



TECHNICAL INFO N° 8

ADHESIVES : HEALTH AND SAFETY REGULATIONS

***KEY WORDS : ADHESIVES ON FOODSTUFFS - HEALTH - MARINE
USE - SAFETY SKIN IRRITATION - TOY LABELLING***

Health and Safety regulations are more and more part of our daily business environment.

In some instances, it is even necessary that the self-adhesive product is in agreement with national or international regulations failing which the material would not be accepted by the printer or end-user.

Listed below are the most important regulations on Health and Safety, applicable to certain of the products manufactured by our industry, that you may come across when discussing with end-users or specifiers of self-adhesive materials.

European standard EN 71 part 3, safety of toys : migration of certain elements

- EN 71/3 specifies requirements and methods for test for the migration of certain (8) chemical elements from accessible parts of toy material;
- Toys and part of toys can, due to their function, size or other characteristics include a risk due to sucking, licking or swallowing, bearing in mind the normal and foreseeable behaviour of children. This may of course include labels.
- Most MACtac adhesives, face stocks and liners are in agreement with the limits of element migration as described in the EN 71/3 regulation.

A Certificate of Conformity can be delivered upon request.

FDA/BGA approvals for use of adhesives on foodstuffs

- Foodstuffs can be subdivided in 3 main categories : moist - dry or fat.
- Adhesives can stand in indirect or direct contact with foodstuffs. **Indirect contact** means that the foodstuff is labeled on the outside of the packaging material. **Direct contact** means that the label is directly applied to the dry or moist foodstuff. Fatty foodstuffs should never be labeled directly i.e. the food-grade packaging material must always form a barrier in between the foodstuff and the label.
- **The American FDA** (Food and Drugs Administration) and the *German BGA* (Bundesgesundheitsamt) administrations publish recommendations, codes and test methods for the examination of consumer goods.
- FDA code § 176-170, 21 CFR ch. 1 and BGA code 80-30, 1 § 35 deal with the handling of foodstuffs and the determination of the migration in simulant solvents.
- Most MACtac adhesives are approved against the FDA/BGA codes for indirect contact. Following the Certificates of Conformity, an occasional direct contact is also allowed with the cutting edges of the self-adhesive laminate.

Some MACtac adhesives are approved against the FDA/BGA codes for direct contact with dry or moist foodstuffs.

Indirect Contact :		
MP	MF	MR
MP 125S MP 312 MP 747		MR 101 MR 180

Direct contact (not with fatty foodstuffs) :		
MP	MF	MR
MP 128N MP 196 MP 199 MP/MI 318 MP/MI 318UV MI 465 MP 499 MP 710N		MR 980

Direct Contact (with some fatty foodstuffs) :		
MP	MF	MR
FA 103	MF 132	

Certificates of Conformity for direct or indirect contact, depending from the type of adhesive, are available upon request.

BS 5609 -Pressure sensitive labels for marine use

Under the provisions of the British Merchant Shipping (Dangerous Goods) Regulations, it is obligatory for shippers to durably mark dangerous goods packages for carriage by sea. « Durably marked » means that the label is such as to remain identifiable on packages which have been at least three months in the sea.

Labels manufactured to BS 5609 are regarded by the British Department of Transport as complying with the Regulations and this Department from time to time issues a Merchant Shipping Notice listing firms which are said to supply labels to the standard.

MACTac meets the requirements of BS 5609 Section Two (Pressure sensitive, adhesive coated label base material) with different products :

The Certificates of Conformity are available upon request.

Skin irritation to the rabbit

The purpose of this type of testing, performed by an independent research centre, is to assess eventual dermal reactions that could occur when handling pressure-sensitive materials.

The experimental procedure used is based on that prescribed by the Consumer Safety Commission of the USA in the Code of Federal Regulations, Title 16, Section 1500.41 and is performed to the albino rabbit.

After testing, the test substance is classified following a Primary Irritation Index (PII).

Primary irritation Index Classification

- 0 non-irritant
- > 0-2 mildly irritating
- 2.1-5.0 moderate irritant
- 5.1-6.0 moderate to severe irritant

- > 6 severe irritant

Din 52900, Health and Safety data sheet

The German Din 52900 norm states standardized information on chemicals, papers or films concerning various aspects of a product under normal conditions of storage, handling or use.

The norm includes information on the manufacturer, chemical and physical characteristics of the product such as melting point, burning behaviour and chemical decomposition in case of fire, safety measurements for transport and handling and toxicological and ecological information.

A Din 52900 health and safety data sheet on most self-adhesive laminates can be obtained upon request.

C.O.S.H.H., Control of Substances Hazardous to Health

In the UK, the legal framework for the provision of information on substances is contained primarily in the Health and Safety at Work Act 1974, Section 6.

The C.O.S.H.H. information sheet states a product description, intended use, composition, health and fire hazards and handling precautions.

Although less detailed, the C.O.S.H.H. information sheet is comparable to the German Din 52900 norm