1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name : MACKAMIDE SMV

Details of the supplier of the safety data sheet

Company : RHODIA INC;
8, Cedar Brook Drive;
NJ 08512 Cranbury;
United States;
Tel. : +1 609 860 4000;
Fax : +1 609 860 2241

Emergency telephone number : MULTI LINGUAL EMERGENCY NUMBER (24/7)
Europe/America/Africa : +44 1235 239 670 (UK)
Middle East & Africa speaking Arabic : +44 1235 239 671 (UK)
Asia Pacific : +65 3158 1074 (Singapore)
China : +86 10 5100 3039 (Beijing)

E-mail address : information.fds@eu.rhodia.com

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity, Dermal, Category 5	H313: May be harmful in contact with skin.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Acute aquatic toxicity, Category 3	H402: Harmful to aquatic life.

Label elements

Hazardous products which must be listed on the label:

- 111-57-9 N-(2-hydroxyethyl)stearamide
- 141-43-5 2-aminoethanol

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Pictogram :

Signal word : Danger

Hazard statements :

H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H402	Harmful to aquatic life.

Precautionary statements :

General:
None.

Prevention:

P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/ eye protection/ face protection.

Response:

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.

Storage:
None.

Disposal:

P501	Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical nature : Surfactant

CAS-No. : 111-57-9

Information on Components and Impurities

Chemical Name	CAS-No.	Identification number	GHS Classification	Concentration [%]
N-(2-hydroxyethyl)stearamide	111-57-9		H313 : Acute toxicity, Dermal, Category 5 H315 : Skin irritation, Category 2 H318 : Serious eye damage, Category 1 H402 : Acute aquatic toxicity, Category 3	>= 90 - < 95
2-aminoethanol	141-43-5		H302 : Acute toxicity, Oral, Category 4 H332 : Acute toxicity, Inhalation, Category 4 H312 : Acute toxicity, Dermal, Category 4 H314 : Skin corrosion, Category 1B H402 : Acute aquatic toxicity, Category 3	>= 1 - < 5

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Description of necessary first-aid measures

General advice : Show this safety data sheet to the doctor in attendance.
First aider needs to protect himself.
Place affected clothing in a sealed bag for subsequent decontamination.

Inhalation : not applicable

Skin contact : In case of skin contact
Take off contaminated clothing and shoes immediately.
Wash off with soap and water.
If symptoms persist, call a physician.

Eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

Ingestion : Do not induce vomiting without medical advice.
Drink water as a precaution.
If symptoms persist, call a physician.

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	:	The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	On combustion forms: Carbon oxides nitrogen oxides (NOx).

Advice for firefighters

Special protective equipment for firefighters	:	Self-contained breathing apparatus (EN 133) Full protective suit

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Wear suitable protective equipment.
Methods for Cleaning or Taking Up	:	Shovel into suitable container for disposal. Keep in suitable, closed containers for disposal. Flush with plenty of water.
Additional advice	:	The product should not be allowed to enter drains, water courses or the soil. Material can create slippery conditions.

7. HANDLING AND STORAGE

Handling

Advice on safe handling and usage	:	Avoid contact with skin and eyes.

Storage conditions

Recommended	:	Keep only in the original container. Keep tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	Value type	Value	Update	Basis
2-aminoethanol	PC-TWA	8 mg/m3	2002-04-08	China. Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents
2-aminoethanol	PC-STEL	15 mg/m3	2002-04-08	China. Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents

Components with workplace foreign Control Parameters

Components	Value type	Value	Update	Basis
2-aminoethanol	TWA	3 ppm	2007-01-01	USA. ACGIH Threshold Limit Values (TLV)
2-aminoethanol	STEL	6 ppm	2007-01-01	USA. ACGIH Threshold Limit Values (TLV)

Control measures

Engineering measures : Avoid splashes.
Apply technical measures to comply with the occupational exposure limits.

Personal protective equipment

Respiratory protection : Use a respirator with an approved filter if a risk assessment indicates this is necessary.

Hand protection : Where there is a risk of contact with hands, use appropriate gloves
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Gloves must be inspected prior to use.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Safety glasses
In case of contact through splashing:
Wear face-shield and protective suit.

Goggles

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Remove and wash contaminated clothing.

Hygiene measures	:	Emergency equipment immediately accessible, with instructions for use. Ensure that eyewash stations and safety showers are close to the workstation location. Regular cleaning of equipment, work area and clothing. Use clean, well-maintained personal protection equipment. Store personal protection equipment in a clean location away from the work area. Contaminated work clothing should not be allowed out of the workplace. Before reuse, thoroughly clean personal protection equipment Wash hands before breaks and immediately after handling the product. Shower or bathe at the end of working. When using do not eat, drink or smoke.
Protective measures	:	The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	:	Pastilles
Physical state	:	solid
Colour	:	white light yellow
Odour	:	characteristic
Odour Threshold	:	no data available

Safety data

pH	:	ca. 10.0
Melting point/range	:	95 °C
Boiling point/boiling range	:	> 150 °C
Flash point	:	> 150 °C closed cup
Flammability (solid, gas)	:	no data available
Autoignition temperature	:	no data available
Water solubility	:	dispersible
Solubility in other solvents	:	no data available

Partition coefficient: n-octanol/water	:	no data available
Vapour pressure	:	no data available
Evaporation rate	:	no data available
Relative vapour density	:	> 1
Density	:	no data available
Oxidation/Reduction Potential	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Explosive properties	:	no data available
Thermal decomposition	:	no data available
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available

10. STABILITY AND REACTIVITY

Chemical stability	:	Stable at room temperature.
Hazardous reactions		
Conditions to avoid	:	Avoid excessive heat for prolonged periods of time.
Materials to avoid	:	Strong oxidizing agents

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity	:	no data available Acute toxicity estimate : 16,667 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate (dust/mist) : 50 mg/l Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate : 2,480 mg/kg Method: Calculation method

Acute toxicity (other routes of administration)	:	no data available
Aspiration toxicity	:	no data available

Skin corrosion/irritation

Skin irritation	:	Irritating to skin.

Serious eye damage/eye irritation

Eye irritation	:	Risk of serious damage to eyes.

Respiratory or skin sensitization

Sensitisation	:	no data available

Repeated dose toxicity

Repeated dose toxicity	:	no data available

STOT

STOT - single exposure	:	no data available
STOT - repeated exposure	:	no data available

Carcinogenicity

Carcinogenicity	:	no data available

Mutagenicity

Genotoxicity in vitro	:	no data available
Genotoxicity in vivo	:	no data available

Reproductive toxicity

Reproductive toxicity	:	no data available

12. ECOLOGICAL INFORMATION

Ecotoxicity assessment

Ecotoxicity assessment	:	no data available

Persistence and degradability

Biodegradability

Biodegradability	:	Expected to be biodegradable

Bioaccumulation

Bioconcentration factor (BCF)	:	no data available

Other adverse effects

Environment assessment	:	Not classified as Dangerous for the Environment, according to EC criteria

13. DISPOSAL CONSIDERATIONS

Product Disposal

Advice on Disposal	:	Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

ADR
not regulated

RID
not regulated

IMDG
not regulated

IATA
not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

15. REGULATORY INFORMATION

Following last version of regulations are applicable for the chemical classification, SDS and label:
-General Rule for classification and hazard communication of chemicals, GB 13690
-Series standards of Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB 20576~GB 20602)
-General rules for preparation of precautionary label for chemicals, GB 15258
-Safety data sheet for chemical products—Content and order of sections, GB/T 16483

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H402	Harmful to aquatic life.

Full text of P-Statements referred to under sections 2 and 3.

P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P501	Dispose of contents/ container to an approved waste disposal plant.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in an other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.