

59700 - 59720 Dralon Fibers

Edition: 07.02.2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Information:

Product Name: Dralon Fibers
Article no.: 59700 - 59720
Application: Artists' and Restoration Material

Company: Kremer Pigmente GmbH & Co. KG
Hauptstrasse 41-47, D - 88317 Aichstetten
Tel. +49 7565 914480 Fax. +49 7565 1606
www.kremer-pigmente.de, kremer-pigmente@t-online.de

2. COMPOSITION / INFORMATION ON INGREDIENTS

2.1. Composition

			CAS-Nr.
2.1.1. Polymer	98.25 - 98.75 %	Polyacryl nitrile	24980-62-9
2.1.2. Additives	none		
2.1.3. Other constituents	< 0.25 %	N,N-Dimethylacetamide	127-19-5
	1 - 1.5 %	Spin finish	n.a.

2.2. Remarks Concerning Special Constituents

2.2.1. Spin Finish

The fiber product is non toxic. It may contain up to 1.5% of a spin finish. In cases where the product is to be used for special applications such as in the foodstuffs, the hygienic, medical or surgical sectors please approach the manufacturer first. When the fiber product is used as intended, no detrimental effects on health are known to date.

Spin finish is applied to most fibers and yarns as a processing aid. The spin finish can generally be removed in an aqueous medium if necessary. When subjected at temperatures between approximately 130°C and 190°C the spin finish can evaporate or decompose. If subsequent processing involves water, resultant waste water must be directed into a purification plant to comply with local regulations.

2.2.2. Residues of Solvent

Acrylic fibers contain a small residue of the solvent dimethylacetamide (DMAC) because of the production method.

In the statutory order on dangerous substances and the corresponding EG-regulations DMAC is classified as injurious to health. It is injurious to health by breathing in or by skin contact and it irritates the eyes.

In the German MAK-list from 1996 following specifications of DMAC are listed:

MAK: 10 ppm 35 mg/m³ (max. workplace concentration)

H: Danger of skin absorption.

Pregnancy group: C

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In case of thermal treatment, DMAC can evaporate. Please ensure that the working place is exhausted and ventilated so that an over-exposition of DMAC-vapor is avoided.
When the fiber product is used as intended, no detrimental effects on health are known.

3. HAZARD IDENTIFICATION

The fiber product is not reactive under normal environmental conditions. When the fiber product is used as intended, no detrimental effects on health are known to date. Fiber dust can occur during normal processing. At higher processing temperatures, spin-finish can be released at the workplace (see 2.2.1).

4. FIRST AID MEASURES

After inhalation:	If the prescribed MAK values are followed health risks from breathing this product is unlikely. Therefore no special treatment is necessary. Fiber fly, dust and decomposition products are to be avoided by aspiration and ventilation. By overexposure remove person to fresh air. Seek medical advice if coughing or other symptoms arise.
After skin contact:	Rinse with plenty of water. Seek medical advice in case of irritation.
After eye contact:	Rinse open eye for several minutes under running water and if irritations persists, consult physician.
After ingestion:	No special measures required.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Use fire fighting measures that suit the environment.
Unsuitable extinguishing media:	Water, if the fire was caused by electrical short circuit.
Unusual fire and explosion hazards:	In case of fire: formation of carbon monoxide, carbon dioxide, nitrogen oxides. Under certain circumstances, tiny amounts of other toxic gases such as hydrogen cyanide cannot be ruled out, especially in case of smoldering fire. In this case, consult medical advice immediately.
Personal protective equipment:	Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear protective clothing.
Environmental precautions:	Prevent product from getting into drains/ surface water/ groundwater. Keep away from combustible material.

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Methods of cleaning/
absorption: Collect mechanically and if possible reuse material. Dispose according to Section 13.

7. HANDLING AND STORAGE

Handling:
Instructions on safe handling: Avoid dust formation. Provide adequate ventilation.
Information of fire and explosion protection: A build up of fiber dust or fly could represent a fire hazard in sufficient concentrations. Keep away from ignition sources and electrostatic discharge.

Storage:
Storage conditions: Store product in accordance with the appropriate regulations.
Storage class: 11

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical systems:
Local exhaust; apply adequate measures according to the exposure limits.

Components with critical values that require monitoring at the workplace:
MAK Value: 6 mg/m³

Personal protective equipment:
General protective measures: Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Do not store near food or drinks. Do not eat, drink or smoke during work.
Avoid contact with eyes and skin
Respiratory protection: Dust mask required in case of high dust concentrations.
Hand protection: Fibers which are processed at high speeds can cause injuries such as grazes and cuts. It is good industrial practice to minimize skin contact.
Eye protection: Tightly sealed safety glasses with side shields.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: short cut fiber
Color: white
Odor: odorless

Changes in physical state:
Specific weight: 1.18 g/cm³ (20°C)
Melting point: not applicable

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Flash point:	Not applicable. Product will burn in fire.
Solubility in water:	negligible
Solvent content:	< 0.25 % DMAC
Extraneous ignition temperature:	250°C with spin finish
Auto-ignition temperature:	485°C with spin finish

10. STABILITY AND REACTIVITY

General information:	Product is stable.
Conditions to be avoided:	Temperatures above 230°C lead to decomposition causing combustible gases (also see section 5) and yellowing of the product.
Thermal decomposition:	> 230°C
Hazardous decomposition products:	Ammonia, nitriles, polyacrylamide, polyacril acid.
Products to be avoided:	Aqueous alkalis and amines due to yellowing.
Polymerization:	Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:	
LD50, oral (rat):	---
Primary effect:	
Irritant effect on skin:	No irritant effect (rabbit)
Irritant effect on eye:	No irritant effect (rabbit)

12. ECOLOGICAL INFORMATION

Product is not hazardous for water.
The residue of the solvent DMF or DMAC getting into the water by hot/wet treatment can be eliminated over 70% in accordance with OECD 302B (Zahn-Wellens-Test), the spin finish can be eliminated over 90%.

13. DISPOSAL CONSIDERATIONS

The fiber product can be disposed as non-hazardous waste in a licensed disposal plant in accordance with local authorities' regulations. The material can also be burned in a licensed incineration plant.

14. TRANSPORT INFORMATION

Not a hazardous substance in terms of transport regulations.

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15. REGULATORY INFORMATION

Designation according to EC guidelines: The material is not subject to classification according to EC lists.

National Regulations (D):

Water risk class: 0, not hazardous

16. OTHER INFORMATION

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should therefore not be construed as guaranteeing specific properties.