SAFETY DATA SHEET

Edited according to Regulation (EU) No 453/2010
Trade name: PLAST RETARD XCP
Revision date: 01/12/2015
Version: 2.1

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

1.1 Product identifier
Substance name: Mixture of degraded polyamides salified with calcium.
Commercial name of the product: PLAST RETARD XCP (Commercial code IEXCPAR000)
Substance definition: Chemically modified natural polymer.
REACH status: exempted.

1.2 Relevant identified uses of the substance and uses advised against
Use of the substance: Gypsum setting retarder.
Relevant identified uses:
The product is intended for industrial use, for professional use, for research, analysis and scientific education.
Uses advised against:
Particular uses advised against do not exist for this substance.

1.3 Details of the supplier of the safety data sheet
Supplier:
SICIT 2000 S.p.A. (manufacturer) Via Arzignano 80 I-36072 Chiampo (VI)
Phone +39 0444 450946 Fax +39 0444 677180
E-mail address competent person responsible for the safety data sheet:
sds@sicit2000.it

1.4 Emergency telephone number
+39 0444 450946 working hours only

SECTION 2. HAZARD IDENTIFICATION

2.1 Classification of the substance according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]:
Not classified. Not hazardous substance.

2.2 Label elements:
No hazard indications.

2.3 Other hazards:
Adverse physicochemical effects and adverse health effects:
None.
Adverse environmental effects:
None.
Other adverse effects:
None.

SECTION 3. COMPOSITION/INFORMAZIONI ON INGREDIENTS

3.1 Main constituent:
Mixture of degraded polyamides salified with calcium. Chemically modified natural polymer.
Hazardous impurities:
None.
Other information:
Combustible dust according to ATEX Directive. In cloud it can give explosion hazard in the presence of effective ignition sources.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General notes

There are not predictable hazardous effects in the normal use of the substance but some instructions must be followed.

After inhalation:

If breathed, move person from danger area and provide for fresh air and seek medical advice.
If not breathing give artificial respiration.

After skin contact:

Wash with clean water and if irritation occurs contact a physician.

After eye contact:

Rinse for 15 minutes with copious quantities of clean water keeping the eyelids well open in order to assure an adequate rinsing and seek medical advice.

After swallowing:

Rinse out the mouth with copious quantity of water and seek medical advice.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No remarkable particular symptoms and effects.

4.3 Indication of any immediate medical attention and special treatment needed

No remarkable particular indication.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Appropriate extinguishing media:

Take into account the materials present in its vicinity. In the case of fire due to nearby materials, water, foam, dry chemicals or carbon dioxide can be used.

Unsuitable extinguishing media:

None known.

5.2 Special hazards arising from the substance

In case of fire due to nearby materials, the product could emit pungent and stifling smokes.

5.3 Advice for firefighters

See dust explosion risk in section 9. Coordinate extinguishing measures taking into account local and environment circumstances. Avoid the generation and the dispersion of dust in air and on surfaces. Use respiratory protection equipment that supplies air from an independent source (auto-respirator) and suitable protective clothing.

5.4 Other information

Avoid to flush the water used for the extinguishing in surface-water.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Obey reasonable safety precautions using protective gloves, safety glasses and suitable clothing and practice according to good hygiene and manufacturing procedures keeping precautionary measures against the forming of inhalable aerosols/dust.

6.2 Environment precautionary measures

Collect the product for the re-use how much is possible and limit the pouring area; do not introduce the product and waste into sewage and surface water but into sewage facilities that feed a biological waste water treatment plant or into a container for disposal and dispose in accordance to the legislation in force.

6.3 Methods and material for containment and cleaning up

Wash with water.

6.4 Reference to other sections: Further information on exposure controls/ personal protection equipment and further disposal considerations are reported in sections 8 and 13 of this safety data sheet.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Personal protection measures:
Obey reasonable safety precautions and practise according to good industrial personal hygiene and good occupational practice using suitable protective mask to avoid powder breathing, safety glasses and suitable protective gloves and clothing. There are no particular rules if the product is properly used.
Firefighting precautionary measures:
Data relative to explosion properties relative to this product are reported in section 9. On the basis of current knowledge, the handling of the product doesn't present hazards if the suitable measures for preventive fire protection of good working practices are applied. Avoid the generation and the dispersion of dust in air and on surfaces. Work in clean and ventilated areas.
Measures to prevent aerosol and dust generation:
Use the product according to good manufacturing procedures.
Measures for environment protection:
Use the product following the suggested precautions and procedures.
General occupational hygiene recommendations:
Do not eat, drink and smoke in work areas.
Wash hands after use. Remove clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any compatibilities

The product is hygroscopic. Store the product in the original packing or in suitable sealed container in dry, clean and ventilated places. Keep the bags/containers well closed in order to avoid humidity and to maintain unchanged the original characteristics of the product.

7.3 Specific end use(s)

There are no particular rules to follow.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values:
There are not occupational exposure limit values for this substance.
Biological limit values:
There are not biological limit values for this substance.

8.2.1 Exposure controls

8.2.1 Appropriate engineering controls:

The premises where the product is stored /manipulated must be adequately ventilated, cool and dry.
In the case of the use of the product in powder form, a local exhaustive ventilation is suggested to keep the concentration of dust below generic permissible exposure limits.
Obey reasonable safety precautions and practise according to good industrial personal hygiene
follow good personal hygiene and good working practice rules using appropriate personal protective equipment in accordance to the Directive 89/686/EEC and D.Lgs.475/92- UNI standards considering the exposure to powder.

8.2.2 Personal protective equipment:

Eye/face protection: protective goggles (reference EN 166 standard) depending on working situation.
Hand protection: work gloves category II (reference EN 374 standard) by PVC, neoprene, nitrile or equivalent. For the appropriate choice evaluate permeation, degradation, drilling time in relation to the specific work activity which determines the wear.
Skin protection: work clothes with long sleeves and safety shoes for professional use of category II (Reference EN 344 standard).
Respiratory protection: wear a mask with filter type B or universal type (1,2 or 3) selected according to the specific working situation (reference EN 141 standard).

8.2.3. Environmental exposure controls:

Prevent the release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Aspect:	ivory/white coloured powder
Odour:	characteristic
pH relative to 10% w/w solution:	7,0-8,5
Dry substance:	> 90 % w/w
Density:	300-400 g/mL
Solubility in water (20°C in g/l):	total

Dust Explosion Risk

Minimum Ignition Energy ("MIE", mJ) according to Test Standard BS EN 13821:2002	> 1000	
Minimum (dust cloud) Ignition Temperature ("MIT", °C) according to Test Standard BS EN 50281-2-1:1999 Part 2-1: Method B	580	
MIT Value with Factor of Safety (°C)	387	
Explosion severity (20 litre sphere) according to Test Standard BS EN 14034 parts 1 & 2:		
Maximum explosion pressure Pmax (bar g)	7.7	(see note)
$(dP/dT)_{max}$ (bar. s^{-1})	370	
K_{st} value (bar.m.s^{-1})	101	
St class	1	
Minimum Explosive Concentration ("MEC", g.m^{-3}) according to Test Standard BS EN 14034 part 3	180	

Thermal Stability Characterisation

Layer (5mm layer) Ignition Temperature ("LIT", °C) according to Test Standard BS EN 50281-2-1:1999 Part 2-1: Method A	> 400
LIT Value with Factor of Safety (°C)	325

Note: Owing to the non uniformity of dust clouds, a repeat of the test could cause the Kst value to fluctuate +/- 20%. Consideration must be given to this if applying the data for use in explosion protection/prevention measures.

9.2 Other information:
Available on request.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity: The product doesn't present hazards due to its reactivity.

10.2 Chemical stability: The product is stable in the normal storage conditions. The product is stable if stored in closed and clean container and handled in the suggested conditions.

10.3 Possibility of hazardous reactions: No particular situations must be remarked.

10.4 Conditions to avoid:
The product is hygroscopic; avoid the product storage in open containers and in damp places. Avoid the generation and the dispersion of dust in air and on surfaces. Work in clean and ventilated areas.

10.5 Incompatible materials:
Strong oxidizing agents due to the possibility to realize exothermic reactions.

10.6 Hazardous decomposition products:
None in the normal storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
On the basis of the obtained results in performed toxicological tests, the product is not hazardous, not toxic, not oral noxious, not dermal noxious, not irritating for eyes and skin.
Acute oral toxicity: according to the results interpreted according to OECD n° 423 December 17th 2001, the product has a LD50 > 2000 mg/kg bw and is included in the category 5/NC of the GHS classification.

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Acute dermal toxicity: according to the Official Journal of the European Union 1272/2008 (CLP) dated December 16th, 2008 and OECD n° 402 of February 24th 1987, the product has a LD50 > 2000 mg/kg bw and can be considered NOT TOXIC – NOT HARMFUL.
Acute ocular toxicity: on the basis of the results, interpreted according to the Official Journal of the European Parliament and of the Council and OECD n° 405 of April 24th 2002, the product must be considered NOT IRRITANT for the eyes.
Studies relative to genetic and reproduction toxicity were not performed. Considering the constituents, particular effects can be excluded.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity
Data relative to toxicity obtained by performed tests on aquatic and/or terrestrial organisms are not available.

12.1 Persistence and degradability
On the basis of the obtained results for similar products, the product is biodegradable in aerobic conditions but can pollute ground and surface water. It is necessary to prevent the dispersion into ground and surface waters without a biological waste water treatment. Use a correct letting of diluted product in suitable biological treatment plant in order to avoid difficulties relative to active sludge degradation.

12.3 Bioaccumulative potential
Not pertinent.

12.4 Mobility in soil
The product is completely biodegradable but if present in copious quantities can pollute ground and surface water, it may cause temporarily alterations in the point of dispersion. It is necessary to prevent the dispersion of the product into ground and surface waters.

12.5 Results of PBT and vPvB assessment
Not pertinent.

12.6 Other adverse effects
There are not particular negative effects on environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Act according to local and national law prescriptions.

SECTION 14. TRANSPORT INFORMATION

The product must be transported according to national, European and international regulations for not hazardous substances.

14.1 UN number: Not applicable..
14.2 UN proper shipping name: Not applicable.
14.3 Transport hazard class: Not applicable.
14.4 Packing group: Not applicable.
14.5 Environmental hazards: Not applicable.
14.6 Special precautions for users: Not subjected to particular regulations.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code:
Transport in bulk are not performed.

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance
The substance is not subjected to specific community prescriptions in accordance to health and environment protection.

15.2 Chemical safety assessment
A chemical safety report was not performed.

SECTION 16. OTHER INFORMATION

16.1 Source of information

Toxicological reports relative to SICIT 2000 S.p.A. products.
Acute Oral Toxicity on "Plast Retard XCP", Eurofins Biolab S.r.l., Vimodrone (MI), 24th June 2014
Acute Dermal Toxicity on "Plast Retard XCP", Eurofins Biolab S.r.l., Vimodrone (MI), 24th June 2014
Acute Ocular Irritation Test on "Plast Retard XCP", Eurofins Biolab S.r.l., Vimodrone (MI), 30th September 2014
Plast Retard XCP, Ignition Sensitivity, Explosion Severity & Thermal Stability Testing, Report Number S114037R1V1/2015 for SICIT 2000 S.p.A., Chilworth Technology Limited, Phi House Southampton Science Park, Southampton, UK, 14th August 2015
Exemption of hydrolysed proteins from registration under the REACH Regulation, Joint Position Paper, Centro Reach S.r.l., Milan, Italy, September 2012

16.2 Extended text of hazard statement reported in sections 2 and 3.

No hazard statements are reported.

16.3 Revisions

Safety data sheet rev 1 453/2010/EU dated 20/02/13: first safety data sheet.
Safety data sheet rev 2.0 453/2010/EU dated 01/06/15: revision of sections 2, 3, 5, 11 e 16.
Safety data sheet rev 2.1 453/2010/EU dated 01/12/15: revision of sections 1, 8, 9 and 16.

16.4 Acronyms

CLP: Classification, Labelling and Packaging
EC: European Community
ECHA: European Chemicals Agency
EEC: European Economic Community
EINECS: European Inventory of Existing Commercial Chemical Substances
EU: European Union
GHS: Globally Harmonised System
IBC: International code for the construction and equipment of ships carrying dangerous chemicals in bulk
LD50: Lethal dose 50% test population
MARPOL: International Convention for the Prevention of Pollution from Ships
OECD: Organisation for Economic Co-operation and Development
PBT: Persistent, bioaccumulative and toxic
REACH: Registration Evaluation Authorization and Restriction of Chemicals
UN: United Nations
vPvB: Very persistent very bioaccumulative

16.5 Other information

The statements submitted in this safety data sheet are based on our current knowledge and experience, as accurate and complete as possible, but they are given in good faith and for information only. The information reported in this safety sheet is intended to give you advice about the safe handling of the product, for storage, processing, transport and disposal.
The information can not be transferred to other products. In the case of mixing the product with other products or in the case of further processing, the information reported in this safety data sheet is not necessarily valid for the new made-up material. The user must ensure that the information is appropriate and complete in the case of particular uses.
This product should be stored, handled and used in accordance with good hygiene practice and in accordance with legal regulations.
The data given here do not signify any warranty with regard to particular properties.
This safety data sheet replaces all previous versions/information.

This product is not hazardous and therefore a safety data sheet is legally not obligatory to be delivered to each recipient. The form to communicate safety information by safety data sheet is broadly known and for this reason the safety information is communicated using this format.