

MATERIAL SAFETY DATA SHEET

According to Reg. 1907/2006/EC, Reg. 543/2010/EC and Dir. 67/548/EC

| 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION | | |
|---|---|--|
| Product name | SC - SURFACE CONDITIONING | |
| Use of the product | Abrasive material for mechanical industry | |
| Company name: | BIBIELLE S.p.A. | |
| Address: | Via Cuneo, 35 - 12040 Margarita (CN) | |
| Telephone number: | +39 0171 793800 | |
| Fax number: | +39 0171 793001 | |
| E-mail | bibielle@bibielle.com | |
| Emergency phone number: | +39 0171 793800 | |

| 2 HAZARDS IDENTIFICATION | |
|------------------------------|--|
| Classification | The product is classified not hazardous according to Reg. 1272/2008/CE and to Dir 67/548/EC |
| Hazards for Human | No rilevant hazards for human |
| Hazards for the environment | No rilevant hazards for the environment |
| Physical or chemical hazards | No rilevant physical or chemical hazards |

COMPOSITION / INFORMATION ON INGREDIENTS 3

Material is composed of abrasive powders supported on a structure of Nylon, cotton/polyester tissue binded by a polymerized synthetic resin

Abrasive material

| Matrix | Substance | Hazard symbol | Classification | CAS N. | EC N. | % by weight** |
|----------|---|------------------|----------------|-----------|-----------|------------------|
| Abrasive | Corundum* (Al ₂ O ₃) | | | 1344-28-1 | 215-691-6 | 20 - 60 |
| powders | Silicon carbide (CSi) | | | 409-21-2 | 206-991-8 | 20-00 |

Structural support

| Matrix | Structural component | Hazard symbol | Classification | CAS N. | EC N. | % by weight** |
|---------|-----------------------------|------------------|----------------|--------|-------|------------------|
| Support | Nylon Fiber | none | | n.a. | n.a. | 20 - 60 |
| Cuppon | Cotton/polyester tissue | none | | n.a. | n.a. | 10 - 40 |
| Binder | Polimerized Synthetic Resin | none | | n.a. | n.a. | 10 - 50 |

*: Corundum is a natural form of aluminium oxide; it contains small impurities of iron, magnesium and silica **: any uncertain range concerning % amount of any component does not influence the hazard classification of the material, according to Reference Regulation

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| 4 FIRST AID MEASURES | |
|----------------------|---|
| Preamble | Following statements must be taken as base-rules concerning abrasive materials and has to be completed according to safety data sheets of processed materials and process cooling liquid used |
| General informations | In case of eyes and skin contact, give priority to eyes first aid measures |
| Eye contact | Rinse opened eye for several minutes under running water and seek immediate medical advice, showing this MSDS |
| Skin contact | Remove contaminated clothes. Immediately wash with water and soap and rinse thoroughly. |
| Inhalation | Supply fresh air; consult doctor in case of complaints |
| Swallowing | No negative effects in case of swallowing. Drink water and seek immediate medical advice, showing this MSDS |

| 5 FIRE FIGHTING MEASURES | |
|-------------------------------|---|
| Suitable extinguishing agents | $\ensuremath{\text{CO}}_2$, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam |
| Protective equipment | Ordinary protective equipment in case of fire-fighting |
| Specifical risks | None |

| 6 ACCIDENTAL RELEASE MEASURES | |
|---------------------------------------|------|
| Person-related safety precautions | |
| Measures for environmental protection | n.a. |
| Measures for cleaning/collecting | |

7 HANDLING AND STORAGE

| Handling | Avoid direct contact using recommended handling safety equipment (see § 8). According to normal use conditions, product does not contain volatile components |
|----------|---|
| | Keep in cool, dry, ventilated storage in closed original containers. Do not drinking or eating near the storage place |

| 8 EXPOSURE CONTRO | 8 EXPOSURE CONTROLS / PERSONAL PROTECTION | | | | |
|-----------------------------|--|--------------------------|---|--|------------------------|
| N | Any risk concerning the | use in mechanica | al industry | | |
| Risk scenario | Experimental toxicological data are not available concerning specifical exposure scenarios. Hazard classification of this product was done according to Reg. 1272/2008/EC and other available informations | | | | |
| Information about design of | Ensure good ventilation | /exhaustion at the | e workplace. | | |
| technical facilities | Safety washing water must be available for skin and eyes | | | | |
| | | OSHA 2010 TWA [mg/m³] | | ACGIH 2010 TWA [mg/m ³] | |
| | Substance | Total | Respirable fraction | Inhalable fraction | Respirable fraction |
| Exposure limit values | Silicon carbide | 15 | 5 | 10 | 3 |
| | Corundum [Al ₂ O ₃] | 15 | 5 | | |
| | Particles not otherwise classified | | le fraction (TWA 8 e fraction (TWA 8 h | | |



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| Respiratory protection | In case of brief exposure use respiratory filter device Protection factor: P3 |
|------------------------|---|
| | Safety goggles or face shield |
| Eyes protection | |
| Hands protection | Protective gloves for chemical products, according to standard EN374; materials for long contact time |
| | |
| | Use protective clothes and protective shoes |
| Skin protection | |
| Other informations | Abrasive materials used are inert and cannot cause risks when correctly stored and managed. During use on machineries, they request safety precautions for workers. The most part of powder particles comes from the processed material and eventually from the cooling liquid. Consequently attention and safety precautionary measures on vapours and dusts environmental removing must be applied. Follow the local Safety Management standards and instructions |

| 9 PHYSICAL AND CHEMICAL PROPERTIES | | | | |
|---|---|--|--|--|
| Appearance | Solid abrasive material | | | |
| Odour | Odourless | | | |
| PH | n.a. | | | |
| Charge | n.a. | | | |
| Boiling point | n.a. | | | |
| Melting point | n.a. | | | |
| Flash point | n.a. | | | |
| Vapour pressure | n.a. | | | |
| Water solubility at 20 ℃ | Not soluble | | | |
| Volatile organic chemicals (VOC) | No volatile chemicals (VOC) are present at detectable level | | | |
| Ripartition coefficient n-octanol/water | n.a. | | | |

| 10 STABILITY AND REACTIVITY |) STABILITY AND REACTIVITY | |
|----------------------------------|--|--|
| Stability | Stable in normal handling and storage conditions | |
| Conditions/materials to avoid | Keep away from strong oxidizers and electrostatic charges | |
| Dangerous decomposition products | After overheating and drying, thermical decomposition at ${}^{\circ}T > 250 {}^{\circ}C$ can produce dangerous vapours as carbon dioxide, carbon oxide and nitrogen oxides | |



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11 TOXICOLOGICAL INFORMATIONS

Material is inert on structural matrix. Data are referring to used abrasive components

| Carcinogenic effects: | n.a. | |
|------------------------|--|--|
| Mutagenic effects: | n.a. | |
| Acute toxicity | $\rm Al_2O_3$ (Corundum): > 5000 mg/Kg - DL50, oral rat (IUCLID Data Sheet, European Chemical Bureau) | |
| | CSi (Silicon Carbide): not available data | |
| Chronic toxicity | n.a. | |
| Skin | Mechanical irritating effects | |
| Inhalation | Irritating (superior respiratory system). Powders produced during use can cause respiratory irritating effects | |
| Eyes | Mechanical irritating effects: symptoms can be irritating, reddening, damages of corneal surface, tearing. Powders produced during use can cause eyes irritating effects | |
| Other negative effects | Other risks can be caused depending on the abrasion process material used | |

12 ECOLOGICAL INFORMATIONS

| Ecological toxicity | Al ₂ O ₃ (Corundum): > 100 mg/l – 96 h, salmo trutta (long time acute toxicity) > 100 mg/l – 48 h, daphnia magna (long time acute toxicity) CSi (Silicon carbide): not available data | |
|------------------------------|--|--|
| Mobility | n.a. | |
| Biopersistency | n.a. | |
| Biodegradability | n.a. | |
| Potential of bioaccumulation | n.a. | |

13 DISPOSAL CONSIDERATIONS

| Disposal recommendation | Recovery if possible. Waste and uncleaned packages must be disposed of in accordance with state and local environmental regulations. |
|-------------------------|--|
|-------------------------|--|

14 TRANSPORT INFORMATION

| | ONU number: n.a. |
|------------------------------|--|
| Transport classification and | ADR/RID: not regulated (road and railway) |
| regulation | ICAO/IATA: not regulated (air transport) |
| | IMDG/IMO: nor regulated (maritime transport) |



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15 REGULATORY INFORMATION

| Hazard labelling symbols | None | | |
|---|---|--|--|
| Risk statements | None | | |
| Precautionary statements (Dir. 67/548/CE) | S 22 | Do not breathe dust | |
| | S 39 | Wear eye/face protection | |
| Precautionary statements (Reg. 1272/2008/CE) | P 260 | Do not breathe dust | |
| | P 280 | Wear protective gloves/eye/face protection | |
| Other regulation references | Reg. 1272/2008/EC on classification, labelling and packaging of substances a mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, a amending Regulation (EC) No 1907/2006 | | |
| | Product does not contai | ns substances classified carcinogenic cat. I or cat. 2 | |

| 16 OTHER INFORMATIONS | | |
|---------------------------------------|---|--|
| H/R – statements (full text) (§ 3) | | |
| Further informations and references | Informations are updated to: Dir. 2009/2/EC - 31° update of Dir. 67/548/EC and according to Reg. 1907/2006/EC, Dir. 2001/58/EC and 1999/45/EC and Reg. 1972/2008/EC Reg. 1272/2008/EC (classification, labelling and packaging of substances and preparations) modifying directives 67/548/EC, 1999/45/EC and Reg. 1907/2006/EC | |
| | NIOSH: Registry of toxic effects of chemical substances ACGIH: American Conference of Governmental Industrial Hygienists | |
| | When applicable, according to Reg. 1907/2006/EC - chapter II, all substances used in this preparation where preregistered | |
| | Product is according to Reg. 1907/2006/EC - title II requirements (registration of substances) | |
| | Dir. 42/2006/CE (machineries directive): n.a. | |

ABBREVIATIONS AND ACRONYMSLD50Average letal doseTLV - TWAThreshold Limit Value - Time Weighted AverageSTELShort Term Exposure LimitOESOccupational Exposure StandardREACHRegistration, Evaluation, Autorisation of Chemicals. Regulation 1907/2008/ECn.a.Not applicable/Not available

DISCLAIMER

THIS PREPARATION MUST BE USED ONLY IN THE PROPER WAY FOR PROPER USE.

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