STONEART
Code: 06392M

Version: 6 Revision: 31/08/2015 Previous revision: 08/05/2015 Date of printing: 31/08/2015

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER: STONEART
Code: 06392M

1.2 RELEVANT IDENTIFIED USES AND USES ADVISED AGAINST:
Intended uses (main technical functions): [ ] Industrial [X] Professional [X] Consumers
Limpieza y saneado de superficies contaminadas.
Uses advised against:
This product is not recommended for any use or sector of use industrial, professional or consume other than those previously listed as 'Intended or identified uses'. If your use is not covered, please contact the supplier of this material safety data sheet.
Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:
Not restricted.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:
ARTIC INDUSTRIAL QUÍMICA, S.A.
Ctra. de Gerb, 51-73 - 25600 - BALAGUER (Lleida)
Phone: (+34) 902 431250 - Fax: (+34) 973 445045
E-mail address of the person responsible for the safety data sheet:
e-mail: info@articsa.net

1.4 EMERGENCY TELEPHONE NUMBER: (+34) 973 450717 (9:00-13:00 / 15:00-18:00 h.) (working hours)

SECTION 2 : HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

Classification in accordance with Regulation (EC) No. 1272/2008~487/2013 (CLP):
DANGER: Acute Tox. (oral) 4:H302 | Skin Corr. 1B:H314 | EUH066

Danger class	Classification of the mixture	Cat.	Routes of exposure	Target organs	Effects
Physicochemical: Not classified	Acute Tox. (oral) 4:H302 Skin Corr. 1B:H314 EUH066	Cat.4 Cat.1B -	Ingestion Skin, Eyes Skin	- Skin, Eyes Skin	Harmful Burns Dryness, Cracking
Human health:					
Environment: Not classified					

Full text of hazard statements mentioned is indicated in section 16.

2.2 LABEL ELEMENTS:

This product is labelled with the signal word DANGER in accordance with Regulation (EC) No. 1272/2008~487/2013 (CLP)

Hazard statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Precautionary statements:

P102-P405	Keep out of reach of children. Store locked up.
P103	Read label before use.
P280F	Wear protective gloves, clothing and eye protection. In case of inadequate ventilation wear respiratory protection.
P363	Wash contaminated clothing before reuse.
P301+P330+P331-P310	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
P303+P361+P353-P352-P312	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338-P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P308+P310+P101	IF exposed or concerned: Immediately call a POISON CENTER or doctor. If medical advice is needed, have product container or label at hand.
P501b	Dispose of contents/container to hazardous or special waste collection point.

Supplementary statements:

EUD011	Contains aliphatic hydrocarbons < 5 %. Do not swallow.

Hazardous ingredients:
Ammonium bifluoride

2.3 OTHER HAZARDS:
Hazards which do not result in classification but which may contribute to the overall hazards of the mixture:
Other physicochemical hazards: No other relevant adverse effects are known.
Other adverse human health effects: No other relevant adverse effects are known.
Other negative environmental effects: Does not contain substances that fulfil the PBT/vPvB criteria.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES:
Not applicable (mixture).

3.2 MIXTURES:
This product is a mixture.
Chemical description:
Solution of ammonium bifluoride in aqueous media.

HAZARDOUS INGREDIENTS:
Substances taking part in a percentage higher than the exemption limit:

20 < 25 %	Ammonium bifluoride CAS: 1341-49-7 , EC: 215-676-4 CLP: Danger: Acute Tox. (oral) 3:H301 | Skin Corr. 1B:H314		Index No. 009-009-00-4 < CLP00
< 0,5 %	Ammonia CAS: 1336-21-6 , EC: 215-647-6 CLP: Danger: Skin Corr. 1B:H314 | STOT SE (irrit.) 3:H335 | Aquatic Acute 1:H400	(Note B)	Index No. 007-001-01-2 < CLP00

Impurities:
Does not contain other components or impurities which will influence the classification of the product.

Stabilizers:
None

Reference to other sections:
For more information on hazardous ingredients, see sections 8, 11, 12 and 16.

SUBSTANCES OF VERY HIGH CONCERN (SVHC):
List updated by ECHA on 15/06/2015.
Substances SVHC subject to authorisation, included in Annex XIV of Regulation (EC) no. 1907/2006:
None
Substances SVHC candidate to be included in Annex XIV of Regulation (EC) no. 1907/2006:
None

PERSISTENT, BIOACCUMULABLE AND TOXIC PBT, OR VERY PERSISTENT AND VERY BIOACCUMULABLE VPVB SUBSTANCES:
Does not contain substances that fulfill the PBT/vPvB criteria.

SECTION 4 : FIRST AID MEASURES

4.1
4.2

DESCRIPTION OF FIRST-AID MEASURES AND MAIN SYMPTOMS AND EFFECTS, ACUTE AND DELAYED:

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Lifeguards should pay attention to self-protection and use the recommended protective equipment if there is a possibility of exposure. Wear protective gloves when administering first aid.

Route of exposure	Symptoms and effects, acute and delayed	Description of first-aid measures
Inhalation:	Inhalation produces burning sensation, coughing, breathlessness and sore throat.	Remove the patient out of the contaminated area into the fresh air. If breathing is irregular or stops, administer artificial respiration. If the person is unconscious, place in appropriate recovery position. Keep the patient warm and at rest until medical attention arrives.
Skin:	Skin contact causes redness, burns and pain.	Remove immediately contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser. Do not use solvents or thinners.
Eyes:	Contact with the eyes produces redness, pain, serious burns and loss of vision.	Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, holding the eyelids apart, until the irritation is reduced. Call a physician immediately.
Ingestion:	If swallowed, causes severe burns on the lips, mouth, throat and esophagus, with gastric disorders and abdominal pain.	If swallowed, seek immediate medical attention. Drink large quantities of water. Do not induce vomiting, due to the risk of perforation. Keep the patient at rest.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:
Notes to physician: Damage caused by detergents and tensioactives to intestinal mucus is irreversible. Do not induce vomiting. Pump out stomach prior to the addition of dimeticone (antifrothing agent).
Antidotes and contraindications: Specific antidote not known.

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:
In the case of fire in the surroundings, all extinguishing agents are allowed.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:
As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, carbon dioxide. Irritant. Exposure to combustion or decomposition products may be a hazard to health.

5.3 ADVICE FOR FIREFIGHTERS:
Special protective equipment: Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots. If the fire-proof protective equipment is not available or not used, combat fire from a sheltered position or at a safe distance. The standard EN469 provides a basic level of protection for chemical incidents.
Other recommendations: Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
Avoid direct contact with this product.

6.2 ENVIRONMENTAL PRECAUTIONS:
Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
Contain and mop up spills with absorbent materials (sawdust, earth, sand, vermiculite, diatomaceous earth, etc..). Keep the remains in a closed container.

6.4 REFERENCE TO OTHER SECTIONS:
For contact information in case of emergency, see section 1.
For information on safe handling, see section 7.
For exposure controls and personal protection measures, see section 8.
For subsequent waste disposal, follow the recommendations in section 13.

SECTION 7 : HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Comply with the existing legislation on health and safety at work.

General recommendations:

Handle with care, avoiding any discharge. Avoid any type of leakage or escape. Keep the container tightly closed.

Recommendations for the prevention of fire and explosion risks:

The product is not liable to ignite, deflagrate or explode, and does not sustain the combustion reaction by oxygen from air in the environment in which it is, so it is not included in the scope of Directive 94/9/EC concerning equipment and protective systems intended for use in potentially explosive atmospheres. Also they are not applicable the provisions of the ITC MIE BT-29 on the detailed requirements for electrical installations in locals with risk of fire or explosion.

Recommendations for the prevention of toxicological risks:

Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.

Recommendations for the prevention of environmental contamination:

It is not considered a danger to the environment. In the case of accidental spillage, follow the instructions indicated in section 6.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Keep locked up. Prevent unauthorized access. Keep out of reach of children. Keep away from sources of heat. If possible, avoid direct contact with sunlight. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. Due to its corrosive properties, extreme precaution in the selection of materials for pumps, packages and lines should be taken. The floor must be waterproof and corrosion resistant, with a canal system allowing the liquid to be channelled towards a neutralising pit. The electrical equipment must be made of non-corrodible materials. For more information, see section 10.

Class of store	:	According to current legislation.
Maximum storage period	:	24. months
Temperature interval	:	min: 5. ºC, max: 40. ºC (recommended).

Incompatible materials:

Keep away from oxidixing agents, from strongly alkaline and strongly acid materials.

Type of packaging:

According to current legislation.

Limit quantity (Seveso III): Directive 96/82/EC~2003/105/EC:

Lower threshold: 50 tons , Upper threshold: 200 tons

7.3 SPECIFIC END USES:

For the use of this product do not exist particular recommendations apart from that already indicated.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1

CONTROL PARAMETERS:

If a product contains ingredients with exposure limits, may be necessary a personnel monitoring, work place or biological, to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to EN689, EN14042 and EN482 standard concerning methods for assesing the exposure by inhalation to chemical agents, and exposure to chemical and biological agents. Reference should be also made to national guidance documents for methods for the determination of dangerous substances.

OCCUPATIONAL EXPOSURE LIMIT VALUES (TLV)

AGCIH 2013	Year	TLV-TWA ppm	TLV-TWA mg/m3	TLV-STEL ppm	TLV-STEL mg/m3	Observations
Ammonium bifluoride	1996	-	2.5	-	-	A4 As F
Ammonia	1976	25.	17.	35.	24.	

TLV - Threshold Limit Value, TWA - Time Weighted Average, STEL - Short Term Exposure Limit.
A4 - Non classified as carcinogenic in humans.

BIOLOGICAL LIMIT VALUES:
Not stablished

DERIVED NO-EFFECT LEVEL (DNEL):
Derived no-effect level (DNEL) is a level of exposure that is considered safe, derived from toxicity data according to specific guidances included in REACH. DNEL values may differ from a occupational exposure limit (OEL) for the same chemical. OEL values may come recommended by a particular company, a government regulatory agency or an organization of experts. Although considered protective of health, the OEL values are derived by a process different of REACH.

	DNEL Inhalation mg/m3	DNEL Cutaneous mg/kg bw/d	DNEL Oral mg/kg bw/d
Derived no-effect level, workers: - Systemic effects, acute and chronic: Not available (without data of registration REACH).	- -	- -	- -
Derived no-effect level, workers: - Local effects, acute and chronic: Not available (without data of registration REACH).	DNEL Inhalation mg/m3 - -	DNEL Cutaneous mg/cm2 - -	DNEL Eyes mg/cm2 - -
Derived no-effect level, general population: - Systemic effects, acute and chronic: Not available (without data of registration REACH).	DNEL Inhalation mg/m3 - -	DNEL Cutaneous mg/kg bw/d - -	DNEL Oral mg/kg bw/d - -
Derived no-effect level, general population: - Local effects, acute and chronic: Not available (without data of registration REACH).	DNEL Inhalation mg/m3 - -	DNEL Cutaneous mg/cm2 - -	DNEL Eyes mg/cm2 - -

PREDICTED NO-EFFECT CONCENTRATION (PNEC):

Predicted no-effect concentration, aquatic organisms: - Fresh water, marine water and intermitent release: Not available (without data of registration REACH).	PNEC Fresh water mg/l -	PNEC Marine mg/l -	PNEC Intermittent mg/l -
- Wastewater treatment plants (STP) and sediments in fresh- and marine water: Not available (without data of registration REACH).	PNEC STP mg/l -	PNEC Sediments mg/kg dry weight -	PNEC Sediments mg/kg dry weight -
Predicted no-effect concentration, terrestrial organisms: - Air, soil and effects for predator sand humans: Not available (without data of registration REACH).	PNEC Air mg/m3 -	PNEC Soil mg/kg dry weight -	PNEC Oral mg/kg bw/d -

8.2 EXPOSURE CONTROLS:

ENGINEERING MEASURES:


Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

Protection of respiratory system: Avoid the inhalation of product.
Protection of eyes and face: Dispose of water taps or sources with clean water close to the working area.
Protection of hands and skin: Dispose of water taps or sources with clean water close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.

OCUPATIONAL EXPOSURE CONTROLS: Directive 89/686/EEC~96/58/EC:
As a general measure on prevention and safety in the work place, we recommend the use of a basic personal protection equipment (PPE), with the corresponding EC marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, type and characteristics of the PPE, protection class, marking, category, CEN norm, etc..), you should consult the informative brochures provided by the manufacturers of PPE.

Mask:  ✓	Mask for gases and vapours (EN14387). Classe 1: low capacity up to 1000 ppm, Classe 2: medium capacity up to 5000 ppm, Classe 3: high capacity up to 10000 ppm. In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers.
Goggles:  ✓	Safety goggles for chemicals, with suitable lateral protection (EN166). Clean daily and disinfect at regular intervals in accordance with the instructions of the manufacturer.
Face shield:	Face shield against liquid splashes (EN166), advisable when there is a risk of spillage, diffusion or atomization of the liquid.
Gloves:  ✓	Neoprene rubber gloves (EN374). When it can be a repeated or prolonged contact, it is recommended to use gloves with a protection level 5 or higher, with a breakthrough time >240 min. When you only expects a short contact, it is recommended to use gloves with a protection level 2 or higher, with a breakthrough time >30 min. The breakthrough time of the selected glove material should be in accordance with the pretended period of use. There are several factors (for example, temperature), they do in practice the period of use of a protective gloves resistant against chemicals is clearly lower than the established standard EN374. Due to the wide variety of circumstances and possibilities, we must have in mind the manual of instructions from manufacturers of gloves. Use the proper technique of removing gloves (without touching glove´s outer surface) to avoid contact of the product with the skin. The gloves should be immediately replaced when any sign of degradation is noted.
Boots:  ✓	Neoprene rubber boots (EN347).
Apron:	No.
Clothing:  ✓	Clothing resistant to corrosive products will have to be worn.

Thermal hazards:
Not applicable (the product is handled at room temperature).

ENVIRONMENTAL EXPOSURE CONTROLS:
Avoid any spillage in the environment.
Spills on the soil: Prevent contamination of soil.
Spills in water: Do not allow to escape into drains, sewers or water courses.
Emissions to the atmosphere: Not applicable.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Appearance				
- Physical state	:	Liquid.		
- Colour	:	Yellowish .		
- Odour	:	Characteristic		
- Odour threshold	:	Not available (mixture).		
pH-value				
- pH	:	4.5 ± 0.5	at 20ºC	
Change of state				
- Melting point	:	Not available		
- Initial boiling point	:	> 100.	ºC at 760 mmHg	
Density				
- Relative density	:	1.04 ± 0.03	at 20/4ºC	Relative water
Stability				
- Decomposition temperature	:	230.	ºC	
Viscosity:				
- Dynamic viscosity	:	1700.	cps 23ºC	
- Kinematic viscosity	:	580.	mm2/s at 40ºC	
- Dynamic viscosity	:	15.	Poise 23ºC	
Volatility:				
- Vapour pressure	:	Not applicable		
- Vapour pressure	:	12.3	kPa at 50ºC	
Solubility(ies)				
- Solubility in water:	:	Miscible		
- Solubility in oils and fats:	:	Not available		
Flammability:				
- Flash point	:	Not flammable		
- Autoignition temperature	:	Not applicable (do not support combustion).		

Explosive properties:
Not available.
Oxidizing properties:
Not classified as oxidizing product.

9.2 OTHER INFORMATION:

- Solids	:	25.7	% Weight

The values indicated do not always coincide with product specifications. The data for the product specifications can be found in the technical data sheet of the same. For additional information concerning physical and chemical properties related to safety and environment, see sections 7 and 12.

SECTION 10 : STABILITY AND REACTIVITY

10.1 REACTIVITY:
Corrosivity to metals: Not available.
Pyrophorical properties: It is not pyrophoric.

10.2 CHEMICAL STABILITY:
Stable under recommended storage and handling conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:
Possible dangerous reaction with oxidizing materials, acids or strong alkalis.

10.4 CONDITIONS TO AVOID:
Heat: Keep away from sources of heat.
Light: If possible, avoid direct contact with sunlight.
Air: Not applicable.
Pressure: Not applicable.
Shock: Not applicable.

10.5 INCOMPATIBLE MATERIALS:
Keep away from oxidixing agents, from strongly alkaline and strongly acid materials.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:
As consequence of thermal decomposition, hazardous products may be produced: nitrogen oxides, ammonia, hydrofluoric acid.

SECTION 11 : TOXICOLOGICAL INFORMATION

No experimental toxicological data on the preparation is available. The toxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EC) No. 1272/2008~487/2013 (CLP).

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

ACUTE TOXICITY:

Dose and lethal concentrations for individual ingredients :	DL50 (OECD 401) mg/kg oral	DL50 (OECD 402) mg/kg cutaneous	CL50 (OECD 403) mg/m3.4h inhalation
Ammonium bifluoride	130. Rat		
Ammonia	350. Rat		> 1417. Rat

No observed adverse effect level
Not available
Lowest observed adverse effect level
Not available

INFORMATION ON LIKELY ROUTES OF EXPOSURE : Acute toxicity:

Routes of exposure	Acute toxicity	Cat.	Main effects, acute and/or delayed
Inhalation: **Not classified**	ETA > 20000 mg/m3	-	Not classified as a product with acute toxicity if inhaled (based on available data, the classification criteria are not met).
Skin: Not classified	ETA > 2000 mg/kg	-	Not classified as a product with acute toxicity in contact with skin (based on available data, the classification criteria are not met).
Eyes: Not classified	Not available	-	Not classified as a product with acute toxicity by eye contact (lack of data).
Ingestion:	ETA : 433. mg/kg	Cat.4	HARMFUL: Harmful if swallowed.

CORROSION / IRRITATION / SENSITISATION :

Danger class	Target organs	Cat.	Main effects, acute and/or delayed
Respiratory corrosion/irritation: Not classified	-	-	Not classified as a product corrosive or irritant by inhalation (based on available data, the classification criteria are not met).
Skin corrosion/irritation:	Skin	Cat.1B	CORROSIVE: Causes severe skin burns.
Serious eye damage/irritation:	Eyes	Cat.1	DAMAGE: Causes serious eye damage.
Respiratory sensitisation: Not classified	-	-	Not classified as a product sensitising by inhalation (based on available data, the classification criteria are not met).
Skin sensitisation: Not classified	-	-	Not classified as a product sensitising by skin contact (based on available data, the classification criteria are not met).

ASPIRATION HAZARD:

Danger class	Target organs	Cat.	Main effects, acute and/or delayed
Aspiration hazard: Not classified	-	-	Not classified as a product hazardous by aspiration (based on available data, the classification criteria are not met).

SPECIFIC TARGET ORGANS TOXICITY (STOT) : Single exposure (SE) and/or Repeated exposure (RE):

Effects	SE/RE	Target organs	Cat.	Main effects, acute and/or delayed
Cutaneous:	RE	Skin	-	DEFATTENING: Repeated exposure may cause skin dryness or cracking.

CMR EFFECTS:
Carcinogenic effects: Is not considered as a carcinogenic product.
Genotoxicity: Is not considered as a mutagenic product.
Toxicity for reproduction: Do not harm fertility. Do not harm the fetus developping.
Effects via lactation: Not classified as a hazardous product for children breast-fed.

SECTION 12 : ECOLOGICAL INFORMATION

No experimental ecotoxicological data on the preparation as such is available. The ecotoxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EC) No. 1272/2008~487/2013 (CLP).

12.1 TOXICITY:

Acute toxicity in aquatic environment for individual ingredients :	CL50 (OECD 203) mg/l.96hours	CE50 (OECD 202) mg/l.48hours	CE50 (OECD 201) mg/l.72hours
Ammonium bifluoride	40. Fishes		
Ammonia	8.2 Fishes	0.66 Daphnia	8.0 Algae

No observed effect concentration
Not available
Lowest observed effect concentration
Not available

12.2 PERSISTENCE AND DEGRADABILITY:
Not available.

Aerobic biodegradation for individual ingredients :	DQO mgO2/g	%DBO/DQO 5 days 14 days 28 days	Biodegradability
Ammonium bifluoride	0.	0.	Not available

12.3 BIOACCUMULATIVE POTENTIAL:
Not available.

Bioaccumulation for individual ingredients :			

12.4 MOBILITY IN SOIL:
Not available.

12.5 RESULTS OF PBT AND VPVB ASSESMENT: Annex XIII of Regulation (EC) no. 1907/2006:
Does not contain substances that fulfill the PBT/vPvB criteria.

12.6 OTHER ADVERSE EFFECTS:
Ozone depletion potential: Not available.
Photochemical ozone creation potential: Not available.
Earth global warming potential: Not available.
Endocrine disrupting potential: Not available.

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1

WASTE TREATMENT METHODS: Directive 2008/98/EC:
Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

Disposal of empty containers: Directive 94/62/EC~2005/20/EC, Decision 2000/532/EC:
Emptied containers and packaging should be disposed of in accordance with currently local and national regulations. The classification of packaging as hazardous waste will depend on the degree of empting of the same, being the holder of the residue responsible for their classification,)in accordance with Chapter 15 01 of Decision 2000/532/EC, and forwarding to the appropriate final destination. With contaminated containers and packaging, adopt the same measures as for the product in itself.

Procedures for neutralising or destroying the product:
Authorised landfill in accordance with local regulations.

SECTION 14 : TRANSPORT INFORMATION

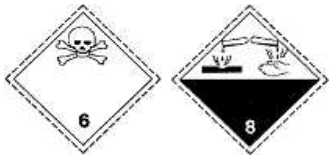
14.1 UN NUMBER: 2927

14.2 UN PROPER SHIPPING NAME:
TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (contains ammonium bifluoride, in solution)

14.3
14.4 TRANSPORT HAZARD CLASS(ES) AND PACKING GROUP:

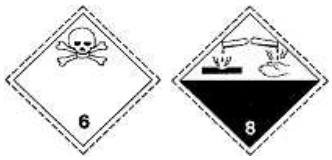
Transport by road (ADR 2015) and
Transport by rail (RID 2015):

- Class:	6.1
- Packaging group:	II
- Classification code:	TC1
- Tunnel restriction code:	(D/E)
- Transport category:	2 , max. ADR 1.1.3.6. 333 L
- Limited quantities:	100 ml (see total exemptions ADR 3.4)
- Transport document:	Consignment paper.
- Instructions in writing:	ADR 5.4.3.4



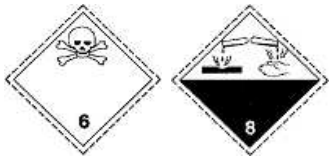
Transport by sea (IMDG 36-12):

- Class:	6.1
- Packaging group:	II
- Emergency Sheet (EmS):	F-A,S-B
- First Aid Guide (MFAG):	-
- Marine pollutant:	No.
- Transport document:	Shipping Bill of lading.



Transport by air (ICAO/IATA 2014):

- Class:	6.1
- Packaging group:	II
- Transport document:	Air Bill of lading.



Transport by inland waterways (ADN):
Not available.

14.5 ENVIRONMENTAL HAZARDS:
Not applicable (not classified as hazardous for the environment).

14.6 SPECIAL PRECAUTIONS FOR USER:
Ensure that persons transporting the product know what to do in case of accident or spill. Always transport in closed containers that are in a vertical position and sure. Keep separated from foodstuffs.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:
Not applicable.

SECTION 15 : REGULATORY INFORMATION

15.1 EU SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC:
The regulations applicable to this product generally are listed throughout this material safety data sheet.

Restrictions on manufacture, placing on market and use: See section 1.2

Control of the risks inherent in major accidents (Seveso III): See section 7.2

Tactile warning of danger: If the product is intended for the general public, is mandatory a tactile warning of danger. The technical specifications for tactile warning devices shall conform with EN ISO standard 11683 relating to 'Packaging - Tactile warnings of danger - Requirements.'

Child safety protection: If the product is intended for the general public, is required a child-resistant fastening. Child-proof fastenings used on reclosable packages shall comply with ISO standard 8317 relating to 'Child resistant packages - Requirements and methods of testing for reclosable packages.' Child-proof fastenings used on non-reclosable packages shall comply with CEN standard EN 862, relating to 'Packaging - Child-resistant packaging - Requirements and testing procedures for non-reclosable packages for non-pharmaceutical products.'

OTHER REGULATIONS:
Not available

15.2 CHEMICAL SAFETY ASSESSMENT:
Not applicable (mixture).

SECTION 16 : OTHER INFORMATION

16.1

TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:
Hazard statements according the Regulation (EC) No. 1272/2008~487/2013 (CLP), Annex III:
H301 Toxic if swallowed. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life.
Notes related to the identification, classification and labelling of the substances:
Note B : Some substances are placed on the market in aqueous solutions at various concentrations and these solutions require different classification als labelling since the hazards vary at different concentrations.

ADVICES ON ANY TRAINING APPROPRIATE FOR WORKERS:
It is recommended for all staff that will handle this product to carry out a basic training in occupational risk and prevention, in order to provide understanding and interpretation of material safety data sheets and labelling of products as well.

MAIN LITERATURE REFERENCES AND SOURCES FOR DATA:

· European Chemicals Agency: ECHA, http://echa.europa.eu/
· Access to European Union Law, http://eur-lex.europa.eu/
· Threshold Limit Values, (AGCIH, 2012).
· European agreement on the international carriage of dangerous goods by road, (ADR 2015).
· International Maritime Dangerous Goods Code IMDG including Amendment 36-12 (IMO, 2012).

ABBREVIATIONS AND ACRONYMS :
List of abbreviations and acronyms that can be used (but not necessarily used) in this material safety data sheet:

· REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
· DSD: Dangerous Substances Directive.
· DPD: Dangerous Preparations Directive.
· GHS: Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations.
· CLP: European regularion on Classificatin, Labelling amd Packaging of substances and chemical mixtures.
· EINECS: European Inventory of Existing Commercial Chemical Substances.
· ELINCS: European List of Notified Chemical Substances.
· CAS: Chemical Abstracts Service (Division of the American Chemical Society).
· UVCB: Substances of Unknown or Variable composition, complex reaction products or biological materials).
· SVHC: Substances of Very High Concern.
· PBT: Persistent, bioaccumulable and toxic substances.
· vPvB: Very persistent and very bioaccumulable substances.
· VOC: Volatile Organic Compounds.
· DNEL: Derived No-Effect Level (REACH).
· PNEC: Predicted No-Effect Concentration (REACH).
· LD50: Letal dose, 50 percent.
· LC50: Letal concentration, 50 percent.
· UN: United Nations Organisation.
· ADR: European agreement concerning the international carriage of dangeous goods by road.
· RID: Regulations concerning the international transport of dangeous goods by rail.
· IMDG: International Maritime code for Dangerous Goods.
· IATA: International Air Transport Association.
· ICAO: International Civil Aviation Organization.

MATERIAL SAFETY DATA SHEET REGULATIONS:
Material Safety Data Sheet in accordance with Article 31 of Regulation (EC) No. 1907/2006 (REACH) and Annex of Regulation (EU) No. 2015/830.

HISTORY:	Revision:
Version: 5	08/05/2015
Version: 6	31/08/2015

Modifications with respect to the previous Material Safety Data Sheet:
The possible legislative, contextual, numerical, methodological and normative changes with respect to the previous version are highlighted in this Material Safety Data Sheet by a mark # in red and italic.