

Safety Data Sheet dated 9/11/2018, version 3

1. IDENTIFICATION

Product identifier Mixture identification: Trade name: A-96 Other means of identification: P54012-NA MSDS code: Recommended use of the chemical and restrictions on use Recommended use: Solvent Professional uses Industrial uses Restrictions on use: No uses advised against are identified. Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party Company: Dysol Inc. - 791 Westport Parkway - Fort Worth, TX 76177 / Phone: 1-817-335-1826 / csr-na@socomore.com/ Fax Number: 817-335-2405 Distributor: SOCOMORE S.A.S. - Zone Industrielle du Prat - CS 23707 - 56037 VANNES CEDEX - France - Tel : +33 (0)2 97 43 76 83 - Fax : +33 (0)2 97 54 20 26 Distributor: Socomore Ltd - 5, Coe Avenue - Loughborough - Leicestershire - LE11 4SE - UK - Tel: +44 1509 262040 - Fax: +44 1509 262046 Distributor: Socomore Iberia - Calle Diputacio, 260 - 08007 Barcelona - Espana - Tel: +34 917 693 962 - Fax: +34 902 908 966 Distributor: MagChem Inc. 1271, rue Ampere, suite 101, Boucherville, QC, J4B 5Z5 Canada -Tel: 1-450 641 8500 - Fax: 1-450 655 1717 Distributor: Socomore GmbH - c/o MAZARS GmbH - Theodor-Stern-Kai 1 - 60596 Frankfurt am Main - Deutschland - Tel: +49 (0)89 20 70 28 83 - Fax: +49 (0) 89 88 91 98 16 Distributor: Socomore Trading Shangai - 355 East Kang Qiao Road - Kang Qiao Industrial Zone - Pudong - 201315 Shangai - Tel: 862158131133 - Fax: 862158131933 Dystrybutor : SOCOMORE SPzoo - UI. Piekna 18, 00-549 Warszawa Polska - Tel : +48 608

454 114 - Fax : +48 (22) 621 61 09

Competent person responsible for the safety data sheet:

techdirsocomore@socomore.com

Emergency phone number

CHEMTEL: 1-800-255-3924 (USA) / CANUTEC: 1-613-996-6666 (CANADA)

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

- Warning, Met. Corr. 1, May be corrosive to metals.
- Warning, Acute Tox. 4, Harmful if swallowed.
- Warning, Acute Tox. 4, Harmful in contact with skin.



Warning, Acute Tox. 4, Harmful if inhaled.

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Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.

Danger, Eye Dam. 1, Causes serious eye damage.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Label elements Hazard pictograms:



Danger Hazard statements: H290 May be corrosive to metals.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P234 Keep only in original container.

P260 Do not breathe spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER if you feel unwell.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

P405 Store locked up.

P406 Store in corrosive resistant container.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Hazards not otherwise classified identified during the classification process:

None

Ingredient(s) with unknown acute toxicity:

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

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Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 90% 2-AMINOETHANOL

REACH No.: 01-2119486455-28, CAS: 141-43-5, EC: 205-483-3

- A.1/4/Inhal Acute Tox. 4 H332
- A.1/4/Dermal Acute Tox. 4 H312
- A.1/4/Oral Acute Tox. 4 H302
- A.2/1B Skin Corr. 1B H314

US-HAE/C3 Aquatic Chronic 3 H412

4. FIRST-AID MEASURES

Description of necessary measures In case of skin contact: Immediately take off all contaminated clothing. OBTAIN IMMEDIATE MEDICAL ATTENTION. Remove contaminated clothing immediately and dispose off safely. After contact with skin, wash immediately with soap and plenty of water. In case of eyes contact: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately. Protect uninjured eye. In case of Ingestion: Do NOT induce vomiting. Give nothing to eat or drink. In case of Inhalation: If breathing is irregular or stopped, administer artificial respiration. In case of inhalation, consult a doctor immediately and show him packing or label. Most important symptoms/effects, acute and delayed None Indication of immediate medical attention and special treatment needed In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Treatment: No particular treatment.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water. Carbon dioxide (CO2). Unsuitable extinguishing media: None in particular. Specific hazards arising from the chemical Do not inhale explosion and combustion gases. Burning produces heavy smoke. Hazardous combustion products: None

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Explosive properties: N.A. Oxidizing properties: N.A. Special protective equipment and precautions for fire-fighters Use suitable breathing apparatus . Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures Wear personal protection equipment. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation. Remove persons to safety. Use appropriate respiratory protection. See protective measures under point 7 and 8. Methods and materials for containment and cleaning up Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists. Do not use on extensive surface areas in premises where there are occupants. Use localized ventilation system. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contamined clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment. Conditions for safe storage, including any incompatibilities Do not pour the product into other containers. Always use the original container. Keep away from food, drink and feed. Incompatible materials: None in particular. Instructions as regards storage premises: Adequately ventilated premises.

Storage temperature:

Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

2-AMINOETHANOL - CAS: 141-43-5

- OEL Type: National - TWA(8h): 5.1 mg/m3 - Notes: Germany- Notes DFG, H, Y - OEL Type: National - TWA(8h): 2.5 mg/m3, 1 ppm - STEL: 7.6 mg/m3, 3 ppm -

Notes: France VLEC - TMP N2 49, 49 Bis

- OEL Type: EU - TWA(8h): 2.5 mg/m3, 1 ppm - STEL: 7.6 mg/m3, 3 ppm - Notes: Skin

- OEL Type: ACGIH - TWA(8h): 3 ppm - STEL: 6 ppm - Notes: Eye and skin irr

- OEL Type: National - TWA(8h): 2.5 mg/m3, 0.98 ppm - STEL: 7.6 mg/m3, 3 ppm - Notes: Netherland

- OEL Type: National - TWA(8h): 2.5 mg/m3, 1 ppm - STEL: 7.6 mg/m3, 3 ppm - Notes: Belgium

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- OEL Type: National - TWA(8h): 2.5 mg/m3, 1 ppm - STEL: 7.6 mg/m3, 3 ppm -Notes: UK **DNEL Exposure Limit Values** 2-AMINOETHANOL - CAS: 141-43-5 Worker Industry: 1 mg/kg - Consumer: 0.24 mg/kg - Exposure: Human Dermal -Frequency: Long Term, systemic effects Worker Industry: 3.3 mg/m3 - Consumer: 2 mg/m3 - Exposure: Human Inhalation -Frequency: Long Term, local effects Consumer: 3.75 mg/kg - Exposure: Human Oral - Frequency: Long Term, local effects **PNEC Exposure Limit Values** 2-AMINOETHANOL - CAS: 141-43-5 Target: Fresh Water - Value: 0.085 mg/l Target: Marine water - Value: 0.0085 mg/l Target: Freshwater sediments - Value: 0.425 mg/l Target: Marine water sediments - Value: 0.0425 mg/l Target: Microorganisms in sewage treatments - Value: 100 mg/l Target: Soil (agricultural) - Value: 0.035 mg/kg Target: PNEC intermittent - Value: 0.025 mg/l Appropriate engineering controls: None Individual protection measures Eye protection: Safety goggles (EN 166) Face protection shield. Use close fitting safety goggles, don't use eye lens. Protection for skin: Chemical protection clothing. (type 3 - EN14605) Chemical protection clothing. (type 6 - EN13034) Boots (NF EN13832-3) Protection for hands: Suitable gloves type: NF EN374 NR (natural rubber, natural latex). PVC (polyvinyl chloride). Butyl caoutchouc (butyl rubber). PVA (Polyvinyl alcohol). Respiratory protection: Use adequate protective respiratory equipment. Thermal Hazards: None

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Value	Method:	Notes
Appearance and colour:	Clear Colourless		
	liquid		
Odour:	N.A.		
Odour threshold:	N.A.		
pH:	12.5		
Melting point / freezing point:	Not Relevant		
Initial boiling point and boiling range:	111 165 175° C / 232 330 347 °F		



	1	
Flash Point (°F):	185° F (TCC)	
Flash point (°C):	85 °C (TCC)	
Evaporation rate:	0.156	
Solid/gas flammability:	Not Relevant	
Upper/lower flammability	1	
or explosive limits:		
Vapour pressure:	0.4	
Vapour density:	2.1	
Relative density:	1.015	
Solubility in water:	N.A.	
Solubility in oil:	N.A.	
Partition coefficient	N.A.	
(n-octanol/water):		
Auto-ignition temperature:	537° C /	
	1000° F	
Decomposition	N.A.	
temperature:		
Viscosity:	N.A.	
Explosive properties:	N.A.	
Oxidizing properties:	N.A.	

9.2. Other information

Properties	Value	Method:	Notes	
Miscibility:	N.A.			
Fat Solubility:	N.A.			
Conductivity:	N.A.			
Substance Groups relevant properties	N.A.			

10. STABILITY AND REACTIVITY

Reactivity Stable under normal conditions Chemical stability Stable under normal conditions Possibility of hazardous reactions None Conditions to avoid Stable under normal conditions. Incompatible materials None in particular. Hazardous decomposition products None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Toxicological information of the product: N.A. Toxicological information of the main substances found in the product: 2-AMINOETHANOL - CAS: 141-43-5 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat = 1089 mg/kg

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Test: LD50 - Route: Skin - Species: Rabbit > 1000 mg/kg
Test: LC50 - Route: Inhalation Dust > 1 mg/l - Duration: 4h
g) reproductive toxicity:
Test: NOAEL - Species: Rat = 225 MGKGBWDAY - Notes: development
Test: NOAEL - Species: Rat = 300 MGKGBWDAY - Notes: fertility
h) STOT-single exposure:
Test: C - Route: Inhalation Dust > 5 mg/l - Duration: 4h
i) STOT-repeated exposure:
Test: NOAEL - Route: Oral - Species: Rat = 300 mg/kg/d - Duration: > 75 days - Source: OECD 416, Experimental value - Notes: Effect: Body weight, weight of organs, consumption food
Test: NOAEC - Route: Inhalation - Species: Rat = 10 mg/m3 - Duration: 4 weeks (daily, 5 days/week) - Source: OECD 412, Experimental value - Notes: Effect: Lesions to the larynx, trachea and lungs
Test: NOEC - Route: Inhalation - Species: Rabbit = 150 mg/m3 - Duration: 4 weeks (daily, 5 days/week) - Source: OECD 412, Experiemental value - Notes: No adverse systemic effects
Substance(s) listed on the NTP report on Carcinogens: None.
Substance(s) listed on the IARC Monographs: None.
Substance(s) listed as OSHA Carcinogen(s): None.
Substance(s) listed as NIOSH Carcinogen(s): None.
ECOLOGICAL INFORMATION
Ecotoxicity
Adopt good working practices, so that the product is not released into the environment

12. EC

Adopt good working practices, so that the product is not released into the environment. 2-AMINOETHANOL - CAS: 141-43-5 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 349 mg/l - Duration h: 96 - Notes: Cyprinus carpio Endpoint: NOEC - Species: Fish = 1.2 mg/l - Duration h: 720 - Notes: Oryzias latipes Endpoint: EC50 - Species: Daphnia = 65 mg/l - Duration h: 48 Endpoint: NOEC - Species: Daphnia = 0.85 mg/l - Duration h: 504 Endpoint: NOEC - Species: Algae = 1 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata Endpoint: EC50 - Species: Algae = 2.5 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata c) Bacteria toxicity: Endpoint: EC50 - Species: bacteria > 1000 mg/l Persistence and degradability 2-AMINOETHANOL - CAS: 141-43-5 Biodegradability: Biodegradability rate - Test: N.A. - Duration: 21 days - %: > 90 -Notes: N.A. **Bioaccumulative potential** 2-AMINOETHANOL - CAS: 141-43-5 Log Pow - Test: N.A. -1.91 - Duration: N.A. - Notes: N.A. Mobility in soil 2-AMINOETHANOL - CAS: 141-43-5 Log Koc - Test: N.A. 1.17 - Duration: N.A. - Notes: N.A. Other adverse effects No harmful effects expected.



13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION



LIN number	
UN number ADR-UN Number:	UN2491
DOT number:	UN2491
IATA-UN Number:	UN2491
IMDG-UN Number:	UN2491
UN proper shipping name	
ADR-Shipping Name:	ETHANOLAMINE SOLUTION(2-AMINOETHANOL)
DOT-Shipping Name:	ETHANOLAMINE SOLUTION(2-AMINOETHANOL)
IATA-Shipping Name:	ETHANOLAMINE SOLUTION(2-AMINOETHANOL)
IMDG-Shipping Name:	ETHANOLAMINE SOLUTION(2-AMINOETHANOL)
Transport hazard class(es)	
ADR-Class:	8
DOT Hazard Class:	8
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8
Packing group	
ADR-Packing Group:	
DOT Packing group:	
IATA-Packing group:	
IMDG-Packing group:	III
Environmental hazards	
ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No
	II of MARPOL 73/78 and the IBC Code)
N.A.	
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Special precautions	
DOT Special provisions:	IB3, T4, TP1
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	F-A , S-B
IMDG-Subsidiary risks:	-
DOT Labels: ADR-Subsidiary risks: ADR-S.P.: ADR-Transport category (Tunn IATA-Passenger Aircraft: IATA-Subsidiary risks: IATA-Cargo Aircraft: IATA-S.P.: IATA-ERG: IMDG-EmS: IMDG-Subsidiary risks:	8 - IB3, T4, TP1 el restriction code): 3 (E) 852 - 856 A3 A803 8L F-A , S-B -

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IMDG-Stowage and handling:Category AIMDG-Segregation:SG35Q.L.: 5 LQ.E.: E1

15. REGULATORY INFORMATION

USA	- Federal regulations
	TSCA - Toxic Substances Control Act
	TSCA inventory: all the components are listed on the TSCA inventory.
	TSCA listed substances:
	2-AMINOETHANOL is listed in TSCA Section 8b.
	SARA - Superfund Amendments and Reauthorization Act
	Section 302 - Extremely Hazardous Substances: no substances listed.
	Section 304 - Hazardous substances: no substances listed.
	Section 313 - Toxic chemical list: no substances listed.
	CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
	No substances listed.
	CAA - Clean Air Act
	CAA listed substances:
	2-AMINOETHANOL is listed in CAA Section 111, Section 112(b) - HON.
	CWA - Clean Water Act
	CWA listed substances:
	None.
USA	- State specific regulations
	California Proposition 65
	Substance(s) listed under California Proposition 65:
	None.
	Massachusetts Right to know
	Substance(s) listed under Massachusetts Right to know:
	2-AMINOETHANOL.
	New Jersey Right to know
	Substance(s) listed under New Jersey Right to know:
	2-AMINOETHANOL.
	Pennsylvania Right to know
	Substance(s) listed under Pennsylvania Right to know:
	2-AMINOETHANOL.
	The following substance(s) in this product has/have an identification by CAS number
	either in countries not affected by the REACH regulation or in regulations not yet
	updated to reflect the new naming convention for hydrocarbon solvents:

16. OTHER INFORMATION

Full text of phrases referred to in Section 3:

H332 Harmful if inhaled.

H312 Harmful in contact with skin.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

Safety Data Sheet dated 9/11/2018, version 3 Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The

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information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet cancels and replaces any preceding release.

Dangerous Goods by Road.	
CAS: Chemical Abstracts Service (division of the American Chemical Society).	
CLP: Classification, Labeling, Packaging.	
DNEL: Derived No Effect Level.	
EINECS: European Inventory of Existing Commercial Chemical Substances.	
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.	
HMIS: Hazardous Materials Identification System	
IARC: International Agency for Research on Cancer	
IATA: International Air Transport Association.	
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).	
ICAO: International Civil Aviation Organization.	
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).	
IMDG: International Maritime Code for Dangerous Goods.	
INCI: International Nomenclature of Cosmetic Ingredients.	
KSt: Explosion coefficient.	
LC50: Lethal concentration, for 50 percent of test population.	
LD50: Lethal dose, for 50 percent of test population.	
NFPA: National Fire Protection Association	
NIOSH: National Institute for Occupational Safety and Health	
NTP: National Toxicology Program	
OSHA: Occupational Safety and Health Administration	
PNEC: Predicted No Effect Concentration.	
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.	5
STEL: Short Term Exposure limit.	
STOT: Specific Target Organ Toxicity.	
TLV: Threshold Limiting Value.	
TWA: Time-weighted average	