

Safety data sheet

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name **MARBOCOTE 227**

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

Intended use **RELEASE AGENT**

Identified Uses	Industrial	Professional	Consumer
RELEASE AGENT	ERC: 4 PROC: 1, 10, 14, 2, 3, 4, 6, 7, 8b	ERC: 8a, 8d PROC: 1, 10, 11, 14, 2, 3, 4, 6, 8a, 8b	-

Uses Advised Against
UNSUITABLE FOR THE ' DO-IT-YOURSELF '

1.3. Details of the supplier of the safety data sheet

Name **MARBO SA**
Full address **Strada 16, Cluj Napoca, Romania**
District and Country **Cluj Napoca, Romania**
Tel. **+(360,) +1% ' \$**
Fax **+(360,) +1% (\$**

e-mail address of the competent person responsible for the Safety Data Sheet **contact.marbo@marbo.ro**

1.4. Emergency telephone number

For urgent inquiries refer to **+(360,) +1% ' \$**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments

Hazard classification and indication:

Flam. Liq. 2 H225
Asp. Tox. 1 H304
Skin Irrit. 2 H315
STOT SE 3 H336
Aquatic Chronic 2 H411
EUH066

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols: F-Xn-N

R phrases: 11-38-51/53-65-67

SECTION 2. Hazards identification ... / >>

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements:

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to hazardous or special waste collection point.

Contains: ISO-ALKANES C7-C9

2.3. Other hazards

Information not available

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS			
EC 920-750-0	50 - 60	R66, R67, F R11, N R51/53, Xn R65, Note P	Flam. Liq. 2 H225, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, Nota H P
Reg. no. 01-2119473851-33			
ISO-ALKANES C7-C9			
EC 921-728-3	40 - 50	R67, F R11, N R51/53, Xi R38, Xn R65, Note H	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 2 H411, Nota H
Reg. no. 01-2119471305-42			

F= HIGHLY FLAMMABLE,N= DANGEROUS FOR THE ENVIRONMENT,Xn= HARMFUL,Xi= IRRITANT

Note: Upper limit is not included into the range

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by the contained substances, see chap. 11.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire.

Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:
 United Kingdom

Éire
 OEL EU

TLV-ACGIH

EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended). Code of Practice Chemical Agent Regulations 2011.
 Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
 ACGIH 2012

ISO-ALKANES C7-C9

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV (ACGIH)		1200	241		

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Effects on workers					
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	699				
			mg/kg	mg/kg				
Inhalation			VND	608			VND	2035
			mg/m3	mg/m3			mg/m3	mg/m3
Skin			VND	699			VND	773
			mg/kg	mg/kg			mg/kg	mg/kg

SECTION 8. Exposure controls/personal protection ... / >>

HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV (ACGIH 1)		1400	326		

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	699				
Inhalation			VND	608			VND	2035
			mg/m3	mg/m3			mg/m3	mg/m3
Skin			VND	699			VND	773
			mg/kg	mg/kg			mg/kg	mg/kg

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Information not available

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	LIQUID
Colour	COLOURLESS
Odour	CHARACTERISTIC
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	> 45 °C
Boiling range	Not available
Flash point	-1 °C
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	>1
Relative density	0,733 kg/l
Solubility	INSOLUBLE
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 1999/13/EC) : 724,00 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory tract. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

ISO-ALKANES C7-C9

LD50 (Oral)	>5.000 mg/kg Rat
LD50 (Dermal)	>2.000 mg/kg Rabbit
LC50 (Inhalation)	>21 mg/l/4h Rat

HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS

LD50 (Oral)	>5.000 mg/kg Rat
LD50 (Dermal)	>2.800 mg/kg Rabbit
LC50 (Inhalation)	>23,3 mg/l/4h Rat

SECTION 12. Ecological information

12.1. Toxicity

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

ISO-ALKANES C7-C9

LC50 - for Fish	18,4 mg/l <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	2,4 mg/l <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	29 mg/l <i>Pseudokirchneriella subcapitata</i>

HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS

LC50 - for Fish	>13,4 mg/l <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	3 mg/l <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	>10 mg/l <i>Pseudokirchneriella subcapitata</i>

SECTION 12. Ecological information ... / >>

12.2. Persistence and degradability

ISO-ALKANES C7-C9
Entirely biodegradable

HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS
Rapidly biodegradable

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations



13.1. Waste treatment methods

Waste transportation may be subject to ADR restrictions.



SECTION 14. Transport information

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.


Road and rail transport:

ADR/RID Class:	3	UN:	1993	
Packing Group:	II			
Label:	3			
Nr. Kemler:	33			
Special Provision:	640D			
Limited Quantity	1 L			
Tunnel restriction code	D/E			
Proper Shipping Name:	Flammable liquid n.o.s. (Aliphatic hydrocarbons, octanes) (ISO-ALKANES C7-C9; HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS)			

Carriage by sea (shipping):

IMO Class:	3	UN:	1993	
Packing Group:	II			
Label:	3			
EMS:	F-E, <u>S-E</u>			
Marine Pollutant	YES			
Proper Shipping Name:	Flammable liquid n.o.s. (Aliphatic hydrocarbons, octanes) (ISO-ALKANES C7-C9; HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS; ISO-ALKANES C7-C9)			

Transport by air:

IATA:	3	UN:	1993	
Packing Group:	II			
Label:	3			
Cargo:				
Packaging instructions:	364	Maximum quantity:	60 L	
Pass.:				
Packaging instructions:	353	Maximum quantity:	5 L	
Proper Shipping Name:	Flammable liquid n.o.s. (Aliphatic hydrocarbons, octanes) (ISO-ALKANES C7-C9; HYDROCARBONS, C7-C9, N-ALKANES, ISOALKANES, CYCLICS)			

SECTION 15. Regulatory information

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

Seveso category

7b,9ii

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point

3-40

Substances in Candidate List (Art. 59 REACH)

None

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2	Flammable liquid, category 2
Asp. Tox. 1	Aspiration hazard, category 1
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R11	HIGHLY FLAMMABLE.
R38	IRRITATING TO SKIN.
R51/53	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R65	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.
R66	REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)

SECTION 16. Other information ... / >>

- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
9. The Merck Index. - 10th Edition
10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique (toxicological sheet)
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
15. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.