MATERIAL SAFETY DATA SHEET

<u>1 IDENTIFICATION OF MATERIAL AND SUPPLIER:</u>

Wattmaster 54 Lakewood Boulevard Carrum Downs, VIC 3201 Australia Ph. 61 3 9775 1186 Fax. 61 3 9775 1187

ALCO NYLON CABLE GLANDS

Alco

Product Name: Akulon® Product Code: F223-D ALCMG

2. COMPOSITION/INFORMATION ON INGREDIENTS

This chemical product is preparation Chemical nature:

(poly)amide PA6

Components contributing to the hazard:

Not relevant

3. HAZARDOUS IDENTIFICATION

Most important hazards:

Hazard warning not required

Specific hazards:

Vapour and fumes released at elevated processing temperatures may be irritant for the eyes, the nose, the throat and the respiratory tract and in case of overexposure may cause nausea and headache. The material is not classified as being a dangerous preparation according to the EEC-Directive 88/379 and the subsequent amendments. See also Section 15.

4. FIRST AID MEASURES:

Inhalation:

When fumes of molten material have been inhaled; Move person to fresh air quickly as possible Rest in half upright position Loosen clothing Keep Warm

In case of respiratory problems move person to first aid station for medical treatment.

Skin Contact:

Any molten material on the skin/burns should be cooled off as quickly as possible by means of cold water. Cover the wound with sterile cloth and move person to first aid station or hospital for medical treatment.

Attention: Never pull off the molten material from the wound.

4. FIRST AID MEASURES: (cont.:)

Eye Contact:

Any material entering the eye should be flushed out with copious volumes of water.

Alco

Ingestion:

No danger of toxicity, this material is biologically inactive (see also Section 11)

5. FIRE - FIGHTING MEASURES

Extinguishing media:

Water, water/foam, CO2, ABC fire extinguisher powder.

Specific Hazards:

Treat the material as a solid that can burn. Moulded parts of solid granules generally burns slowly with flaming drips.

In case of fire appreciable quantities of carbon monoxide and ammonia are released in combination with irritating and/or toxic substances.

Protection for the fire-fighters:

Do not approach fire in confined space without positive pressure self breathing apparatus and full bunker gear: bunker coats, helmet with face shield, gloves, rubber boots.

6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions:

Apply ample grounding with respect to dust explosion danger caused be released just from granulate supply (filters): see section 7 Protection of skin/eye/hand: see section 8

Environmental Precautions:

Disposal considerations - see section 13

Cleaning up Methods:

Shovel or sweep up, use especially industrial vacuum cleaner to suck possible fines/dust. Avoid generating dust clouds. Put into containers for reclaiming or disposal.

7. HANDLING AND STORAGE

Handling:

Technical Measures:

Make provisions for sufficient ventilation and local exhaust at vent, nozzle and ejected melt.

7. HANDLING AND STORAGE (cont.:)

Precautions:

Dust and processing fumes must be removed by effective exhaust ventilation.

Storage:

<u>Technical measures and storage conditions:</u> The material should be stored in a dry place.

<u>Incompatible Products:</u> Stack pallets only two high when storing in order to prevent collapsing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Control Parameters:

<u>Threshold Limit Value (TLV):</u> A provisional TLV (TWA 8 hours) is advised in accordance with the TLV of non-toxic nuisance dust: 10 mg/m3 for total dust. 5mg/m3 for respirable dust.

Personal Protective Equipment:

Respiratory Protection:

When TLV is accidentally exceeded see section 7 (prevention of dust generation)

Hand Protection:

When handling a hot melt, heat resistant gloves should be worn (e.g. when purging a processing machine)

Skin and Body Protection:

The use of apron, boots and/or full protection suit is not prescribed here: it is up to the decision of the processor.

Hygiene Measures:

Adequate washing facilities, with supplies of mild soap and hand cleanser should be available at all working locations. Solvents should never be used as hand cleansers. Smoking, eating and drinking in working and storage area's should be prohibited.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid, at 20°C
Form:	Granulate
Colour:	Natural Opaque, dependent on added pigment.
Density:	> 1.0 g/cm3
Melting point/range:	220°C
Odour:	No special odour

Alco

9 PHYSICAL AND CHEMICAL PROPERTIES (cont.:)

Solubility in water:	insoluble
Decomposition Temp:	> 350°C
Flashpoint:	> 390°C
Auto Ignition Temp:	> 400°C

Dust Explosive Properties:

Lower Explosion Limit (LEL):	<10g/m3
Minimum Ignition Temp:	475°C
Dust Explosion Class (st):	1

10.STABILITY AND REACTIVITY:

Stability:

The material is chemically unreactive. Under certain conditions however hazardous reactions can take place.

Conditions to be avoided:

Temperatures:>350°C and/or long residence times should be avoided since thermal
degradation occurs.

Materials to be avoided:

Strong oxidising agents.

Hazardous decomposition products:

At processing temperatures some degree of thermal degradation will occur. Although highly dependent on temperature and environmental conditions, traces of variety of toxic and/or irritating gases may be evolved.

11. TOXICOLOGICAL INFORMATION:

Acute toxicity:

None (LD50 oral rat >5000 mg/kg)

Local effects:

The material appears to be a non-toxic substance in standard toxicological and Eco toxicological tests and is regarded a biologically inactive.

12. ECOLOGICAL INFORMATION:

Persistence/degradability:

Very low UV degradability.

Eco toxicity:

No indication that this material is being a risk to the environment.

Alco

12. ECOLOGICAL INFORMATION: (cont.)

Aquatic Toxicity:

Insoluble non toxic solid material (no water hazard).

13. DISPOSAL CONSIDERATIONS:

This material - as will as the packaging thereof - presents on danger regarding toxicological and/or ecological considerations. It can be burnt in a controlled way or be disposed of via Landfill, or it can be recycled for possibly less critical - non food applications.

Alco

Note: Additional National or Regional provisions may be in force with this matter

14. TRANSPORT INFORMATION

General Precautions:

Keep this material dry during transport.

Special Precautions:

No special precautions have to be met.

This material is not classified according to the recommendations of the UN (8. edition) on the transport of dangerous goods.

15. REGULATORY INFORMATION:

Labelling according to EEC directive 88/379/EEC and subsequent amendments is not required. Additional national legislation may be in force in this matter. EEC classification: No dangerous preparation. R (isk) phrases: N.a.

16 OTHER INFORMATION:

None of the material and/or products referenced herein should be used and/or applied in any product, device or material used or for use as human body implant or otherwise with the human body.

Note: This information is based on the data available and believed to be accurate at the time of writing, but it is subject to change without notice. It is given in good faith, but no warranty, expressed or implied, is made to it's accuracy, completeness or otherwise. Every person dealing with the material referred to in the MSDS does so at his/her own risk absolutely and must make independent determination of the suitability and completeness of information from all sources to ensure proper and safe use of the material.