

LINE OF PRODUCTS: POLISOL / ALL PRODUCTS

DESCRIPTION: Abrasive Solid Compositions
APPLICATION: Surface Finishing, Industrial Polishing
(a.k.a. Buffing, Brightening, Mirror Finishing, Pre-polishing and others).

State: Solid
Colour: Not Relevant
Viscosity * : Not Relevant
Smell: Typical of Fat
Powder Content > 65 mesh **: < 5%
Complementary Tools: Sisal and Cotton Wheels
Suitable for the following Metals: Stainless Steel, Aluminium, Brass, Zamak and similar alloys
Best Before: 12 months from date of manufacture
Storage: Avoid exposure to atmospheric agents and sunlight
Store in a dry, proper place, between 5°C and 30°C
Optimal Working Temperature: Between 15°C and 25°C

INTRODUCTION

ABRASIVE SOLIDS

It is by interposing the abrasive "media" between the rotating tool and the metal, that friction is caused, allowing the polishing effect to occur. These are generally composed of selected grain size abrasives which are incorporated in an emulsion of fats in water. These fats have an average melting point ranging from approx. 40°C and 75°C and a self ignition point between temperatures 150°C and 300°C. Above all, the self ignition point needs to be carefully considered; because by exceeding it, it can derive a possible formation of harmful vapors and/or trigger a fire hazard.

TOOLS

Composed primarily of vegetable cloth such as cotton and sisal; these are the "means" of transport for the abrasive pastes. The polishing effect is achieved by obtaining the right setup between RPM (peripheral speed) and contact pressure, as well as by applying an adequate amount of the liquid abrasive emulsion to the tool or the piece.

FEEDING SYSTEMS FOR SOLID ABRASIVE COMPOUNDS

Solid pastes can be applied to the tool either manually by the operator or through automatic feeding systems that hold the tool/piece in place and that is operated by either an electric, hydraulic or pneumatic operation system which pushes the paste into contact with the tool/piece with predefined intervals and pressures set by the user. The application method is the "key" point for the processing. In fact, a malfunction can have a negative effect on the polishing results and can also create various kinds of risks.

METALWORKING

By default, the metal powders that are exposed to dry finish treatments have extremely small dimensions, a high specific surface area, and hence, a high reactivity.

OPERATIVE AND SAFETY INSTRUCTIONS

During the polishing process **do NOT ever exceed 60°C and in any case never exceed the self-ignition point.** Carefully consider the risk of a fire resulting from the simultaneous presence of the following residues: tools, abrasive compounds and from the extremely fine metal powders generated during the process.

In particular, Aluminium powders or other metallic alloys, especially those that are extremely fine, are absolutely dangerous and also extremely reactive. Strong exothermic reactions can trigger, which if not inhibited, may generate a considerable temperature increase that significantly speeds up the course of the reaction itself, until it reaches the self-ignition point. Seek advice from a company specialized in fire fighting and fire prevention in order to properly address this potential risk.

We strongly recommend avoiding any accumulation of process residue/waste in the working area and/or **to collect the waste in an ideal manner; undergo procedures and use suitable waste containers, in order to cool down the area as fast as possible.**

Make use of an efficient extraction system specifically **designed for the process/application.**

Make use of a proper fire alarm, fire prevention and fire extinguishing system, which has been **studied and developed for the specific** application and use, through a specialized company.

Make sure that the feeding systems for the solid abrasive compounds are set and working properly, in order to avoid any malfunctions that may cause important quality defects and/or which may overheat the tools and the metals during the process as this could also potentially trigger a fire.

Residue and waste generated by the polishing process must be handled and disposed of in accordance with the Local Regulations, using any necessary measure to avoid the risk of self-ignition.

Given the complexity of this matter and the high number of variables of the process, we strongly recommend to avail of specialized companies for consulting, training and servicing on the following areas:

- Fire prevention and fire safety
- Waste/residue handing, management and disposal
- Safety and hygiene in the work environment
- Exhaustion systems and air pollution / filtration systems

These polishing compounds need to be stored, handled and used in accordance with the Hygiene and Safety Regulations applied locally, of good industrial practice and comply with the relevant Legal Regulations.

The information included in this Technical Sheet is not exhaustive but only indicative of the more frequent risks, and is based on our actual knowledge: it should not be considered as a guarantee of specific performances or property and does not reduce in any way the responsibility of the end user and his obligation to know of and apply any local regulations that may specifically apply for his actual use, work and product.

The information mentioned in this Technical Sheet is designed to help the end-user to comply with the obligation which he is subject to during the use of the product for which he is the only one responsible. Prior to the use of our polishing compound, acquire any adequate and necessary information from the manufacturers of your polishing/buffing machines, mainly regarding the safety requirements prescribed by the manufacturers themselves in order to guarantee the proper functioning of the specific equipment used in conjunction with polishing compounds that have the specification as described in this Technical Sheet.

TRADERS, DISTRIBUTORS, AGENTS and DEALES must inform the end user customers according to this Technical Sheet.

Sabbio Chiese, 09/07/2013.

Europolish S.r.l.

RONDOR MANUFACTURING CO., LTD

This Technical Sheet is an integral part of each Contract and is governed by the terms and conditions, where applicable, (i) of the General Terms and Conditions no. 01/2003, undersigned by Europolish and your Company, and (ii) of each order confirmation which forms the object of the sale of Products having the technical specification described in this Technical Sheet.

Note:

* *Value in cPA, calculated at 20° C at the origin. Indicative number subject to continuous variation due to different environmental factors, handling, and thixotrophy property of the product. Based on calculation methods and evaluation of Europolish s.r.l.;*

** *Indicative value calculated through the methods and evaluation of Europolish s.r.l. / Cilas.*