

SVHCs in Articles and Packaging

On 28th October 2008 the European Chemicals Agency (ECHA) based in Finland, issued details around legal obligations that companies may have resulting from the inclusion of substances on the so called "Candidate List". These obligations are not only linked to the listed substances on their own or in preparations but also to their presence in articles.

Suppliers of articles which contain substances on the Candidate List in a concentration of >0.1% of the weight of the total article must inform their customers of the name of the substance and provide appropriate safe use data.

In general, packaging is regarded as a separate article to the item it contains. For example, the sealed bag a semiconductor is supplied in and, if included, a humidity indicator card should be considered separately. Likewise, anything to protect the semiconductor, such as a foam insert, is a separate article. The 0.1% threshold would apply to each individually.

Taking into account the above and the example used; an article's packaging would not need to be mentioned in relation to the article itself but would need to be mentioned separately, via the safety data.

Please refer to the following data sheet for details of any SVHC contained in the packaging of this product.

SAFETY DATA SHEET

Product:

GARBEFLEX DOP R

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SDS No. : 02009

Version : 5

Date : 2004-01-15
Cancel and replace: 2001-09-21

01 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING (*)

NAME OF THE SUBSTANCE (*) : GARBEFLEX DOP R (*)
RECOMMENDED USES : Plasticizer for polymers (Poly(vinyl chloride))
SDS No : 02009
SUPPLIER : Arkema France
ACRYLIQUES
420 rue d'Estienne d'Orves
92705 COLOMBES CEDEX
FRANCE
Tel : 33 1 49 00 80 80
Fax : 33 1 49 00 83 96
Emergency telephone number : 44 1865 407 333

02 - HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS : -
HEALTH EFFECTS : May impair fertility
May cause harm to the unborn child
Inhalation of vapours from heated product :
Irritating to eyes, respiratory system and skin
PHYSICAL AND CHEMICAL HAZARDS : Thermal decomposition giving flammable and toxic products
SPECIFIC HAZARDS / EC : TOXIC
May impair fertility
May cause harm to the unborn child

03 - COMPOSITION / INFORMATION ON INGREDIENTS (*)

CHEMICAL NAME OF THE SUBSTANCE (*) : DI(2-ETHYLHEXYL) PHTHALATE
T, R60-61 (*)
Synonyms : DIOCTYL PHTHALATE
CAS : 117-81-7
EINECS : 204-211-0

04 - FIRST AID MEASURES

GENERAL ADVICE : Take off immediately all contaminated clothing
INHALATION : Inhalation of vapours from heated product :
Move to fresh air
Oxygen or artificial respiration if needed
In case of persistent problems :
Consult a doctor
SKIN CONTACT : Wash immediately and abundantly with soap and water
EYE CONTACT : Wash immediately, abundantly and thoroughly with water
If irritation persists, consult an ophthalmologist
INGESTION : In case of problems, consult a doctor

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05 - FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA :	Dry powder Carbon dioxide (CO2) Foam
SPECIFIC HAZARDS :	Thermal decomposition giving flammable and toxic products : Hydrocarbons Aldehydes Ketones (Phthalic anhydride)
SPECIFIC METHODS :	Cool containers / tanks with water spray
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS :	In case of fire, wear a self-contained breathing apparatus

06 - ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION :	Avoid contact with skin and eyes and inhalation of vapours
ENVIRONMENTAL PROTECTION :	Do not release into the environment Do not let the product enter into drains Contain by damming
METHODS FOR CLEANING UP :	-
Recovery :	Pump into an inert labelled emergency container Absorb the remainder with an inert absorbent material : Sand Sawdust
Disposal :	Destroy the product by incineration at an approved waste disposal site

07 - HANDLING AND STORAGE

HANDLING :	-
Technical measures/Precautions :	Storage and handling precautions applicable to products : LIQUID TOXIC WITH IRRITATING VAPOURS (when hot) Ensure appropriate exhaust and ventilation at machinery Provide showers, eye-baths
STORAGE :	-
Technical measures/Storage conditions :	Keep container tightly closed Provide a catch-tank in a bunded area Provide electrical earthing of equipment
Incompatible products :	Oxidizing agents
PACKAGING MATERIALS :	-
Recommended :	Metals

08 - EXPOSURE CONTROLS / PERSONAL PROTECTION (*)

PROTECTIVE PROVISIONS :	Ensure sufficient air exchange and/or exhaust in work areas
CONTROL PARAMETERS (*) :	-

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Exposure limits (*) : FRANCE 1999 : VME= 5 mg/m³
USA-ACGIH 2003 : TLV-TWA = 5 mg/m³ (*)

PERSONAL PROTECTION EQUIPMENT (*) : -

Hand protection (*) : Gloves: (*)
Splash contact, intermittent and prolonged (*)
Material: PolyVinyl Chloride (*)
Surface thickness 1.1 mm (*)
According to permeation index NF EN 374: 3 (time elapsed > 60 mins) (*)

Eye protection : Safety glasses

Skin and body protection (*) : At the workplace: (*)
Protective clothing (cotton) (*)
Safety shoes (*)
Intervention at incident: (*)
waterproof suit (*)
Boots (PVC) (*)

Specific hygiene measures : Avoid contact with skin and eyes and inhalation of vapours

09 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE (20°C) : Liquid

COLOUR : Colourless

ODOUR : None

BOILING POINT/RANGE : At 1013 hPa (mbar) : 386 °C

MELTING POINT/RANGE : -46 °C

DECOMPOSITION TEMPERATURE : 200 °C (approximately)

FLASH POINT : Open cup : 218 °C
Standard : NF T 60 118 (ISO 2592)

VAPOUR PRESSURE : (20 °C) : 10EXP(-8) hPa (mbar)
(25 °C) : 4.53 x10EXP(-7) hPa (mbar)
(200 °C) : 1.7 hPa (mbar)

DENSITY : Liquid :
(20 °C) : 984 kg/m³

SPECIFIC GRAVITY (water = 1) : (liquid)
(20°C) : 0.984

SOLUBILITY : -

WATER : (20°C) : 0.2 g/l

Solvents : Soluble in :
ACETONE
CYCLOHEXANE
Alcohols

PARTITION COEFFICIENT (n-octanol/water) : log Pow = 8

OTHER DATA : Molecular mass : 390.57
Viscosity (20 °C) : 81 mPa.s (cP)

10 - STABILITY AND REACTIVITY

MATERIALS TO AVOID : Oxidizing agents

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HAZARDOUS DECOMPOSITION PRODUCTS : Thermal decomposition giving flammable and toxic products :
Hydrocarbons
Aldehydes
Ketones
(Phthalic anhydride)

FURTHER INFORMATION : The product is stable at ambient temperature

11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : Reported in animals :

Inhalation : Practically not harmful by inhalation
No mortality in rat at 10.6 mg/l (for 4 h)

Ingestion : Practically not harmful if swallowed
LD50/oral/rat > 30 g/kg

Skin-contact : Practically not harmful in contact with skin
LD50/dermal/rabbit = 25 g/kg

LOCAL EFFECTS : -

Inhalation : Possible irritation of respiratory system (in case of exposure to vapour/fog of the heated product)

Skin-contact : Possible irritation of skin (in case of exposure to vapour/fog of the heated product)
Reported in animals :
Slightly or not irritating to skin (rabbit)

Eye-contact : Possible irritation of eyes (in case of exposure to vapour/fog of the heated product)
Reported in animals :
Slightly or not irritating to eyes (rabbit)

SENSITIZATION : -

Skin-contact : No reported cases of cutaneous sensitization in man
In animals :
(guinea-pig)
Not a skin sensitizer

CHRONIC TOXICITY : Oral route :
Target organs at high doses
Liver, kidney
(rat, mouse)
No effect maximum dose : 29 mg/kg/d (mouse, 2 year(s))
No specific toxic effect in primates :
2500 mg/kg/d (3 month(s))
Inhalation :
Target organs at high concentrations : respiratory system (Irritation.)
Maximum concentration with no effect : 0.05 - 1 mg/l/ rat (1 month(s))

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SPECIFIC EFFECTS :

GENOTOXICITY :

Available experimental data indicates no particular problems for man
Overall inactive in 'in vivo' and 'in vitro' tests

CARCINOGENICITY :

Available experimental data indicates no particular problems for man
The tumour-inducing effects on the liver observed at high doses in rats and mice are specific to these animal species and are considered as unsuitable for extrapolation to man

REPRODUCTIVE TOXICITY :

Experimental effect have been observed in animals at much higher doses than those which people come into contact with during normal use conditions

Foetal development :

At high doses toxic effects on foetal development in rodents

No effect dose : 44 mg/kg (mouse, oral route)

Fertility :

At high doses, toxic effects to the male reproductive system in rodents

No effect dose : 110 mg/kg (rat)

(oral route)

Absence of toxic effects upon the reproductive system. (Primates)

At 2500 mg/kg/d (3 month(s), oral route)

12 - ECOLOGICAL INFORMATION (*)

MOBILITY (*) :

In aqueous environment : (*)

Very slight evaporation : t1/2 life = 15y

In soils and sediments : (*)

Strong adsorption : log Koc = 4-5 (*)

PERSISTENCE/DEGRADABILITY :

-

In water :

Very slowly hydrolysable : t1/2 life = 2000y (pH = 7)

Photolysis : t1/2 life = 143d

Readily biodegradable : 82 % after 28 d

Inherently biodegradable

In air :

Degradation by radicals OH : t1/2 life = 8.8 h (estimated)

In soils and sediments :

Moderately biodegradable in sediments : 41% after 30d

Not biodegradable under anaerobic conditions

BIOACCUMULATION (*) :

log Pow = 4.88 (*)

Fish : bioconcentration factor (BCF) = 280 (average) (*)

Crustaceans: Bioconcentration factor (BCF) = 1164 (average)

Algae : bioconcentration factor (BCF) = 3173 (average) (*)

ECOTOXICITY :

-

AQUATIC TOXICITY :

-

Acute toxicity :

Fish : > Solubility in water

Daphnia : > Solubility in water

Algae : > Solubility in water

13 - DISPOSAL CONSIDERATIONS (*)

DISPOSAL OF PRODUCT (*) :

Destroy the product by incineration at an approved waste disposal site
(in accordance with local and national regulations) (*)

14 - TRANSPORT INFORMATION (*)

Technical consignment name : (*)

See Section : 2 (*)

ADR/RID :

Not regulated

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ADN/ADNR (*) : Not regulated (*)
IMDG : Not regulated
IATA : Not regulated
Consult ARKEMA's safety department for any further information

15 - REGULATORY INFORMATION (*)

EEC DIRECTIVE : -
SAFETY DATA SHEETS : D. 91/155/EEC amended by D.93/112/EEC and D. 2001/58/CE: Dangerous substances and preparations
EC CLASSIFICATION / LABELLING : -
HAZARDOUS SUBSTANCES : D. 67/548/EEC amended by D. 2001/59/EC (28th APT)
T _ TOXIC
R60 _ May impair fertility
R61 _ May cause harm to the unborn child
S45 _ In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible)
S53 _ Avoid exposure - obtain special instructions before use
Restricted to professional users
Nr in ANNEX : 607-317-00-9
EC Nr (EINECS) : 204-211-0
INVENTORIES (*) : EINECS (EU) : 204-211-0 (*)
TSCA (USA) : listed
DSL (Canada) : listed
AICS (Australia) : listed
ENCS (Japan) : 3-1307
ECL (Korea) : KE-02196
PICCS (The Philippines) : listed (*)

16 - OTHER INFORMATION

RESTRICTIONS ON USE : Restricted to professional users
BIBLIOGRAPHY REFERENCES : Fiche toxicologique INRS : N° 161 : Phtalate de di(2-éthylhexyle)
FURTHER INFORMATION : WHEN USED IN FORMULATIONS, CONTACT US FOR LABELLING

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This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA
In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear
The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. However the revision of some data is in progress
Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes
The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive
It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product
It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes)
the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment
The (*) indicate the changes made with respect to the previous version

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