

Safety Data Sheet TOP GUN

Safety Data Sheet dated 24/8/2017, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: TOP GUN

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

Identified use:

Anti-algae, anti-skincare, coagulant and non-foamy blue.

Uses advised against:

Any other use different from the identified uses.

1.3. Details of the supplier of the safety data sheet

Company:

BARCHEMICALS SRL

VIA S.ALLENDE 14

CASTELNUOVO RANGONE (MO)

ITALY

PHONE. +39 059/536502

FAX. +39 059/536742

www.barchemicals.it

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it

1.4. Emergency telephone number

Barani Dr. Corrado - MOBILE PHONE. +39 335/6109383

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)

Warning, Aquatic Acute 1, Very toxic to aquatic life.

Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P391 Collect spillage.

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

Special Provisions:

None

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Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 12.5% - < 15%	Methanamine, N- methyl-,polymer with 2- (chloromethyl)oxirane	CAS:	25988-97-0	3.1/4/Oral Acute Tox. 4 H302 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410
>= 3% - < 5%	Nitrilomethylphosphoni c acid	CAS: EC: REACH No.:	6419-19-8 229-146-5 01- 2119487988- 08	3.3/2 Eye Irrit. 2 H319
>= 0.25% - < 0.5%	sodium hydroxide; caustic soda	Index number: CAS: EC: REACH No.:	011-002-00-6 1310-73-2 215-185-5 01- 2119457892- 27	◆ 3.2/1A Skin Corr. 1A H314
>= 0.1% - < 0.25%	2,2'-iminodiethanol; diethanolamine	Index number: CAS: EC: REACH No.:	603-071-00-1 111-42-2 203-868-0 01- 2119488930- 28	 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 3.9/2 STOT RE 2 H373

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

Remove contaminated clothing immediatley and dispose off safely.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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:

Rinse well your mouth

Give nothing to eat or drink.

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Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.

If breathing is irregular or stopped, administer artificial respiration.

4.2. Most important symptoms and effects, both acute and delayed None

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

Treatment:

After contact with skin, wash immediately with plenty of soap and water.

In case of contact with eyes, rinse immediately with water and seek medical advice.

If swallowed, rinse mouth and drink water. Consult a doctor as soon as possible.

If inhaled, move the victim to fresh air and keep warm and at rest.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray, heavy alcohol foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training. Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate the surrounding areas.

Prevent entry of foreign and unprotected personnel.

Do not touch or walk on spilled material.

Avoid breathing vapors or mists.

Provide adequate ventilation.

Wear personal protection equipment.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Stop the escape if there is no risk. Move the containers from the spill area. Get closer to the source of overwhelming emission. Prevent spills in sewage systems, waterways, basements or restricted areas. Wash and convey the spilled amounts in a waste treatment plant. In case of a liquid product, hold and absorb the spillage with inert absorbent material (eg, sand, earth, vermiculite, fossil flour). Store contaminated material in suitable containers and start waste disposal. After collection, rinse the area and the materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

6.4. Reference to other sections

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See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

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.

7.2. Conditions for safe storage, including any incompatibilities

Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from other incompatible materials (see section 10) and food and drink. Keep the container tight and sealed until use. Open containers should be carefully resealed and kept straight to avoid accidental spillage of the product. Do not store in labels without label.

Keep away from food, drink and feed.

Incompatible materials:

See the next paragraph 10.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium hydroxide; caustic soda - CAS: 1310-73-2

ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

ACGIH - TWA(8h): 1 mg/m3 - Notes: (IFV), Skin, A3 - Liver and kidney dam

DNEL Exposure Limit Values

sodium hydroxide; caustic soda - CAS: 1310-73-2

Worker Professional: 1 03 - Consumer: 1 03 - Exposure: Human Inhalation -

Frequency: Short Term, local effects

Worker Professional: 1 03 - Consumer: 1 03 - Exposure: Human Inhalation -

Frequency: Long Term, local effects

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

Worker Professional: 1 03 - Consumer: 0.25 03 - Exposure: Human Inhalation -

Frequency: Long Term (repeated)

Worker Professional: 0.13 mg/kg - Consumer: 0.07 mg/kg - Exposure: Human Dermal -

Frequency: Long Term (repeated)

Consumer: 0.06 mg/kg - Exposure: Human Oral - Frequency: Long Term (repeated)

PNEC Exposure Limit Values

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

Target: Fresh Water - Value: 0.0022 mg/l Target: Marine water - Value: 0.00022 mg/l

Target: Freshwater sediments - Value: 0.012 mg/kg
Target: Marine water sediments - Value: 0.0012 mg/kg

Target: Soil (agricultural) - Value: 0.0012 mg/kg

8.2. Exposure controls

Eye/face protection:

Eye glasses with side protection.EN166

Protection for skin:

Chemical protection clothing.

Protection for hands:

Use protective gloves that provide comprehensive protection, eg. PVC, neoprene or rubber.

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Respiratory protection:

Not necessary in normal use.

Thermal Hazards:

Not applicable (the product is handled at room temperature)

Environmental exposure controls:

Do not allow the product to be absorbed from the soil or from entering waterways or sewers.

Do not let product enter drains. Discharge into the environment must be avoided.

The product is toxic to the aquatic environment.

Appropriate engineering controls:

Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid Light Blue		
Odour:	Odorless		
Odour threshold:	N.A.		
pH:	3.5		at 20 °C
Melting point / freezing point:	N.A.		
Initial boiling point and boiling range:	Not Available		
Flash point:	Not Available		
Evaporation rate:	N.A.		
Solid/gas flammability:	N.A.		
Upper/lower flammability or explosive limits:	N.A.		
Vapour pressure:	Not Available		
Vapour density:	Not Available		
Relative density:	1.05 Kg/l		at 20 °C
Solubility in water:	Complete		
Solubility in oil:	N.A.		
Partition coefficient (noctanol/water):	Not Available		
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		
Viscosity:	Not Available		
Explosive properties:	N.A.		
Oxidizing properties:	N.A.		

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Not Available		
Fat Solubility:	N.A.		
Conductivity:	Not Available		
Substance Groups	N.A.		
relevant properties			

SECTION 10: Stability and reactivity

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10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under recommended storage and handling. Please refer to section 7 of the MSDS.

10.3. Possibility of hazardous reactions

No hazardous reactions when stored and handled properly.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

No one in particular.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane - CAS: 25988-97-0

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg Test: LD50 - Route: Oral - Species: Rat = 1672 mg/kg

Nitrilomethylphosphonic acid - CAS: 6419-19-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Notes: OECD 401

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative - Notes: OECD 404

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Positive - Notes: OECD 405

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Species: .porc Negative - Notes: OECD 406 sodium hydroxide; caustic soda - CAS: 1310-73-2

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 1350 mg/kg - Source: IUCLID

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Yes - Source: JACOBS G 1990 (ECHA) - Notes: OECD GUIDELINE 404 (ACUTE DERMAL IRRITATION /

CODDOCIONI

CORROSION)

d) respiratory or skin sensitisation:

Test: Skin Sensitization No - Source: PARK 1995 (ECHA)

e) germ cell mutagenicity:

Test: Genotoxicity No - Source: MORITA 1989 (ECHA) - Notes: MAMMALIAN CELL GENE MUTATION ASSAY

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1600 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;



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- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- i) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

No information is available on the mixture as a whole. This is the information on ecotoxicological effects of the individual components.

Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane - CAS: 25988-97-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae = 0.09 mg/l - Duration h: 72 Endpoint: EC50 - Species: Daphnia = 0.14 mg/l - Duration h: 48 Endpoint: LC50 - Species: Fish = 0.077 mg/l - Duration h: 96

Nitrilomethylphosphonic acid - CAS: 6419-19-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 300 mg/l - Duration h: 96 - Notes: OECD 203

Endpoint: EC50 - Species: Daphnia > 200 mg/l - Duration h: 48

sodium hydroxide; caustic soda - CAS: 1310-73-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 45 mg/l - Duration h: 96 - Notes: ECHA Endpoint: EC50 - Species: Daphnia = 40 mg/l - Duration h: 48 - Notes: ECHA

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 55 mg/l - Duration h: 48 Endpoint: NOEC - Species: Daphnia = 0.78 mg/l - Duration h: 504 Endpoint: LC50 - Species: Fish = 1460 mg/l - Duration h: 96 Endpoint: EC50 - Species: Algae = 2.2 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

Retrieve if possible. Send to authorized disposal plants or incineration under controlled conditions. Work according to local and national regulations. Recover if possible. Send to authorized disposal plants or for incineration under controlled conditions. Operate according to local and national regulations.

SECTION 14: Transport information



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14.1. UN number

ADR-UN Number: 3082 IATA-UN Number: 3082 IMDG-UN Number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Methanamine, N-methyl-,polymer with 2-

(chloromethyl)oxirane)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, IATA-Shipping Name:

N.O.S. (Methanamine, N-methyl-,polymer with 2-

(chloromethyl)oxirane)

IMDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Methanamine, N-methyl-,polymer with 2-

(chloromethyl)oxirane)

14.3. Transport hazard class(es)

ADR-Class: 9

ADR - Hazard identification number: 90

IATA-Class: 9 9 IATA-Label: IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: Ш IATA-Packing group: Ш IMDG-Packing group: Ш

14.5. Environmental hazards

ADR-Enviromental Pollutant: Yes

IMDG-Marine pollutant: Marine Pollutant

Most important toxic component: Methanamine, N-methyl-, polymer with 2-

(chloromethyl)oxirane

14.6. Special precautions for user

ADR-Subsidiary risks:

ADR-S.P.: 274 335 375 601 ADR-Transport category (Tunnel restriction code): 3 (E)

IATA-Passenger Aircraft: 964 IATA-Subsidiary risks: IATA-Cargo Aircraft: 964

IATA-S.P.: A97 A158 A197

IATA-ERG: 91

IMDG-EmS: F-A , S-F

IMDG-Subsidiary risks:

IMDG-Stowage and handling: Category A

IMDG-Segregation:

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

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Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E1

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

For professional use.

Full text of phrases referred to in Section 3:

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

Hazard class and	Code	Description	
hazard category			
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4	
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A	
Skin Irrit. 2	3.2/2	Skin irritation, Category 2	
Eye Dam. 1	3.3/1	Serious eye damage, Category 1	
Eye Irrit. 2	3.3/2	Eye irritation, Category 2	
STOT RE 2	3.9/2	Specific target organ toxicity - repeated	
		exposure, Category 2	
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1	
Aquatic Chronic 1 4.1/C1		Chronic (long term) aquatic hazard, category 1	

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

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SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

For professional use.

ADR: European Agreement concerning the International Carriage of

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.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

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.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.