER A 25 180 WT0443	150105	ISOTER A 40 150 WT0860
150095	ISOTER A 15 300 BIANCO HI	150121	ISOTER A 25 200 GR0449	150081	ISOTER A 40 180 BN0541
150106	ISOTER A 15 300 BL0392	150069	ISOTER A 25 200 RD0777	150049	ISOTER A 40 180 UV BN0542
150068	ISOTER A 15 300 BL1011	150071	ISOTER A 25 250 GR0458	150101	ISOTER A 40 180 WT0544

150157	ISOTER A 40 180 WT0790
150152	ISOTER A 40 180 WT1024
150151	ISOTER A 40 180 WT1066
150070	ISOTER A 40 200 GR0548
150156	ISOTER A 40 200 GR0972
150062	ISOTER A 5 100 GF10 NA
150015	ISOTER A 5 100 GF17 NA
150086	ISOTER A 5 100 GF17 NA1
150099	ISOTER A 5 100 GF30 GR1003
150139	ISOTER A 5 100 WT2032
150163	ISOTER A 5 200 HT UV BK
150127	ISOTER A 5 450 WT1019
150175	ISOTER A 5 60 GF08 HT BK
150058	ISOTER A 50 180 AS GR0554
150178	ISOTER AS 10 150 BK
150181	ISOTER AS 10 150 BK2118
150074	ISOTER AS 10 150 GR0945
150169	ISOTER AS 10 150 GR2098
150144	ISOTER AS 10 150 WT0944
150180	ISOTER AS 10 150 WT2117
150147	ISOTER AS 20 100 BK808
150064	ISOTER B 15 220 BL0555
150024	ISOTER B 20 120 BK
150076	ISOTER B 20 200 NA
150041	ISOTER B 30 150 BK
150014	ISOTER I 10 100 GF17 BK1
150002	ISOTER I 10 100 GF17 BK2
150016	ISOTER I 20 130 RH BK
150008	ISOTER I 20 130 RH BK1
150183	ISOTER I 20 130 RH BK2
150042	ISOTER I 30 200 GR0565
110001	ISOTER S 15 05 RD0566
150112	ISOTER S 20 05 FU0650