

MATERIAL SAFETY DATA SHEET

1- DEFINITION OF THE MATERIAL

Product Name : BAYCOPUR-3GF B-Component

Product Use : Injection Resin

Manufacturer / supplier : AB-SCHOMBURG CONSTRUCTION CHEMICALS INC.

Address: 19 Mayıs Mah.Turapoğlu Sok. Hamdiye Yazgan İş Merkezi 4/8

34736 – Kozyatağı / İstanbul / TURKEY

Tel : (0216) 302 71 31 /-32

Fax : (0216) 302 70 01

e-mail : info@ab-schomburg.com.tr

web : www.ab-schomburg.com.tr

2- INFORMATION ABOUT COMPOSITION

CAS-No.	Description	Weight %	Symbol	R-phrases
9016-87-9	Diphenylmethanediisocyanate, isomers and homologue	100	XN Xi	20 36/37/38-42/43

3- HAZARDS IDENTIFICATION

Dangerous to health by inhalation, irritation of eyes, respiratory organ and skin. Sensitisation by inhaling and skin contact possible.

4- FIRST AID MEASURES

General Measure contaminated shoes and clothes have to be taken off and decontaminated

Inhalation of aerosoles or vapour at high concentration go immediately out into the air, keep warm and have a rest; in case of respiratory problems medical aid required.

Eye Contact

Contamination of the eyes must be treated by thorough irrigation with water (10 minutes), with the eyelids held open. A doctor (or eye specialist) should be consulted immediately.

Skin Contact

After skin contact with skin, using cleaner on polyethylene glycol base, wash immediately with plenty of water and soap.

Swallowing

DON'T try to vomit, seek medical advice.

Medical measures

Product irritates the respiratory tracts and is mainly responsible for skin and respiratory tract sensitisations. Bronchial constriction and acute irritation symptomatic, a long-term medical care may be necessary.

5- FIRE FIGHTING MEASURES

Extinguishing media:

CO₂ , foam, dry powder, in case of larger fires, water spray should be used.

Further indications: COx, NOx, Isocyanatedämpfe und Spuren von HCN fire may cause respiratory protection with independent air supply required. Personnel should be evacuated. Contaminated water shouldn't get into soil, ground water or rivers and lakes.

6- ACCIDENTAL RELEASE MEASURES

Protection clothes (see chapter 8) take up with wet, liquid absorbent for chemicals (e.g. dry sand, sawdust, absorbent for chemicals on phosphate hydrate base). After about 1 hour take off waste and, because of CO₂ release, keep it wet and in the open air at a safe place for 7-14 days. Waste has to be decontaminated see chapter 13 "Instructions on Documentation".

7- HANDLING AND STORAGE

Handling:

Observe the usual precautionary measures for chemicals. Avoid contact with skin. Work places must have an exhausting device, air circulation away from worker, maintenance of the systems regularly.

Storage:

Keep container tightly closed and dry. Keep separated from foodstuffs. Storage temperature no less than 10°C and no more than 30°C. VCI-storage class: 10

Fire and exposure protection exposure protection not required.

8- EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical systems:

Further specific information see chapter 15 "Regulatory information". Technical protective measures on exposure controls see chapter 7 "Handling and storage".

Respiratory protection

Not required in most cases, in case of working at higher temperature without sufficient air condition or aerosols a suitable respiratory protective device should be used.

Exposure Controls/Personal Protection

Hand Protection protective gloves made of

Natural rubber / latex	NR	(≥ 0,5mm)
Polychloroprene	CR	(≥ 0,5mm)
Nitrile rubber	NBR	(≥ 0,35mm)
Butyl rubber	IIR	(≥ 0,5mm)
Fluorinated rubber	FKM	(≥ 0,4mm)
Polyvinyl chloride	PVC	(≥ 0,5mm)

Keep working clothes separate. Wash hands before breaks and at end of work. Concerning contaminated protective clothes see chapter 13.

9- PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form	: Liquid
Colour	: brown
Smell	: earthy, mouldy
Pour Point °C	: -24
Boiling Point	: > 300
Flash point	: > 250
Ignition Temperature °C	: > 500
Vapor pressure at 20 °C mbar	: 1
Explosive limits	: n.b.
Solubility in Water	: insoluble, reacts with water
p.H value	: n.a.
Density at 25 °C g/cm³	: ca. 1,23
Viscosity 25 °C mPas	: ca. 200

10- STABILITY AND REACTIVITY

Hazardous Decomposition Products : no hazardous decomposition products when stored and handled correctly.

Hazardous reactions : exotherm with amines and alcohol, with water CO₂ – development, in closed containers danger of pressure, danger of explosion.

Avoidable materials : Copper, copper alloys and plated surfaces.

11- TOXICOLOGICAL INFORMATION

Diphenylmethandiisocyanate, Isomere and Homologue :

LD₅₀ oral, rat (female) > 15000 mg/kg

LD₅₀ inhalant, rat 490 mg as aerosol /m³, 4h exposure concentration of the saturated vapour of Diphenylmethane-4,4'-diisocyanate

A long term inhalation study with rats over a period of 2 years by mechanically produced aerosols (aerodynamic diameter 95% blow 5 µm) of polymeric MDI (PMDI) and concentrations of 0,2 , 1,0 and 6,0 mg PMDI/m³ led to an increased number of lung tumours, long-term inflammatory changes of the nose respiratory tracts and lungs as well as yellow sediments in the respiratory tracts and lungs of those animals of the highest concentration group. The animals of the 1,0 mg/m³ –group showed slight irritations and inflammatory modifications of nose, respiratory tracts and lungs but however no lung tumours and/or sediments. The animals of the 0,2 –group didn't show any irritations; these concentration has been stated as "no effect level".

Effect on the eyes:

Causes short-term weak reddening and swelling of the conjunctiva as well as weak reversible cornea blurring. Product vapours of high concentration have an irritating effect on the eyes and mucous membrane.

Effect on the skin:

Irritating. In case of longer contact with the skin tanning and irritating effects possible.

Effect on the respiratory tract product vapours of high concentration have an irritating effect on eyes and mucous membrane.

Experiences / human irritation of the mucous membrane of nose, pharynx and lung, dryness of pharynx, pressure on the chest, temporarily combined with difficulty in breathing and headache. Problems and allergic reaction may be possible.

Sensation by inhalation possible.

There exist no proved tests on animals regarding sensation of the skin. (contradictory experimental results)

12- ECOLOGICAL INFORMATION

Do not allow to escape into waters, wastewater or soil (see chapter 15).

Not miscible with water. Combined with water converting on the interface by means of formation of carbon dioxide to a solid, highly smelting and insoluble reaction product (polyurea). Interface active substances (e.g. liquid soap) or water-soluble dissolver increase their reaction. As to the present experience polyurea is not degradable.

Information on the Diphenylmethane diisocyanate, Isomer und Homologue

Biodegradability	0 %	Respiratory test	testing time 28 days
Acute fish toxicity	LC ₀ >1000 mg/l	Special tests Brachydanio rerio	testing time 96 h
Daphnien toxicity	EC ₅₀ 1000 mg/l		testing time 24 h
Acute bacterial toxicity	EC ₅₀ 100 mg/l	tested with activated sludge bacteria	testing time 3 h

Angaben zu Diphenylmethandiisocyanat, Isomeren und Homologen

13- DISPOSAL INFORMATION

Waste or residues of this product have to be disposed of in a suitable incinerator under compliance with the relevant legislation. The consumer is incumbent on information. After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until "drip-Dry") and removing

the labels they can be sent to an appropriate collection point set up within the framework of existing take-back scheme of chemical industry.

14- TRANSPORTATION INFORMATION

Not dangerous goods according to the international transportation as to RID/ADR, IMO and IATA.

15- REGULATORY INFORMATION

Labelling in accordance with the EEC directives 67/548 appendix I and corresponding alterations.

Chemical name of the substance	Diphenylmethanediisocyanate, Isomere und Homologue	
Symbol-/ indication of danger	Xn, harmful	
Risk phrases (R-phrases)	R20	Harmful by inhalation
	R36/37/37	Irritating to eyes, respiratory system and skin
	R42/43	May cause sensitisation by inhalation and skin Contact
Safety advices (S-phrases)	S23	Wear suitable protective clothing and gloves
	S36/37	Wear suitable protective clothing and gloves
	S45	In case of accident or if feel unwell, seek medical advice immediately (show the label where possible)

OEL Occupational Exposure Limits 0,005 ml/m³ (ppm) = 0,05 mg/m³

WGK Water endangering 2 (VwVwS Anhang 4)

AOX this product doesn't contain organically combined halogen

16- OTHER INFORMATION

This safety data sheet corresponds to chapter 3 of the instructions 91/155/EEC of the commission dd. 5th March, 1991 in order to lay down the details of a special information system for dangerous processes as to chapter 10 of the instruction 88/379/EEC of the commission (Ab1EG No.L 187 dd. 16th July, 1988, page 14) resp. all following changes and alterations.

Literatur :

Safety Data Sheet of single components.

ISOPA MAP Newletter Issue No. 1-Febr.1999

ISOPA Guidelines for safe Loading/Unloading, Transportation and Storage of TDI and MDI

Alterations since the latest issue: Emergency calls

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify warranty with regard to the products' properties.