

**PRODUCT REFERENCE: LIQUID COMPONENT DEMOTEC) 95<sup>®</sup>/EASY BLOC<sup>®</sup>,**

Dear Customer:

In compliance with the Occupational Safety and Health Administration Hazard Communication Standard, 29 CFR 1910.1200, we are providing a Material Safety Data Sheet (Version 1.898) for DEMOTEC) 95<sup>®</sup>/EAST BLOC<sup>®</sup>. This MSDS also provides information on any toxic chemicals subject to the reporting requirements of Section 13 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

If this product, or any components of it, is considered hazardous or carcinogenic under the OSHA Hazard Communication Standard, information is provided in the "HAZARDS IDENTIFICATION" Section.

If you have any questions, please contact our office.

Sincerely yours,

AG-TEK<sup>®</sup> DIVISION/KANE ENTERPRISES, INC.  
George K. Kane  
President

**LIQUID COMPONENT DEMOTEC) 95<sup>®</sup>/EASY BLOC<sup>®</sup>,  
MATERIAL SAFETY DATA SHEET**

**Emergency Contact**

**Chemtrec 1-800-424-9300**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Material Identity**

**Product Name:** DEMOTEC 95<sup>®</sup>, (HC200, HC214, HC500 AND HC570)

EASY BLOC<sup>®</sup>, (EB104, EB112 and EB250)

**General or Generic ID:** Methacrylate Liquid

**NFPA RATINGS for USA (Scale 0 - 4)**

Health-3                      Flammability-3                      Reactivity-2

**MANUFACTURED BY:**

Demotec

Siegfried Demel

Bretanostrabe 21

D-61130 Nidderau, Germany

Tel: 0049-6187-21200

**DISTRIBUTED IN USA BY:**

Kane Enterprises, Inc.

P.O. Box 1043

Sioux Falls, SD 57101-1043

Phone: 1-800-336-8577

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical characterization**

Methylacrylic acid methyl ester or methyl methacrylate, containing an activator.

**Hazardous Ingredient(s)**

Methylmethacrylate, concentration

Concentration      60 to 100%

CAS Number      80-62-6

Hazard symbols      Xi, F

R-phrases      11, 36/37/38, 43

N, N-dimethyl-p-toluidine, concentration 1 to 5 %

CAS Number      99-97-8

Hazard symbols      T

R-phrases      23/24/25

**3. HAZARDS IDENTIFICATION**

Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.

**4. FIRST AID MEASURES**

**EYES**

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**SKIN**

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

## SWALLOWING

Do not induce vomiting. This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with head down. Seek medical attention. If possible do not leave individual unattended.

## INHALATION

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen.

### Note to physicians

No data

## 5. FIRE FIGHTING MEASURES

### Suitable extinguishing media

Water spray jet

Foam

Dry Powder

Carbon dioxide

### Unsuitable extinguishing media for safety reasons

Full water jet

### Special protective equipment for fire fighting

Use self-contained breathing apparatus

Wear full protective suit

## 6. ACCIDENTAL RELEASE MEASURES

### Small Spill

Absorb liquid on vermiculite, floor absorbent, other absorbent material and transfer to hood. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks.

### Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams, or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

## 7. HANDLING AND STORAGE

### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or soils), all hazard precautions given in the data sheet must be observed. All five gallon pails and larger metal, containers including tank cars and tank trucks should be grounded and or bonded when material is transferred.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type of safety glasses. Consult your safety representative.

### Skin Protection

Wear resistant gloves, such as: nitrile latex. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

### Respiratory Protection

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

### Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

### Exposure Guidelines

Components or products of decomposition according to point 10, with limit values related to the place of work which require monitoring.

#### TLV (short term)-value for

CAS Number 80-62-6

Methyl methacrylate 510mg/m<sup>3</sup> 125 m/m<sup>3</sup> 1989

#### TLV (long term)-value for

CAS Number 80-62-6

Methyl methacrylate 410 mg/m<sup>3</sup> 100 ml/m<sup>2</sup> 1989

### Personal Protective Equipment

General Protective Measures:

Do not inhale vapors. Avoid contact with eyes and skin.

#### Hygiene measures:

Store work clothing separately. Remove soiled or soaked clothing immediately. Follow the usual good standards of occupational hygiene.

#### Respiratory protection:

Breathing apparatus in case of high concentrations.

Short term: Filter appliance, Filter A

#### Hand protection:

Rubber gloves

#### Eye protection:

Tight fitting goggles

#### Body Protection:

When handling larger quantities: Face mask, rubber boots and rubber apron must be worn.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form: liquid

**Initial boiling point** approx. 100 deg. C at 1013 Hpa

**Flash point** Method DIN 51755: 10 deg. C

(Methyl Methacrylate)

**Ignition temperature** Method DIN 51794: 430 deg. C

(Methyl Methacrylate)

**Lower explosion limit:** (Methyl Methacrylate) 21 % vol

**Upper explosion limit:** (Methyl Methacrylate)

**Vapor Pressure:** < 40 hPa at 20 deg. C

**Density:** 0.95 g/cm<sup>3</sup> at 20 deg. C

**Relative Vapor Density - Related to Air:** > 1 at 20 deg. C

**Solubility/Qualitative:**

In e.g. esters, ketones and chlorinated hydrocarbons

Rapidly soluble

**pH-value:** Not applicable

**Viscosity dynamic:** approx 2 mPa\*s at 23 deg. C

**Further information** None

## 10. STABILITY AND REACTIVITY

### Thermal decomposition

No decomposition when used as directed

### Hazardous reactions

Polymerizations with heat evolution may occur in the presence of radical forming substances (e.g. peroxides, reducing substances, and/or heavy metal ions).

### Hazardous decomposition products

None when used as directed

## 11. TOXICOLOGICAL INFORMATION

### Acute oral toxicity (LD50) > 500 mg/kg

Species rat

Method OECD 401

Source literature

The data mentioned above refers to the component methyl methacrylate.

### Acute oral toxicity (LD50) > 996 mg/kg

Species rat

The data mentioned above refer to the component N, N-dimethyl-p-toluidine

### Acute inhalation toxicity (LD50) 7093 ppm

Length of exposure 4 h

Species rat

Source Literature

The data mentioned above refer to the component methyl methacrylate

### Acute dermal toxicity (LD50) > 500 mg/kg

Species rabbit

Source Literature

The data mentioned above refer to the component methyl methacrylate

## Skin Irritation

Non-irritating

Length of exposure

Species rabbit

Method Occlusive, FDA Draize

The data mentioned above refer to the component methyl methacrylate

## Irritant effect on the eyes

Non-irritating

Odor: odorless

Color: colorless

## Changes in Physical State

**Melting temperature** -48 deg. C

Species rabbit eye

Method Draize

The data mentioned above refer to the component methyl methacrylate

## Sensitization

In sensitization tests on guinea pigs with and without adjuvant both positive and negative results were found.

Source Literature

In humans various types of allergic reactions have been observed (symptoms: headache, eye irritations, skin affections)

Source Literature

The data mentioned above refer to the component methyl methacrylate

## Mutagenicity

Non-mutagenic

Dos/concentration 10000 up/plate

Metabolic activation

+/-

Species/test system

Salmonella typhimurium

Method Ames-test

Source Literature

Mutagenic

Metabolic activation

+/-

Species/test system

Mouse lymphoma L 5178 Y TK+/- cells

Method Mouse lymphoma test

Source Literature

Slight increase in SCEs

Metabolic activation

+/-

Species/test System

CHO cells

Method SCE test  
Source Literature

No increase in the SCE rate up to cytotoxic concentrations  
Species/test system  
Human Lymphocytes  
Method SCE test  
Source Literature

No increase in the number of micro nuclei  
Application method oral  
Dos / concentration 4520 mg/kg  
Application interval 1 Dose  
Species/test system  
Mouse  
Method Micro-nucleus test / OECD 474  
Source Literature

No increase in the number of micro nuclei  
Application method oral  
Dos / concentration 1130 mg/kg  
Application interval 4 Doses  
Species/test system  
Mouse  
Method Micro-nucleus test / OECD 474  
Source Literature

Non-mutagenic  
Application method inhalation  
Application interval 6 h/d  
Application period 5 d  
Species/test system

CD-1 mouse (male)  
Method Dominant lethal test  
Source Literature  
The data mentioned above refer to the component methyl methacrylate

**Teratogenicity**  
No indications of toxic effects were observed in reproduction studies in animals  
Application method inhalation  
Dosage 2028 ppm  
Application period 6 to 15 d qest  
Species rat  
Method OECD 414  
Source Literature  
The data mentioned above refer to the component methyl methacrylate

**Carcinogenicity**  
Non-carcinogenic in inhalation and feeding studies carried out on rats, mice and dogs

Source Literature  
The data mentioned above refer to the component methyl methacrylate

**Chronic toxicity**  
Application method inhalation  
Dosage 250 to 1000 ppm  
Application interval 6 h/d, 5 d/w  
Application period 2 a  
Species rat  
Source Literature  
Findings: Damage to the mucous membranes in nose, throat and lungs.

Degeneration of the olfactory epithelium  
The data mentioned above refer to the component methyl methacrylate

**Chronic toxicity**  
Application method inhalation  
Dosage 500 to 1000 ppm  
Application interval 6 h/d 5 d/w  
Application period 2 a  
Species mouse  
Source Literature  
Findings: Damage to the mucous membranes in nose, throat and lungs.

Degeneration of the olfactory epithelium  
The data mentioned above refer to the component methyl methacrylate

**Further information on toxicology**  
Methaemoglobinaemia possible after skin contact  
Symptoms at poisoning may not occur for many hours  
Liver damage is possible  
The data mentioned above refer to the component N,N-dimethyl-p-toluidine  
There are no toxicological data available for the product as such  
Carefully avoid contact with skin and eyes as well as inhalation of product vapors

## 12. ECOLOGICAL INFORMATION

### Information on elimination (persistence and degradability)

**Biodegradability**  
Duration of test 30.7 %  
Method OECD 301 C 28 d > 95 %  
Method test according to Zahn/Wellens  
Source Literature  
This product is not readily biodegradable to OECD criteria but is inherently biodegradable

**Ecotoxicological effect**  
Fish toxicity (LC50)  
Length of exposure > 79 mg/l  
Species oncorhynchus mykiss rainbow trout  
Method OECD 203 / ISO 7346 / EEC 84 / 449 / V C1

Source Literature  
Fish toxicity (NOEC)  
40 mg/l  
Length of exposure 96 h  
Species oncorhynchus mykiss rainbow trout  
Method OECD 203 / ISO 7346 / EEC 84 / 449 / V C1  
Source Literature  
Daphnia toxicity (EC50)  
Length of exposure 69 mg/l  
Species daphnia magna 48 h  
Method OECD 202 / ISO 6431 / EEC 84 / 449 / V C21  
Source Literature  
Algae toxicity (EC3)  
Length of exposure 37 mg/l  
Species scendesmus quadricauda 8 d  
Method DIM 38412 part 9  
Source Literature  
Algae toxicity (EC50)  
Length of exposure 170 mg/l  
Species scendesmus quadricauda 4 d  
Method OECD 201 / ISO 8692 / EEC 88 / 302 / V C  
Source Literature  
Bacteria toxicity  
Species pseudomonas putida 100 mg/l

Further ecological information

#### **Further information on ecology**

The data mentioned above refer to the component methyl methacrylate. Do not allow to enter soil, waterways or waste water

### **13. DISPOSAL INFORMATION**

#### **Product**

Waste is hazardous and therefore particularly to be kept under surveillance. It must be disposed of in accordance with the regulations after consultation of the competent local authorities

and the disposal company in a suitable and licensed facility.

#### **Transport Information**

DOT INFORMATION - 49 CFR 172.01

DOT DESCRIPTION:

CONSUMER COMMODITY - ORM-D

### **14. REGULATORY INFORMATION**

#### **Hazardous component(s) for labeling**

Contains:

Methyl methacrylate

N,N-dimethyl-para-toluidine

#### **Hazard symbols**

Xi irritant

F Highly flammable

#### **R-phrases**

11 Highly flammable

36/37/38 Irritating to eyes, respiratory system and skin

43 May cause sensitization by skin contact.

#### **S-phrases**

9 Keep container in a well-ventilated place

16 Keep away from sources of ignition -- No Smoking

29 Do not empty into drains

33 Take precautionary measures against static discharges

### **15. OTHER INFORMATION**

The product is normally supplied in a stabilized form. If the permissible storage period and / or storage temperature is noticeably exceeded, the product may polymerize with heat evolution. This data is based on our present knowledge of the product. However, no warranty or guaranty, express or implied, is made regarding the information or performance of the product. Since the conditions of use are beyond our control, all risks associated with its use are assumed by the user. Kane Enterprises assumes no liability for incidental, consequential or direct damages of any kind, no matter what the cause.

**PRODUCT REFERENCE: POWDER COMPONENT DEMOTEC) 95®/EASY BLOC®,**

Dear Customer:

In compliance with the Occupational Safety and Health Administration Hazard Communication Standard, 29 CFR 1910.1200, we are providing a Material Safety Data Sheet (Version 1.898) for DEMOTEC) 95®/EAST BLOC®. This MSDS also provides information on any toxic chemicals subject to the reporting requirements of Section 13 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

If this product, or any components of it, is considered hazardous or carcinogenic under the OSHA Hazard Communication Standard, information is provided in the "HAZARDS IDENTIFICATION" Section.

If you have any questions, please contact our office.

Sincerely yours,

AG-TEK® DIVISION/KANE ENTERPRISES, INC.  
George K. Kane  
President

**POWDER COMPONENT DEMOTEC) 95®/EASY BLOC®,  
MATERIAL SAFETY DATA SHEET**

**Emergency Contact**

**Chemtrec 1-800-424-9300**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Material Identity**

**Product Name:** DEMOTEC 95®, (HC200, HC214, HC500 and HC570)

EASY BLOC®, (EB104, EB112 and EB250)

General or Generic ID: Acrylic Polymer on the basis of methyl methacrylate

**NFPA RATINGS for USA (Scale 0 - 4)**

Health-1 Flammability-1 Reactivity-0

**MANUFACTURED BY:**

Demotec

Siegfried Demel

Bretanostrabe 21

D-61130 Nidderau, Germany

Tel: 0049-6187-21200

**DISTRIBUTED IN USA BY:**

Kane Enterprises, Inc.

P.O. Box 1043

Sioux Falls, SD 57101-1043

Phone: 1-800-336-8577

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical characterization**

Acrylic polymer on the basis of methyl methacrylate

**Hazardous Ingredient(s)**

Dibenzoylperoxide

Concentration 1 to 3%

CAS Number 94-36-0

Hazard symbols E, Xi

R-phrases 2,7,36,43

**3. HAZARDS IDENTIFICATION**

May cause sensitization by skin contact

**4. FIRST AID MEASURES**

**EYES**

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**SKIN**

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media**

Water spray jet

Foam

Dry Powder

Carbon dioxide

## Unsuitable extinguishing media for safety reasons

Full water jet

## 6. ACCIDENTAL RELEASE MEASURES

### Methods of cleaning/adsorption

Take up mechanically

Dispose of according to regulations

## 7. HANDLING AND STORAGE

### Handling

Avoid dust formation

Guarantee suitable sucking off during dust development

### Fire and explosion protection

At higher quantities take measures against electrostatic discharges.

In the event of a fire, endangered product should be cooled with water.

### Storage

Requirements for storage areas and containers

Storage dry

Containers should be kept closed

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components or products of decomposition according to point 10, with limit values related to the place of work which require monitoring.**

### TLV (short term)-value for

CAS Number	89-62-6		
Methyl methacrylate	510mg/m <sup>3</sup>	125 m/m <sup>3</sup>	1989

### TLV (long term)-value for

CAS Number	80-62-6		
Methyl methacrylate	410 mg/m <sup>3</sup>	100 ml/m <sup>2</sup>	1989

### Annotations (Notes) Observations

Sensitizing

A hazard of fruit damage does not exist during compliance with the MAK worth

### MAK (DFG) for

CAS Number	94-36-0		
Dibenzoylperoxide	5 mg/m <sup>3</sup>	100ml/m <sup>2</sup>	

### General Protective Equipment

**General Protective Measures:** Do not inhale dust

**Hygiene measures:** Follow the usual good standards of occupational hygiene.

**Respiratory protection:** Filtering half mask during dust formation above the MAK worth

**Hand protection:** Protective gloves

**Eye protection:** Protective goggles

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form: Powder

Odor: Very weak odor

Color: Grey changes in physical state

### Softening point:

**Flash point (Method ASTM-D 1929-68):** >250 deg. C

**Ignition temperature (Method ASTM-D 1929-68):** >400 deg. C

**Lower explosion limit:** No information

**Upper explosion limit:** No information

**Melting temperature:** Not determined

**Density:** Not applicable

**Bulk density:** Approx. 500 to 550 kg/m<sup>3</sup>

**Water solubility:** Insoluble

**Solubility/qualitative:** Not determined

**pH-value:** Not applicable

**Viscosity Dynamic:** Not applicable

### Further information

Dust explosions are generally to be expected with dust-forming organic products

## 10. STABILITY AND REACTIVITY

### Hazardous reactions

No hazardous reactions known

### Hazardous decomposition products

No hazardous products during normal appropriation

## 11. TOXICOLOGICAL INFORMATION

### Acute oral toxicity

There are no toxicological data available for this product

### Sensitization

Allergic reactions on humans was recorded

This information applies to the component Dibenzoyl peroxide

### Carcinogenicity

The substance shows tumor promoting properties in animal test.

The data refers to the component Dibenzoyl peroxide.

### Further information on toxicology

The fine particles contained in the product may cause mechanical irritations of the skin, eyes and mucous membranes.

## 12. ECOLOGICAL INFORMATION

### Further ecological information

Do not allow to enter soil, waterways or waste water.

## 13. DISPOSAL INFORMATION

### Product

Can be incinerated together with household refuse in accordance with the regulations and after consultation with the disposal agency and the relevant authorities.

### Transport Information

DOT INFORMATION - 49 CFR 172.01

DOT DESCRIPTION: CONSUMER COMMODITY - ORM-D

### REGULATORY INFORMATION

Hazardous component(s) for labeling

Contains Dibenzoylperoxide

**Hazard symbols**

Xi irritant

**R-phrases**

43 May cause sensitization by skin contact.

**S-phrases**

36/37 Protective gloves and protective clothing

**Danger Category:** Self classification.

**Rubbish Type:** Other hardened synthetic waste.

**14. OTHER INFORMATION FOR SILICA QUARTZ POWDER**

**No other information**

This data is based on our present knowledge of the product.

However, no warranty or guaranty, express or implied, is made regarding the information or performance of the product. Since the conditions of use are beyond our control, all risks associated with its use are assumed by the user. Kane Enterprises assumes no liability for incidental, consequential or direct damages of any kind, no matter what the cause.