

**THERMOCLEAN**

**1. Identification of the Substance/Mixture and of the Company/Firm**

**1.1. Product Identifier**

Trade name : **THERMOCLEAN**  
 ISS Code : **THERCL**

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

Consumer, professional uses : **Sanitizing passivating agent for combustion chambers in aluminium and aluminium-silicon**  
 Uses advised against : **All those not expressly specified in the label**

**1.3 Details of the Supplier on the Safety Data Sheet**

FACOT CHEMICALS snc - Via Crema, 44 - 26010 CAPRALBA (CR)  
 phone 0373 450642 - fax 0373 450751 - email: [info@facot.it](mailto:info@facot.it)  
 e-mail of referee: [msds@facot.it](mailto:msds@facot.it)

**1.4. Emergency telephone number**

+39 0373 450642 (from 08.30 to 12.30 and from 14.00 to 18.00 )

In section 16 of this data sheet are given the contact numbers of the Poison Centers in Italy open 24 hours a day.

**2. Identification of hazards**

**2.1. Classification of the substance or mixture**

**2.1.1 Classification pursuant to Regulation (CE) No. 1272/2008**

**Symbols** : GHS05, GHS07  
**Class codes and category of danger:** : Skin Corr. 1A, STOT SE 3  
**Hazard statements codes** : H314 - Causes severe skin burns and severe eye lesions.  
 H335 - May cause respiratory irritation.

**2.1.2 Adverse effects**

Corrosive product: causes severe skin burns and severe eye lesions.  
 The product, if inhaled, causes irritation to the respiratory system.

**2.2. Elements of label**

**Labelling in accordance with Regulation (CE) no. 1272/2008:**

**Symbols** : GHS05, GHS07  
**Warning code** : RISK  
**Hazard statements codes** : H314 - Causes severe skin burns and severe eye lesions.  
 H335 - May cause respiratory irritation.  
**Other hazard statements** : Not classifiable  
**Safety phrases** :



**Prevention**

P260 - Avoid breathing dust/fumes/gas/mist/vapours/spray.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**Reaction**

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. DO NOT induce vomiting.  
 P303+P361+P353 - IN CASE OF CONTACT WITH THE SKIN (or with hair): take off immediately all contaminated clothing Rinse skin with water/shower.  
 P305 + P351 + P338 IF IN EYES: rinse continuously 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.

**Contains:** Sodium metasilicate pentahydrate

**2.3. Other hazards**

No further data available.

**3. Composition/information on ingredients**

**3.1. Substances**

Not relevant

**3.2. Mixtures**

Refer to point 16 for the full text of risk phrases and hazard statements.

Substance	Concentration	Classification	CAS	EINECS	REACH
Sodium metasilicate pentahydrate	> 10 ≤ 20%	Skin Corr. 1B, H314; STOT SE 3, H335	10213-79-3	229-912-9	--
2-(2-butoxyethoxy)ethanol	> 5 ≤ 10%	Eye Irrit. 2, H319	112-34-5	203-961-6	01-2119475104-44

**4. First aid measures**

**4.1. Description of first aid measures**

**Inhalation:**

Move the victim away from the contaminated area and let him/her rest in a well ventilated area. If you feel unwell seek medical advice.

**Direct contact with the skin (of the pure product):**

Remove contaminated clothing. Wash with tap water the areas of the body that have come into contact with the product, and also the nearby areas; rinse thoroughly.

**Direct contact with the eyes (of the pure product):**

Rinse immediately and thoroughly for at least 15 minutes with tap water keeping the eyes open; then protect your eyes with sterile pad or a clean, dry cloth. SEEK MEDICAL ADVICE. Do not use eye drops or ointments without specific advice from your physician.

**Ingestion:**

Rinse your mouth and drink plenty of water. If you feel unwell seek medical advice.

**4.2. Main symptoms and effects, both acute and delayed**

No data available

**4.3. Indication of whether there is a need to consult a doctor immediately and special treatments**

See point 4.1 Description of first aid measures.



## THERMOCLEAN

**5. Fire fighting measures****5.1. Extinguishing means****Recommended extinguishing means:**

Chemical powder, foam, water spray, carbon dioxide, depending on the materials involved in the fire.

**Extinguishing means to avoid**

Direct water jets.

**5.2. Special dangers arising from the substance or mixture**

None known.

**5.3. Recommendations for firefighters**

Use protective clothing for the respiratory tract, the eyes and the skin. The water spray can be used to disperse the vapors and protect the people involved in the extinction. It is also recommended to use breathing apparatus, especially if you work indoors in poorly ventilated spaces and in any case if you use halogen-based extinguishers. Wear protective devices specific to firefighters.

**6. Accidental release measures****6.1. Personal precautions, protective equipment and procedures in case of emergency****For those who do not intervene directly**

Move away from the area surrounding the spill or leak. Do not smoke.

**For those who intervene directly**

Given the structure of the preparation, leakages of material in amounts that require special measures are not foreseen.

**Precautionary measures addressed to individuals:**

Wear protective equipment. Move away unprotected persons.

**6.2. Environmental precautions**

Contain the leaks. Prevent the product from flowing into sewer systems, surface waters or groundwater and soil. If the product has leaked in large amounts in a water course or has contaminated soil or vegetation, inform the authorities.

**6.3. Methods and materials for containment and remediation**

Collect the product for disposal. After collection, wash with plenty of water the area and the materials involved preventing that waste materials from penetrating into sewers, surface waters or groundwater and soil.

**6.4. Reference to other sections**

Refer to points 8 and 13 for further information

**7. Handling and storage****7.1. Precautions for safe handling**

Normal precautions in handling chemicals; operate in such a way as to avoid contact and inhalation. Do not smoke, eat, do not drink during handling.

**7.2. Conditions for the secure storage, including any incompatibility**

Store in the original packaging in a cool, dry place. Do not expose to direct sunlight. Keep containers close when not using the preparation.

**7.3. Specific end uses**

Data not available.

**8. Exposure controls/personal protection****8.1. Control parameters****Related to the substances contained**

2-(2-butoxyethoxy)ethanol

CVE: TWA 10 ppm 67.5 mg/m<sup>3</sup> STEL 15 ppm 101.2 mg/m<sup>3</sup>

MAK DFG 10 ppm 67 mg/m<sup>3</sup>

**Substance: 2-(2-butoxyethoxy)ethanol****DNEL**

Long term effects - systemic effects, Workers Inhalation = 67.5 (mg/m<sup>3</sup>)

Systemic effects long term Consumers Inhalation = 40.5 (mg/m<sup>3</sup>)

Systemic effects long term Consumers Oral = 5 (mg/ kg bw/day)

Local Effects Long term effects Consumers Inhalation = 40.5 (mg/m<sup>3</sup>)

Local effects Short term Consumers Inhalation = 60.7 (mg/m<sup>3</sup>)

**PNEC**

Fresh water = 1.1 (mg/l)

Sea water = 0.11 (mg/l)

Intermittent release = 11 (mg/l)

Ground = 0.72 (mg/kg Ground)

Systemic effects long term Workers Dermal = 83 (mg/kg bw/day)

Systemic effects long term Consumers Dermal = 50 (mg/kg bw/day)

Local Effects Long term effects Workers Inhalation = 67.5 (mg/m<sup>3</sup>)

Local effects Short term Workers Inhalation = 101.2 (mg/m<sup>3</sup>)

Freshwater sediments = 4.4 (mg/kg/sediment)

Sea water sediment = 0.44 (mg/kg/sediment)

STP = 200 (mg/l)

**8.2. Exposure controls****Personal protection measures****a) Eye/ face protection**

Use goggles with side shields according to EN 166. Emergency eye wash and shower equipment must be available.

**b) Skin protection****i) Protection for hands**

We recommend waterproof safety gloves (neoprene, rubber) in accordance with EN374-1, EN374-2 and EN374-3. Depending on the time of contact, use gloves with suitable PI (Permeation Index)

**ii) Other**

Avoid direct contact with the skin.

**c) Respiratory protection**

Operate in suitably ventilated areas. When performing operations in poorly ventilated areas, wear a mask with suitable filter. Use respiratory protection in accordance with UNI EN 529:2006 (Respiratory protection devices - Recommendations for selection, use, care and maintenance - Guidelines) by establishing the proper FPO value "Operational protection factor" (EN141 type A).

**d) Thermal hazards**

Avoid exposure to naked flames.

**Exposure Controls environment:** Avoid release to the environment



**THERMOCLEAN**

**9. Physical and chemical properties**

**9.1. Information on the basic physical and chemical properties**

Physical and chemical properties	Value
Appearance	Pale yellow liquid
Odour	Virtually odourless
Olfactory threshold	Not available
pH at 20°C	12.0 ± 0.2
Melting/freezing point	Not available
Boiling point/range	>100°C
Flash point	Non-flammable
Evaporation rate	Not available
Flammability (solid/gas)	Not relevant
Upper/lower flammability limit	Not relevant
Vapor pressure (mmHg)	Not available
Vapor density	Not available
Density at 20°C	1.100 ± 0.010 g/cm <sup>3</sup>
Solubility	Soluble in polar solvents
Solubility in water	Complete
Partition coefficient: n-octanol/water	Not available
Self-ignition temperature	Not relevant
Decomposition temperature	Not available
Viscosity at 100°C	Not relevant
Explosive properties	Not available
Oxidizing properties	Not available

**9.2. Other Information**

No data available.

**10. Stability and reactivity**

**10.1. Reactivity**

Under normal conditions of use and storage no reactivity has been noted.

**10.2. Chemical Stability**

Stable under normal conditions of use and storage.

**10.3. Possibility of dangerous reactions**

None under recommended conditions of use.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

Under normal conditions it does not decompose.

**11. Toxicological Information**

**11.1. Information on toxicological effects**

Ate (mix) oral = unavailable

ATE (mix) dermal = unavailable

ATE (mix) inhal = unavailable

a) Acute toxicity

: On the basis of available data, the classification criteria are not met

b) Corrosion/skin irritation

: causes severe skin burns

c) Severe eye damage/irritation

: causes serious eye damage

d) Sensitisation of respiratory tract and the skin

: on the basis of available data, the classification criteria are not met

e) Germ cell mutagenicity

: based on the available data, the classification criteria are not met

f) Carcinogenicity

: on the basis of available data, the classification criteria are not met

g) Reproductive toxicity

: on the basis of available data, the classification criteria are not met

h) specific target organ toxicity (STOT) single exposure

: on the basis of available data, the classification criteria are not met

i) specific target organ toxicity (STOT) repeated exposure

: on the basis of available data, the classification criteria are not met

j) aspiration hazard

: on the basis of available data, the classification criteria are not met

Related to the substances contained:

**Sodium metasilicate pentahydrate**

ROUTES OF EXPOSURE

: The substance can be absorbed into the body by inhalation and ingestion.

RISKS BY INHALATION

: Evaporation at 20° C is not relevant; a harmful concentration of particles dispersed in the air can be reached quickly.

EFFECTS OF SHORT TERM EXPOSURE

: The substance is corrosive to the eyes the skin and the respiratory tract. Corrosive if swallowed.

ACUTE RISKS/ SYMPTOMS

INHALATION Sore throat. A burning sensation. Cough. Shortness of breath.

SKIN Redness. Pain. Skin burns.

EYES Redness. Pain. Severe deep burns.

INGESTION A burning sensation. Abdominal pain. Shock or collapse.



## THERMOCLEAN

**2-(2-butoxyethoxy)ethanol**

## RISKS BY INHALATION

: A harmful contamination of the air can be reached slowly by evaporation of this substance at 20° C; however, much faster by spraying or dispersion.

## EFFECTS OF SHORT TERM EXPOSURE

: Irritating to eyes

## EFFECTS OF REPEATED OR LONG-TERM EXPOSURE

: The liquid has degreasing action on skin.

## ACUTE RISKS/ SYMPTOMS

SKIN Dry skin.

EYES Redness. Pain.

Oral LD50 (rat) (mg/kg body weight) = 2410

LD50 Skin (rat or rabbit) (mg/kg body weight) = 4000

CL50 Inhalation (rat) of steam/dust/aerosol/fumes (mg/1/4h) or gas (ppmV/4h) = 374

**12. Ecological Information****12.1. Toxicity**

Data not available. Use according to good working practices and dispose of carefully.

**12.2. Persistence and degradability**

Data not available.

**12.3. Potential for bioaccumulation**

Data not available.

**12.4. Mobility in ground**

Data not available.

**12.5. Results of PBT and vPvB evaluation**

The mixture contains NO substances classified as PBT/vPvB pursuant to Regulation (CE) 1907/2006, Annex XIII

**12.6. Other adverse effects**

Data not available.

**13. Disposal Considerations:****13.1. Methods of waste treatment**

Do not reuse empty containers. Dispose of waste in accordance with current regulations. Any waste should be disposed of in accordance with existing regulations by contacting authorized companies.

**14. Transport Information****14.1. UN Number**

1760

Any ADR exemption (by affixing the label to the side) if the following characteristics are met: Combined packaging:

inner packing 1 l pack of 30 Kg

Inner packaging secured in trays with shrink or extensible film: inner package 1 l pack of 20 Kg

**14.2. ONU shipping name**

CORROSIVE LIQUID, N.A.S. (Sodium metasilicate pentahydrate)

**14.3. Danger classes related to the transport**

Class : 8

Label : 8

Code of restriction in tunnels. : E

Quantities limited : : 1 L

EmS : F-A, S-B

**14.4. Packaging group**

II

**14.5. Dangers for the environment**

Product dangerous to the environment : : NO

Sea contaminant : : NO

**14.6. Special precautions for users**

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the requirements of the current edition of the A.D.R. agreement and applicable national regulations.

Products should be transported in their original packaging and in any case in packages that are made from materials resistant to their content and unlikely to cause dangerous reactions with it. People loading and unloading dangerous goods must be trained on all the risks deriving from the substance and on all actions to be taken in the event of emergencies.

**14.7. Bulk transport according to Annex II of MARPOL 73/78 and the IBC code**

Transport in bulk not provided

**15. Regulatory Information****15.1. Standards and legislation on health, safety and environment specific for the substance or the mixture**

Law Decree 09/04/2008 n° 81 - TITLE IX Chapter II

It does not contain carcinogens pursuant to Art.234 .

In order to use this product, the employer must carry out the "Risk assessment" according to the provisions of Leg. Decree 9 April 2008 n. 81. Workers exposed to this chemical agent must not be subjected to health surveillance if the outcome of the risk assessment shows that, in relation to the type and quantity of a dangerous chemical agent and the mode and frequency of exposure to this agent, there is only a "moderate risk" for health and safety of workers and that the measures provided for in the same Decree are sufficient to reduce the risk.

Law Decree of Government no. 52, dated 03 /02/1977

(Implementation of Directive 92/32/CEE on classification, packaging and labelling of dangerous substances).

Law Decree of Government no. 65, dated 14/03/2003

(Implementation of Directives 1999 /45/CE and 2001/60/CE relating to the classification, packaging and labelling of dangerous preparations).

Law Decree of Government no. 25, dated 02/02/2002

(Implementation of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at workplace).

DM of 26 02/02/ 2004

(Definition of a first list of indicative occupational exposure limit values for chemical agents).



## THERMOCLEAN

**MD of 03/04/2007**

(Implementation of Directive No. 2006/8/CE of the Commission dated January 23, 2006, amending, to adapt them to technical progress, Annexes II, III and V of Directive 1999/45/CE of the European Parliament and of the Council on the harmonization of laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations).

**Regulation (CE) no. 1907/2006 Of the European Parliament and of the Council dated December 18, 2006**

Concerning the registration, evaluation, authorisation and restriction of chemicals (REACH), establishing a European agency for chemical substances, amending Directive 1999/45/CE and repealing Regulation (EEC) n. 793/93 Of the Council and the Regulation (CE) no 1488/94 Of the Commission and the Council Directive 76/769/EEC, the directives of the Commission 91/155/CEE, 93/67/67, 93/105/CE and 2000/21/CE.

**Regulation (CE) no. 1272/2008 Of the European Parliament and of the Council dated December 16, 2008**

On classification, labelling and packaging of substances and mixtures, amending and revoking Directive 67/548/CEE and 1999/45/CE and amending Regulation (CE) no. 1907/2006.

**Regulation (CE) no. 790/2009 Of the Commission dated August 10, 2009**

Amending, for the purposes of adaptation to technical and scientific progress, of Regulation (CE) n. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

**15.2. Chemical Safety Assessment**

Chemical safety assessment not provided.

**16. Other Information.****16.1. Other Information**

Description of hazard phrases set out in point 3

H314 = Causes severe skin burns and severe ocular lesions.

H335 = Can irritate the respiratory tract.

H319 = Causes severe eye irritation.

Classification based on the data of all the components of the mixture

If necessary, below are the telephone numbers active 24 hour 24 of some poison centres:

([www.salute.gov.it/servizio/documenti/centri\\_antiveleni.pdf](http://www.salute.gov.it/servizio/documenti/centri_antiveleni.pdf))

FLORENCE	Poison Center of Florence ( <a href="http://www.antiveleni.altervista.org">www.antiveleni.altervista.org</a> )	055	7947819
GENOA	Poison Centre	010	56361245
MILAN	Poison Control Center ( <a href="http://www.centroantiveleni.org">www.centroantiveleni.org</a> )	02	66101029
NAPLES	Cardarelli Hospital Poison Center ( <a href="http://www.ospedalecardarelli.it/ospedale/centro-anti-veleni">www.ospedalecardarelli.it/ospedale/centro-anti-veleni</a> )	081	7472870
PADUA	Poison Centre	049	8275078
PAVIA	IRCCS Fondazione S.Maugeri ( <a href="http://www.cavpavia.it">www.cavpavia.it</a> )	0382	24444
ROME	Poison Center Gemelli Hospital ( <a href="http://www.tox.it">www.tox.it</a> )	06	3054343
ROME	Poison Center, University "La Sapienza" ( <a href="http://w3.uniroma1.it/cav_cartella">w3.uniroma1.it/cav_cartella</a> )	06	49970698
TURIN	Poison Center	011	6637637

**MAIN BIBLIOGRAPHIC SOURCES**

ACGIH - American Conference of Governmental Industrial Hygienists

ECB - European Chemicals Bureau

IARC - International Agency for Research on Cancer

IPCS - International Programme on Chemical Safety (Cards)

NIOSH - Registry of toxic effects of chemical substances (1983)

OSHA - European Agency for Safety and Health at Work

PHATOX - Pharmacological and Toxicological Data and Information Network

WHO - World Health Organization

Safety Data Sheet as per Regulation (UE) no. 2015/830 of 29 May 2015 and subsequent amendments

The information in this safety data sheet were obtained using the best information available on the date of revision specified herein. Neither the owner Company nor the subsidiary companies will accept complaints arising from improper use of the information given herein or by improper use of the product. Pay particular attention when using the preparation because an improper use improper handling may increase the danger.

