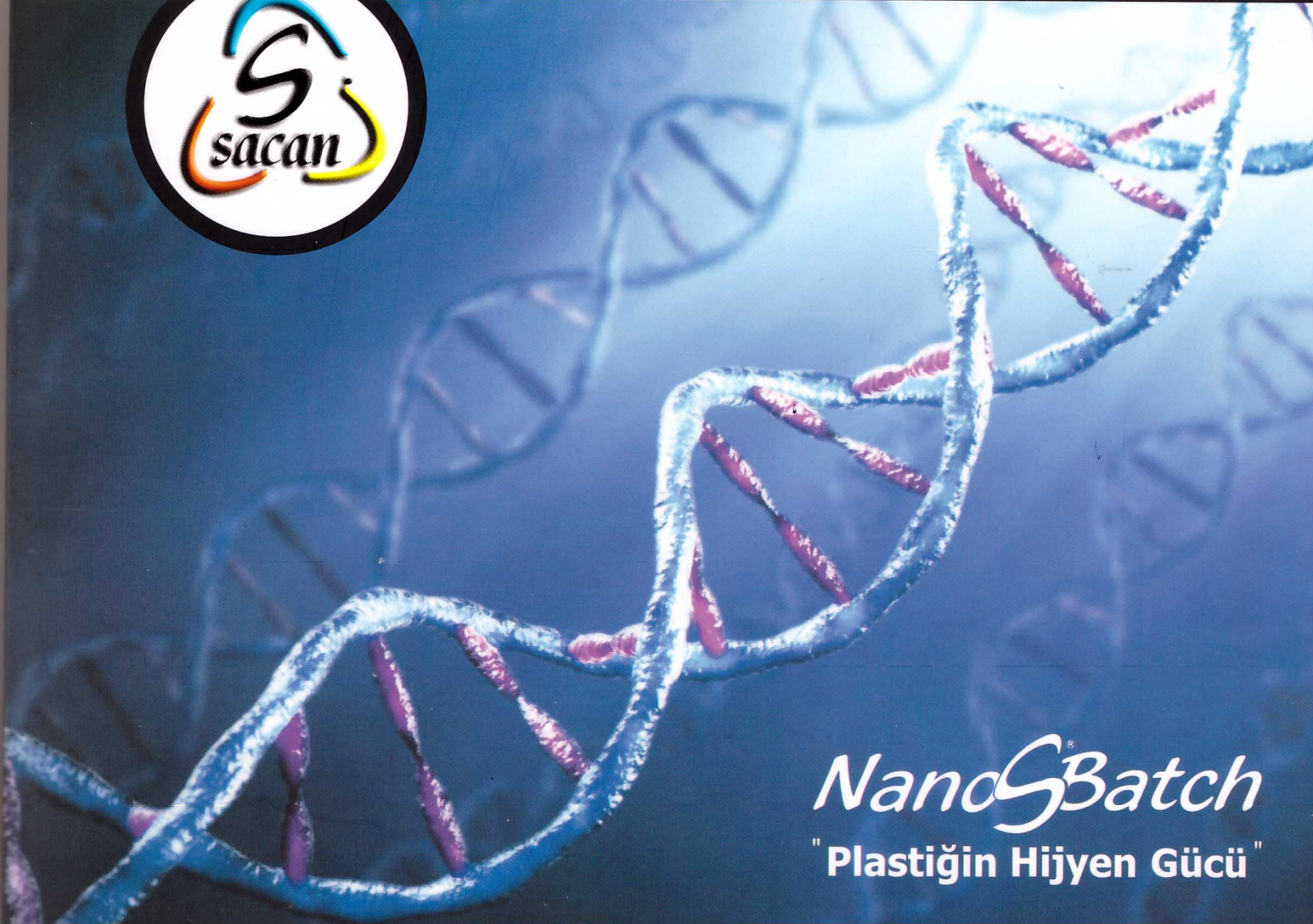




NanoSBatch[®]

Antimikrobiyal Masterbatch



NanoSBatch[®]
"Plastiğin Hijyen Gücü"

NanoSBatch[®]

Antimikrobiyal Masterbatch

Hayatın vazgeçilmez plastik, ortak kullanıma açık her alanda zararlı mikro-organizmalar için potansiyel bir üreme ve barınma mekanıdır. Birçok temizlik uygulaması mikro-organizmaların yayılmasını engellemekte yetersiz kalırken, bu durum yeni yeni yolların denemenin ve bulmanın önemini ve gerekliliğini bizlere kanıtlamıştır.

Antimikrobiyal etkisi sayesinde bir hijyen kaynağı olan *NanoSBatch*, uygulandığı plastik ürünlerin hepsinde zararlı mikro organizmalara karşı güvenli yüzeyler sağlar, kullanımınız için daha sağlıklı ürünler, yaşamınız için daha temiz bir dünya oluşturur.

Geri dönüştürülebilir olmaları plastikleri, alternatiflerine göre çok daha çevreci, daha ekonomik kaynak yapmaktadır.

NanoSBatch, uygun koşullarda geri dönüştürülmemiş plastiklerde oluşan zararlı mikro organizmalar karşı etkisi ile çevreye ve ekonomiye dost bir üründür.

NanoSBatch, antimikrobiyal gücünü doğanın kendi yarattığı gümüş madeninden alır, *NanoSBatch* hiçbir toksik kimyasal ve ağırlık metal içermez, yalnızca gümüşün nano boyutlara indirgenmesiyle elde edilir. Plastiğin ihtiyaç duyduğu yüksek proses sıcaklıklarında bile etkisini koruma özelliği ile antimikrobiyal alandaki diğer ürünlerle kıyaslanamaz.

NanoSBatch, nano teknolojik, doğaya ve insana dost, antimikrobiyal plastik katkıdır.

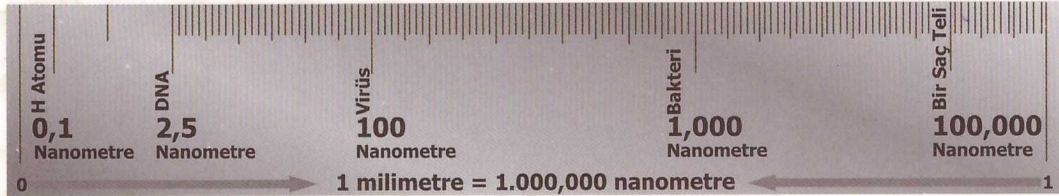
Bağımsız test laboratuvar sonuçları *NanoSBatch* antimikrobiyal etkinliğini belgelemiştir.

NanoSBatch bir temizlik aracı değil, plastiğin antimikrobiyal gücüdür.

NanoSBatch Nedir?

NanoSBatch antimikrobiyal masterbatch, nano boyuttaki gümüş ve plastik karışımıdır.

Nano; Bir ölçü birimi olan metrenin milyarda biridir. Bir nanometrenin diziliminde 5-10 atom bulunur.



Boyut olarak 10-100 nanometre aralığında olan ürünler "nano teknolojik ürün" diye sınıflandırılır. Nano Gümüş, 10-100 nanometre boyutunda olan metalik gümüş taneçiklerdir. Yüksek teknoloji içeren nano "teknolojik süreç" ile elde edilir. Maddeler nano boyutlara indirgenildiğinde çok farklı fiziksel ve kimyasal özellikler taşır.

NanoSBatch Antimikrobiyal Masterbatch Özellikleri;

* *NanoSBatch* antimikrobiyal özelliği ile uygulandığı plastiğe hijyen sağlar.

* *NanoSBatch* uygulandığı plastikte mantar, küf, yosun oluşumunu engeller.

* *NanoSBatch* 'in antimikrobiyal etkisi ve içeriğindeki nano gümüşler eksilmez, uygulandığı plastiğin kullanım ömrü boyunca katıldığı orana bağlı olarak antimikrobiyal ile bakterio statik arası özellik sağlar.

* *NanoSBatch* renksizdir. Renklendirilebilir.

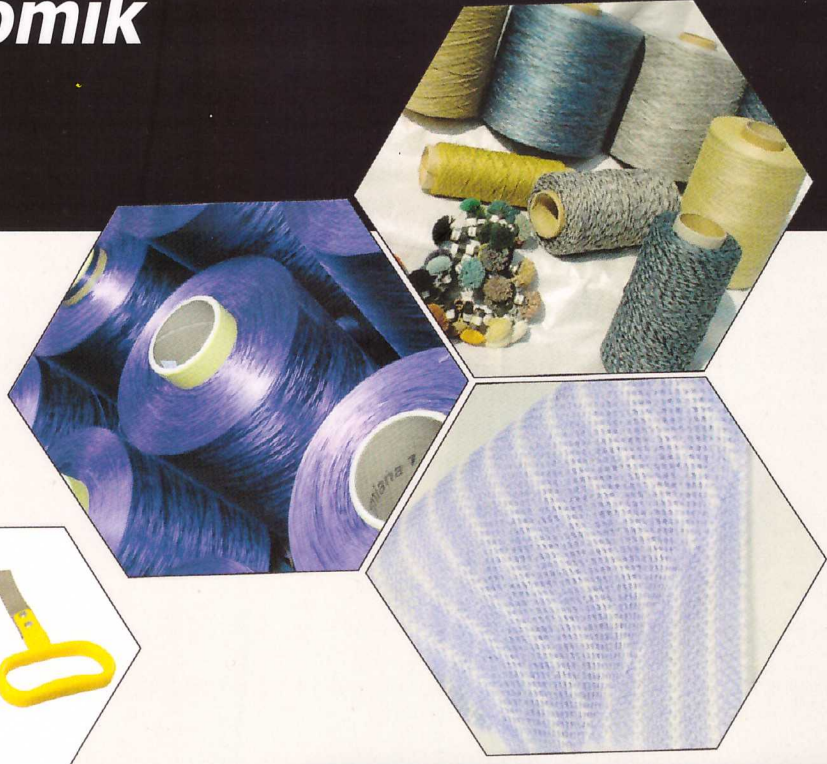
* *NanoSBatch* 'in polimerik yapısı uygulandığı plastik ile tam uyumludur. Antimikrobiyal etkin maddesi yüksek ısıya dayanıklıdır.



% **66,6** Ekonomik
 % **99,9** Etkin
 % **100** Yerli

NanoSbatch Nerelerde Kullanılır?

Antibakteriyel etkiye ve hijyene ihtiyaç duyulan her türlü plastik ürün imalatında; Film, Rafya, Enjeksiyon, Şişirme, Elyaf(Nonwoven, CF yarn), Ekstruzyon, Laminasyon, Rotasyon uygulamalarında kullanılır. NanoSbatch antimikrobiyel etkisi ile uygulandığı ürüne katma değer sağlar.



NanoSbatch Nasıl Kullanılır?

NanoSbatch tavsiye edilen oranda dozaj makinası ile veya elle harmanlanarak renk ve katkı masterbatchler gibi alışılmış şekliyle kolayca kullanılır.



ANALİZ RAPORU

FİRMA ADI	SACAN PLASTİK KATKILARI LTD.ŞTİ		
ADRESİ	İSTANBUL ANADOLU YAKASI O.S.B 10 SOK.NO:8 TUZLA/İSTANBUL		
PROJE ADI	-		
NUMUNE CİNSİ	NANO SBATCH PP		
ÜRETİM TARİHİ	-	ALINDIĞI YER	-
SON KULLANMA TARİHİ	-	NUMUNE SICAKLIĞI	-
ÜRETİCİ FİRMA/ MARKA	-	ORTAM SICAKLIĞI	-
AMBALAJ ŞEKLİ /TÜRÜ	KİLİTLİ POŞET	ALINDIĞI/GELİŞ TARİHİ	10.05.2012
MİKTARI	6 ADET	ANALİZ BAŞLANGIÇ TARİHİ	10.05.2012
SERİ / PARTİ NO	0250	RAPOR TARİHİ	21.05.2012
RAPOR/NUMUNE NO	03522-12	RAPOR SAYFA SAYISI	1/1

10/05/2012 tarihinde tarafınızca gönderilen "Nano Sbatch PP" örneğinin ISO 22196'a, göre Staphylococcus aureus ATCC 6538P ve Escherichia coli ATCC 8739 suşları için antibakteriyel etkiye sahip olduğu tespit edilmiştir.

Aygül Bora
Mikrobiyoloji Bölümü Analisti

Çağlayan Çatal
Mikrobiyoloji Bölüm Sorumlusu

Funda Şentürk
Genel Müdür

BU ANALİZ RAPORU ADLİDARI VE REKLAM AMACI İLE KULLANILMAZ. RAPORLARIMIZIN KISMEN ÇOĞALTILMASI VE ÜÇÜNCÜ SAHİSLARA VERİLMESİ İZİNİMİZE BAĞLIDIR. SONUÇLAR ANALİZİ YAPILAN NUMUNEYE AITTİR.

*Rapora ilave olarak analiz ayrıntıları Ek 1' de bilgileriniz sunulmuştur.

F.02.02/Rev.3/18.01.12/31.05.10



Merkez: Yeni Sahra Mah. Faah Cad. No:18 PK:34746 Ataşehir / İSTANBUL e-mail: saniter@saniter.com.tr • web: http://www.saniter.com.tr
 Tel: (0216) 470 81 48 - 470 81 49 Fax: (0216) 470 09 38 GSM Şirket: (0530) 545 13 22
 Şube: Çeşme Mah. Tuzla Mevki No: 11 PK: 48860 Akyarlar Bodrum / MUĞLA Tel: (0252) 392 82 99



EK:1 (Sayfa No:1/1)

03522-12 NUMARALI ANALİZ RAPORU DENEY SONUÇLARI

NANO SBATCH PP ANALİZ SONUÇLARI			ANTİMİKROBİYAL ETKİNLİK SONUCU (R değeri 2'den büyük olmalıdır)
Mikroorganizma Suşları	İnkübasyon Öncesi Başlangıç Bakteri Süspansiyonu Sayısı cfu/ml	İnkübasyon Sonrası Bakteri Süspansiyonu Sayısı cfu/ml	
Staphylococcus aureus ATCC 6538P	1,43x10 ⁵	10	R=4,15 (%99,9)
Escherichia coli ATCC 8739	1,35x10 ⁵	60	R =3,35 (%99,9)

F.02.02/Rev.3/18.01.12/31.05.10



Merkez: Yeni Sahra Mah. Faah Cad. No:18 PK:34746 Ataşehir / İSTANBUL e-mail: saniter@saniter.com.tr • web: http://www.saniter.com.tr
 Tel: (0216) 470 81 48 - 470 81 49 Fax: (0216) 470 09 38 GSM Şirket: (0530) 545 13 22
 Şube: Çeşme Mah. Tuzla Mevki No: 11 PK: 48860 Akyarlar Bodrum / MUĞLA Tel: (0252) 392 82 99

TEST REPORT

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SACAN PLASTIK KATKILARI MAK İTH İHR SAN VE TIC LTD STI
TUZLA MEMERCİLER OSB 10 SK NO 8 TUZLA İSTANBUL
TEL: 0216 5930538
FAX: 0216 5930540
To the attention of: **Suat Öztelli**

The following sample(s) was (were) submitted and identified by/on behalf of the client as:

Sample No.	Sample Description
A	NanoSBatch PP Antimicrobial Masterbatch
B	White F 041 AMB Antimicrobial Colorful Masterbatch
C	NanoSBatch PE Antimicrobial Masterbatch

Client's reference No. : TR 349726
Buyer : Not Provided
Division : Others - Hardgoods
Order No. : Not Provided
Model/Style No. : NanoSBatch PP Antimicrobial Masterbatch - White F 041 AMB Antimicrobial Colorful Masterbatch - NanoSBatch PE Antimicrobial Masterbatch
Article No. : Not Provided
Age Grade : Not Provided
Age Group Applied : Not Provided
Manufacturer : SACAN PLASTIK KATKILARI MAK İTH İHR SAN VE TIC LTD STI
Country of Origin : Not Provided
Country of Destination : Not Provided
Shipment Date : Not Provided
Sample Receiving Date : 30 March 2012
Test Performing Period : 30 March 2012 - 19 April 2012
Submitted Care Label Instructions : Not Provided
Overall Conclusion : PASS
Test Results : Please refer to the next page(s).
Performed Test Summary: Selected test(s) as requested by client against Client's performance standard.

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Test Parameters	Result
Chemical tests	A+B+C
Heavy metals with reference Resolution AP (89) 1	M

Remarks	
	M = Meets client's requirement
	F = Below client's requirement
	* = No specified requirement

Notes: Conclusions on meet/fail are based on the test result from the actual sampling of the received sample(s).

The test results relate to the tested items only. Test reports without SGS seal and authorized signatures are invalid. Reported results do not include uncertainties. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS. In this Test Report tests marked (1) are included in the UKAS Accreditation Scope. Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

NOTE: IN THIS REVISED-1 REPORT, SAMPLE DESCRIPTION WAS CORRECTED.
THIS REPORT SUPERSEDES OUR REPORT NO: 349726 DATED 19.04.2012

Issued in İstanbul
Signed for and on behalf of
SGS Supervise Gözetme Etüd
Kontrol Servisleri A.Ş.

Neslihan Erol Assistant Customer Services Manager
Ayşe Çimen Customer Services Manager



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Detail Test Result:#

Test Result(s)

PART NAME No.1 : MIXED ALL WHITE PLASTIC PELLETS (3 TYPES)

Test Item(s)	Unit	Method	MDL	Result
				No.1
Soluble Antimony (Sb)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	5	n.d.
Soluble Arsenic (As)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	2.5	n.d.
Soluble Barium (Ba)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	10	n.d.
Soluble Cadmium (Cd)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	5	n.d.
Soluble Chromium (Cr)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	5	n.d.
Soluble Lead (Pb)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	5	n.d.
Soluble Mercury (Hg)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	5	n.d.
Soluble Selenium (Se)	mg/kg	With reference to Resolution AP(89) 1, analysis was performed by ICP-AES.	5	n.d.

Note:
1. mg/kg = ppm : 0.1µt% = 1000ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected
4. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

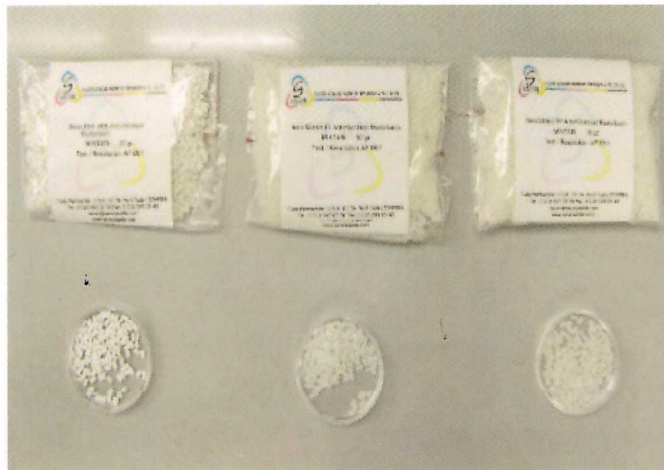
This test was performed at SGS Taiwan as subcontract.

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End of Test Report

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