

## SAFETY DATA SHEET

Issuing date 07-Jun-2015

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Code 004185 Product name 004185

Relevant identified uses of the substance or mixture and uses advised against

Recommended use Additive

Uses advised against No information available

Details of the supplier of the safety data sheet

**Company** 

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**Emergency telephone number** 

Markem-Imaje S.A.S.: (33) 4 75 75 55 00

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## **Section 2: HAZARDS IDENTIFICATION**

## Classification of the substance or mixture REGULATION (EC) No 1272/2008

Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity - single exposure	Category 3 - (H336)
Flammable liquids	Category 2 - (H225)

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16 Symbol(s)

Xi - Irritant

F - Highly flammable

### R-code(s)

F;R11 - Xi;R36 - R66 - R67

#### Label elements

#### **Product identifier**

205-500-4







#### hazard statements

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapour

EUH066 - Repeated exposure may cause skin dryness or cracking

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapours/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/ .? /equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

#### Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

## EYES

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

#### **FIRE**

In case of fire: Use CO2, dry chemical, or foam for extinction

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTRE or doctor/physician if you feel unwell

#### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed Store locked up

#### Other hazards

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Chemical nature of the preparation

Substance.

Chemical Name	EC-No	CAS-No	Weight %	Classification	<b>GHS Classification</b>
Ethylacetate	205-500-4	141-78-6	90 - 100	F; R11 Xi; R36 R66 R67	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225) (EUH066)

For the full text of the R-phrases mentioned in this Section, see Section 16

## **Section 4: FIRST AID MEASURES**

Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance. If symptoms persist, call a physician.

**Inhalation** Move to fresh air. If symptoms persist, call a physician. Immediate medical attention is not

required. Move to fresh air in case of accidental inhalation of vapours.

**Skin contact** Wash off immediately with plenty of water. Immediate medical attention is not required. Wash

off immediately with soap and plenty of water removing all contaminated clothes and shoes. If

skin irritation persists, call a physician.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Immediately flush with plenty of water. Keep eye wide open while

rinsing.

Ingestion Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT

induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give

anything by mouth to an unconscious person. Consult a physician.

**Protection of first-aiders** Remove all sources of ignition. Use personal protective equipment.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

## **Section 5: FIRE FIGHTING MEASURES**

#### **Extinguishing media**

Suitable extinguishing media

water. foam. dry chemical. Carbon dioxide (CO<sub>2</sub>). water spray. alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

high volume water jet

Special hazards arising from the substance or mixture

flammable Keep product and empty container away from heat and sources of ignition Risk of ignition

Advice for fire-fighters

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## Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

#### Section 6: ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

#### Personal precautions

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Beware of vapours accumulating to form explosive concentrations.

#### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal

binder, sawdust). Pick up and transfer to properly labelled containers. Soak up with inert

absorbent material. Take precautionary measures against static discharges.

#### Section 7: HANDLING AND STORAGE

#### Precautions for safe handling

#### Handling

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

#### Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

#### Conditions for safe storage, including any incompatibilities

#### Storage

Keep tightly closed in a dry and cool place. Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition. Keep away from heat. Protect from light.

#### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Ethylacetate		TWA: 200 ppm	TWA: 400 ppm	TWA: 400 ppm	TWA: 400 ppm
141-78-6		STEL: 400 ppm	TWA: 1400 mg/m <sup>3</sup>	TWA: 1460 mg/m <sup>3</sup>	TWA: 1500 mg/m <sup>3</sup>
			_	_	Ceiling / Peak: 800 ppm
					Ceiling / Peak: 3000
					mg/m³

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Ethylacetate	=	TWA: 400 ppm	-	TWA: 300 ppm	TWA: 150 ppm
141-78-6				TWA: 1100 mg/m <sup>3</sup>	TWA: 540 mg/m <sup>3</sup>
				STEL: 500 ppm	_
				STEL: 1800 mg/m <sup>3</sup>	

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Ethylacetate	TWA: 300 ppm	TWA: 400 ppm	STEL: 600 mg/m <sup>3</sup>	TWA: 150 ppm	TWA: 200 ppm
141-78-6	TWA: 1050 mg/m <sup>3</sup>	TWA: 1400 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 550 mg/m <sup>3</sup>	STEL: 400 ppm
	STEL 600 ppm	STEL: 800 ppm	_	STEL: 187.5 ppm	
	STEL 2100 mg/m <sup>3</sup>	STEL: 2800 mg/m <sup>3</sup>		STEL: 687.5 mg/m <sup>3</sup>	

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration** 

(PNEC)

No information available

**Exposure controls** 

**Engineering measures** Ensure adequate ventilation. Use explosion-proof equipment.

Personal protective equipment

Eye/face protection

tightly fitting safety goggles. face-shield.

Hand protection Skin and body protection

Wear protective gloves. impervious butyl rubber gloves. antistatic boots. Wear fire/flame resistant/retardant clothing. impervious gloves. long sleeved

clothing. Chemical resistant apron. apron.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate

Boiling point/range

certified respirators.

**Environmental exposure controls** Do not allow material to contaminate ground water system.

## **Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Physical state liquid Odour esters

**Odour Threshold** No information available Colour colourless clear

>75°C / >167°F

No information available

No information available

No information available **Property Values** pН

Melting/freezing point <-80°C / <-112°F >-4°C / >25°F Flash point

Flammability Limits in Air

**Autoignition temperature** 

2.0 lower flammability limit

upper flammability limit 11.5 Solubility in other solvents

>400°C / >752°F Decomposition

temperature

No information available No information available Dynamic viscosity Kinematic viscosity

No information available **Oxidizing properties** 

OTHER INFORMATION

Vapour pressure 9.7 kPa (20 °C)

Relative vapour density >1

0.905 (20 °C) **Density** Water solubility partly soluble Partition coefficient: n-octanol/water  $\log P(o/w) = 0.66$ 

## **Section 10: STABILITY AND REACTIVITY**

#### Reactivity

no data available

#### **Chemical stability**

Stable.

**Explosion Data** 

Sensitivity to Mechanical Impact none Sensitivity to Static Discharge yes.

#### Possibility of hazardous reactions

#### Hazardous polymerisation

no.

#### **Hazardous reactions**

strong oxidizing agents.

#### Conditions to avoid

Heat, flames and sparks.

#### Incompatible materials

Incompatible with oxidizing agents. Incompatible with strong acids and bases.

#### **Hazardous decomposition products**

none.

## **Section 11: TOXICOLOGICAL INFORMATION**

#### The following values are calculated based on chapter 3.1 of the GHS document

5,620.00mg/kg

#### **Acute Toxicity**

Inhalation May cause irritation of respiratory tract. May cause irritation of respiratory tract. May be harmful

if inhaled.

Skin contact Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing

properties of the product.

Eye contact Irritating to eyes. May cause irreversible eye damage.

Ingestion Harmful if swallowed. May be harmful if swallowed. Ingestion may cause irritation to mucous

membranes.

#### **Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethylacetate	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit)	
		> 20 mL/kg (Rabbit)	

#### **Chronic toxicity**

Inhalation of vapours in high concentration may cause irritation of respiratory system. Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Avoid repeated exposure.

## **Section 12: ECOLOGICAL INFORMATION**

#### Biodegradation

Some ingredients of this material have some potential to biodegrade, but most ingredients have a limited potential to biodegrade or have not been tested.

Chemical Name	CAS-No	log Pow	Toxicity to Algae	Toxicity to microorganisms	German Water Class (VwVwS) Annex 2
Ethylacetate	141-78-6	0.6	3300: 48 h		95
			Desmodesmus		
			subspicatus mg/L EC50		

Chemical Name	CAS-No	Daphnia Magna (Water Flea)	Toxicity to fish
Ethylacetate	141-78-6	560: 48 h Daphnia magna	220 - 250: 96 h Pimephales promelas mg/L LC50 flow-
		mg/L EC50 Static	through
			352 - 500: 96 h Oncorhynchus mykiss mg/L LC50 semi-
			static
			484: 96 h Oncorhynchus mykiss mg/L LC50 flow-through

## **Section 13: DISPOSAL CONSIDERATIONS**

#### Waste treatment methods

Waste from Residues/Unused

**Products** 

Dispose of in accordance with local regulations

## Section 14: TRANSPORT INFORMATION

#### IMDG/IMO

**14.1. UN-No 14.2. Proper shipping name**UN1173
Ethyl acetate

 14.3. Hazard Class
 3

 14.4. Packing group
 II

 14.5. Marine pollutant EmS
 none.

 F-E, S-D

<u>ADR</u>

**14.1. UN-No** UN1173

14.2.
Proper shipping name

Proper shipping name Ethyl acetate

14.3. Hazard Class 3
14.4. Packing group || Classification Code || F1

IATA

**14.1. UN-No 14.2. Proper shipping name**UN1173
Ethyl acetate

## **Section 14: TRANSPORT INFORMATION**

**14.3. Hazard Class** 3 **14.4. Packing group** II

## **Section 15: REGULATORY INFORMATION**

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

In accordance with Regulation (EC) No. 1272/2008

#### **International Inventories**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### **Chemical Safety Assessment**

#### **Section 16: OTHER INFORMATION**

#### Key or legend to abbreviations and acronyms

Full text of R-phrases referred to under sections 2 and 3

R11 - Highly flammable

R36 - Irritating to eyes

R66 - Repeated exposure may cause skin dryness or cracking

R67 - Vapours may cause drowsiness and dizziness

Issuing date 07-Jun-2015

Reason for revision All

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**End of Safety Data Sheet**