



Corso di laurea in Scienze e Tecnologie Chimiche

ESEMPI DI SPECIFICHE PRODOTTO
PER LE DIVERSE TIPOLOGIE
CHIMICHE - "MARKETING per l'
INDUSTRIA CHIMICA " Anno
Accademico 2020 -2021
Docenza affidata a:PAOLO FERRARIO



versalis

SPECIFICA DI VENDITA
Sales Specification

PF2541/01

TOLUENE
TOLUENE

N° CAS: 108-88-3

N° EINECS: 203-625-9

N° REACH: 01-2119471310-51-0036

CODICE SAP 428321
SAP CODE 428321

CARATTERISTICHE PROPERTIES		UNITA' DI MISURA UNITS	LIMITI LIMITS	METODI DI ANALISI METHODS
1	Aspetto (1) <i>Appearance</i>	-	I.l.p.s.s.	ASTM E2680
2	Densità (a 15 °C) <i>Density (at 15 °C)</i>	kg/L	0.871-0.873	ASTM D4052
3	Titolo <i>Purity</i>	% p wt %	99,7 min	ASTM D2360
4	Xileni <i>Xylenes</i>	ppm p ppm wt	200 max	ASTM D2360
5	Benzene <i>Benzene</i>	ppm p ppm wt	200 max	ASTM D2360
6	Etilbenzene <i>Ethylbenzene</i>	ppm p ppm wt	150 max	ASTM D2360
7	Idrocarburi alifatici <i>Aliphatic hydrocarbons</i>	ppm p ppm wt	2000 max	ASTM D2360
8	Intervallo di distillazione (2) <i>Distillation range</i>	°C	1,0 max	ASTM D850
9	T compresa nell'interv. di distillazione (2) <i>Temperature included in distillation range</i>	°C	110,6	ASTM D850
10	Colore-Pt/Co (strumentale) <i>Pt-Co colour (instrumental)</i>	numero number	10 max	ASTM D5386
11	Acidità <i>Acidity</i>	mg NaOH/100 mL	assente absent	ASTM D847
12	Composti solforati (H ₂ S, SO ₂) <i>Sulfur compounds (H₂S, SO₂)</i>	-	negativo negative	Metodo interno Internal method
13	Zolfo totale <i>Total sulfur</i>	ppm p ppm wt	2 max	ASTM D5453
14	Indice di Bromo <i>Bromine Index</i>	mg Br/100 g	150 max	ASTM D2710

- (1) Liquido limpido privo di sostanze in sospensione / Clear liquid free of sediment and haze
(2) Sul prodotto anidrificato / Dried product

SECQ M. Beghi	MINT S. Tezza	CPRT-CB A. Viola	
			Ed. 6 Ed. Data 24/07/2015 Date

Allegato C - Gestione specifiche prodotti sperimentali, prodotti finiti e di vendita

pro ope 001 versalis r01

Questo documento è di proprietà versalis spa che se ne riserva tutti i diritti

SALES SPECIFICATION

EASTMAN

Specification No: 18160-2

Effective Date: 16 March 2006

Page 1 of 1

PRODUCT NAME

Eastman™ Acetic Anhydride, Reagent Grade

SPECIFICATIONS

PROPERTY	LIMITS	TEST METHOD
Acetic Anhydride, %	97.00 Minimum	TEAD-A-AN-G-GC-337
Residue on Evaporation, %	0.0030 Maximum	TEAD-A-AN-G-GA-6
Phosphates, %	0.001 Maximum	TEAD-A-AN-G-VCC-215
Chlorides, ppm	5 Maximum	TEAD-A-AN-G-TBA-62
Sulfates, ppm	5 Maximum	TEAD-A-AN-G-TBA-7
Iron, ppm	5.0 Maximum	TEAD-A-AN-G-AAS-114
Heavy Metals as Pb, ppm	2 Maximum	TEAD-A-AN-G-VCC-67
Permanganate Test for Reducing Substances	Pass Test	TEAD-A-AN-G-VCC-108

Eastman™ is a trademark of Eastman Chemical Company.

Eastman Chemical Company · P.O. Box 511 · Kingsport, Tennessee 37662 USA · 1-800-EASTMAN · 1-423-229-2000 · www.EASTMAN.com

For reasons of safety and accuracy, the person performing this procedure must be thoroughly trained and under the supervision of a professional person who is knowledgeable in the relevant science. Equipment and materials described should be used in accordance with safety precautions recommended by their manufacturers. Limits in this specification are applicable only to data obtained by the referenced test method.

Neither Eastman Chemical Company nor its marketing affiliates shall be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability or fitness of any product; and nothing herein waives any of the seller's conditions of sale.

Sales Specification

n-Nonanal

CAS-No. 124-19-6

Sales-
Specifications

Property	Limit	Unit
n-Nonanal*	min. 88.0	% (w/w)
2-Methyloctanal	max. 6.0	% (w/w)
Triphenylphosphine / Triphenylphosphine Oxide	max. 0.75	% (w/w)
1-Octene	max. 0.60	% (w/w)
High Boilers *	max. 6.0	% (w/w)

*e.g., C₁₈-aldols, formates, and acids.

Product-No. 50000879

Date of Issue 2007-10-01

Version-No. 2

Additional product number(s) in use for other packaging

OXEA GmbH
Otto-Roelen-Straße 3
46147 Oberhausen
Germany

OXEA Corporation
1505 West LBJ Freeway
Suite 400
Dallas, TX 75234
USA

email: psq@oxea-chemicals.com

Page 1 of 1
10540_SLS_NA_V2b

Test methods used are available upon request. Contact your Sales Support for copies.

Typical properties are not part of the sales specification.

This information is based on our present state of knowledge and shall be intended to provide general notes on our products and their field of application. It shall therefore not be construed as guaranteeing specific characteristics of the products described and/or their suitability for a particular application. Any existing industrial property rights shall be observed. The quality of our products is warranted under our General Conditions of Sale.

Lishui Nanming Chemical CO., LTD

1, 6-Hexandiol

TDS

Chemical name: 1, 6-Hexandiol

Molecular formula: HOCCCCCCOH

Relative molecular weight: 118.17

CAS: 629-11-8

Appearance: White crystal;

Flash point: 101°C

Melting point: 41-43°C

Boiling point: 249-251°C

Solubility: Sol in water, alcohol; sparingly sol in hot ether.

WGK: WGK1 slightly water endangering

Risk: 36/37/38

Safety phases: 36/37-24/25-23

Index of quality:

Items	Standards
Purity (GC)	≥99.5%
Every Other Impurity(GC)	≤0.3%
Total Impurities(GC)	≤0.5%
Water	≤0.2%
Solidification Temperature	≥41.6°C
Acid Number	≤0.1 mg KOH/g
Color(Pt-Co 60°C)	<15 HAZEN
Others	In response to Client's request

Uses:

Intermediate in the production of nylon; to make hexamethylenediamine, polyesters, polyurethans; in gasoline refining; as plasticizer, and so on.

Packing:

Iron drums with zinc inside, net weight 200kg; bags with endometriosis, net weight 25kg bag, 20000kg tank.

Storage:

Store in the tightly closed container and in a cool, dry, well-ventilated area away from incompatible substance.



GRUPPO SNIA

CAFFARO S.p.A.
Stabilimento di Brescia

Versione/ version 3
Data emissione 31.10.03
Approval date
Approvato da... *U. Spada*
Approved by

STANDARD DI MATERIA PRIMA
(Raw material standard)
ISOFTALONITRILE (IPN)

TEST <i>Method</i>	CARATTERISTICA	U. M.	VALORE <i>VALUE</i>
AGR 0064 (metodo interno) <i>(internal method)</i>	Titolo in IPN <i>IPN content</i>	% p/p % w/w	99,0 min.
AGR 0064 (metodo interno) <i>(internal method)</i>	Benzonitrile <i>Benzonitrile</i>	% p/p % w/w	0,05 max
AGR 0064 (metodo interno) <i>(internal method)</i>	Ortoftalonitrile <i>Orthophthalonitrile</i>	% p/p % w/w	0,10 max
AGR 0064 (metodo interno) <i>(internal method)</i>	Tereftalonitrile <i>Terephthalonitrile</i>	% p/p % w/w	0,40 max
AGR 0064 (metodo interno) <i>(internal method)</i>	Metatoluenenitrile <i>meta toluen nitrile</i>	% p/p % w/w	0,20 max
AGR 0064 (metodo interno) <i>(internal method)</i>	Cianobenzammide <i>3-Cyano-benzamide</i>	% p/p % w/w	0,20 max
AGR 0064 (metodo interno) <i>(internal method)</i>	Ftalimmide <i>Phthalimide</i>	% p/p % w/w	0,20 max
AGR 0064 (metodo interno) <i>(internal method)</i>	Amminobenzonitrile <i>amino benzo nitrile</i>	% p/p % w/w	0,05 max
AGR 0064 (metodo interno) <i>(internal method)</i>	Acido cianobenzoico <i>Cyanobenzoic acid</i>	% p/p % w/w	0,20 max
CIPAC MT 11 Vol. 1 A (AGR 0062)	Insolubile in xilene <i>Insoluble in xylene</i>	% p/p % w/w	0,20 max
UNI 24006 (AGR 0066)	Umidità <i>Moisture</i>	% p/p % w/w	0,10 max

Nota. Tra parentesi sono indicati i metodi interni equivalenti a quelli ufficiali citati.

Note. Between brackets equivalences of internal methods and official methods are specified.



Naugard[®] 445

Solid Aromatic Amine Antioxidant

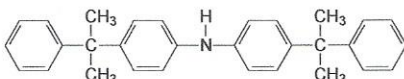
Naugard 445 is a highly effective non-discoloring aromatic amine type antioxidant finding utility as a thermal stabilizer in a wide variety of applications, including polyolefins, styrenics, polyols, hot melt adhesives, lubricants and polyamides. Excellent performance at processing temperatures, and strong synergy with other types of antioxidants such as phenolics and phosphites, makes **Naugard 445** an excellent choice as a stabilizer package component.

Chemical Name 4,4'-Bis(α,α -dimethylbenzyl) diphenylamine

CAS Reg. Number 10081-67-1

EINECS Number 233-215-5

Typical Properties of Naugard 445

	Appearance	White powder or granules	
	Molecular Weight	406	
	Melting Point [°C]	98-100	
	Colour – APHA	20	
	Specific Gravity at 55 °C	1.14	
	Flash Point [TCC/°C]	277C	
	Solubility (g/100ml solvent)		
	Acetone	40.8	
	Cyclohexane	3.5	
	Heptane	0.7	
	Hexane	0.7	
	MEK	41.2	
	Methanol	0.7	
	Toluene	32.8	
	Water	Insoluble	
	Thermo Gravimetric Analyses (10mg@10°C/minutes under N₂)		
	TGA 5%	TGA 10%	TGA 50%
	305	346	

Product Features: Synergistic, High melting.

Storage and Handling: This product may be stored at least three (3) years in sealed containers. Containers should be stored in a cool, dry area. Extended storage at elevated temperatures or exposure to direct heat could decrease product shelf life. Containers should be kept sealed when not in use. After a one (1) year period, a Chemtura representative should be contacted before using the remaining material.

For additional handling information, please see the Material Safety Data Sheet.

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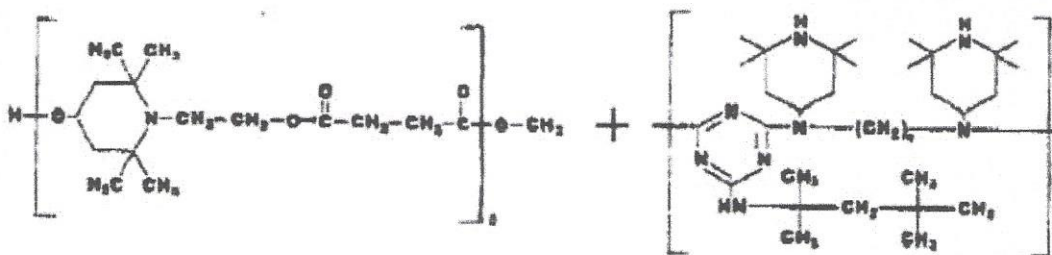
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Product Technical Data Sheet

Product name:	UV-783
Chemical name:	UV-944: poly[[6-[[[(1,1,3,3-tetramethylbutyl)amino]-1,3,5-triazine-2,4-diyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]-1,6-hexanediyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]]] UV-622: butanedioic acid, dimethylester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidine ethanol
Synonym:	tinuvin@783
CAS No:	UV-944 CAS Nr: 71878-19-8 (or 70624-18-9) UV-622 CAS Nr: 65447-77-0

Chemical Structure:



Quality norm: technical grade

Specification:

Appearance:	White to light yellow pastilles
Transmittance (%)	
425 nm	90 min.
500 nm	93 min.
Volatiles (%):	1.0 max.
Ash (%):	0.1 max.

Package:

25kgs net carton or as required, 500kg per pallet wrapped and film shrunk
 Loading capacity per 20'FCL: 10mt

Characterization

UV-783 is a synergistic mixture of UV- 944 and UV-622. It is a versatile UV stabilizer with outstanding extraction resistance, low gasfading and low pigment interaction.

UV-783 is particularly well suited for LDPE, LLDPE, HDPE films, tapes and thick sections and for PP in fibers and films. It is also the product of choice for thick sections where indirect food contact approval is required.

Application

UV-783 areas of application include polyolefins (PP, PE), olefin copolymers such as EVA as well as blends of polypropylene with elastomers

Features/benefits

UV-783 is a versatile UV stabilizer for thin and thick sections and delivers excellent cost / performance benefits. For applications requiring indirect food approvals, TINUVIN 783 can be used at levels not possible with other conventional HALS.

The synergism between the two high molecular weight HALS components of UV-783 is an effective stabilization system for the polymer against degradation through UV radiation and long term heat exposure.

Use Guide:

Thick Sections*	UV Stabilization of HDPE, LLDPE, LDPE and PP	0.1 - 0.8%
Films*	UV Stabilization of LLDPE and PP	0.1 - 1.0%
Tapes	UV Stabilization of PP and HDPE	0.1 - 0.8%
Fibers	UV Stabilization of PP	0.1 - 1.0%

**The presence of a UV-absorber (e.g. UV-326/327/328) is recommended in unpigmented or slightly pigmented articles or to improve the light fastness of certain organic pigments*

Physical Properties

Melting Range	55 – 140 °C
Flashpoint	192 °C (DIN 51758)
Bulk Density	514 g/l

Handling & Safety

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact.

Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. Avoid dust formation and ignition sources.

For more detailed information please refer to the material safety data sheet.

Registration

The registration status for UV-783 is derived from the single components.

The components are registered in:

Australia
Canada
China
Europe
Japan
Korea
Philippines
USA.

Food Contact

They are approved in many countries for use in food contact applications.

IMPORTANT:

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential

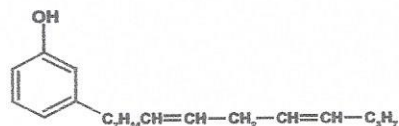
Cardolite[®] Ultra LITE 2023

Multipurpose Resin Modifier

Preliminary Technical Datasheet

DESCRIPTION

Cardolite Ultra LITE 2023 is a low viscosity, very light color multipurpose resin modifier and accelerator designed for use in coatings, adhesives, and other applications. The long hydrophobic aliphatic side chain of the cardanol molecule gives this product a very low viscosity and provides excellent early water resistance and corrosion protection. Used as an epoxy diluent and accelerator, high viscosity solvent or solvent free formulations can achieve enhanced workability, higher solids, and faster cure without sacrificing other performance properties using this product.



CHEMICAL STRUCTURE

PROPERTIES

PROPERTY	TYPICAL VALUE	PROVISIONAL SPECIFICATION	TEST METHOD
Appearance		Clear liquid	Visual
Color (Gardner)	1	≤ 1	ASTM D1544
Viscosity @ 25°C (cPs)	50	40 - 100	ASTM D2196
Solids (% weight)	99.9	≥ 99.5	ASTM D2369-98
Density @ 25°C (kg/L) (lbs/gal)	0.925 7.72	- -	ASTM D1475
Flash point	>260°C / 500°F	-	ASTM D93
pH	2.3	2.2 - 3.5	-
Recommended Use Level (% of total resin weight)	1 - 20	-	-
Shelf Life (Months)			-

APPLICATIONS

Cardolite Ultra LITE 2023 was designed as an accelerator and formulation tool to reduce VOC levels and viscosity on coating systems used in heavy duty marine, protective, industrial, and floor coatings. Although higher in viscosity than some other modifiers, the structure of this product gives excellent dilution efficiency to help rapidly reduce viscosity for improved pigment wetting, flexibility, and general application properties. Coating physical properties such as water resistance, corrosion protection, color stability, chemical resistance, and gloss are not significantly compromised with the addition of Ultra LITE 2023. This product can be added to either component of an epoxy system to provide good cure acceleration and replace or reduce levels of hazardous accelerators like nonylphenol.

ADVANTAGES

- Lowers viscosity while maintaining performance
- Preserves chemical and water resistance
- Good dilution and acceleration effects
- Improves flexibility
- Improves pigment wetting properties
- Usable on both sides on an epoxy formulation
- Very light color
- Low migration rate
- Low volatility and high flash point
- Non-toxic
- Based from natural, renewable, non-food raw material feedstock

江西世龙实业股份有限公司

J I A N G X I S E L O N I N D U S T R I A L C O . , L T D

ADDRESS: DASHAN INDUSTRIAL PARK, LEPING CITY, JIANGXI PROVINCE, CHINA

TEL: +86 798 6806033 FAX: +86 798 6806388 Website: <http://www.Chinaselon.com>

AC BLOWING AGENT

Chemical Name: Azodicarbonamide

Grade: AC-5

Typical analytical properties of AC-5

Property	Specification
APPEARANCE :	FAINT YELLOW POWDER
ASH (%) ≤ :	0.8
DecompositionTemp(°C) :	200-210
PURITY (%≥):	97
GasVolume(ml/g ≥):	220
AverageParticle(um) :	3 ~ 5
Loss on heating(%≤):	0.3

APPLICATION:

Per gain diameter is small, the bore of foam is thinning and well-distributed; blowing multiple is, high, special used in foam products which havent silicom and carbonate. Extensive used in plastic good, for example; rubber foaming, leatherette sports sole, wallpaper, slippers, PVC, EVA, PP, PE, PS and soft leather.

PACKAGING:

25kgs/bag, carton or fiber drums with PP packaging

STORAGE:

Store in cool and dry place, avoid rain and moisture, Keep away from fire, heat, sunlight, under no circumstances should it come into direct contact with acid and alkali.

SHELF LIFE: 12 months

Pure powder: (Purity $\geq 99\%$)

ITEM NO.	ADC-DN3	ADC-DN4	ADC-DN6	ADC-DN8	ADC-DN10	ADC-DN15	ADC-DN20	ADC-DN25
PROPERTIES								
Appearance	Yellow Powder	Yellow Powder	Yellow Powder	Yellow Powder	Yellow Powder	Yellow Powder	Yellow Powder	Yellow Powder
Granularity D50 μm	2.5-3.5	3.5-4.5	5.5-6.5	7.5-8.5	9.5-10.5	14.5-15.5	19.5-20.5	24.5-25.5
Gas-forming Amount ml/g \geq	225 \pm 3	225 \pm 3	225 \pm 3	225 \pm 3	225 \pm 3	225 \pm 3	225 \pm 3	225 \pm 3
Dissociation Point \geq	200 \pm 3	200 \pm 3	205 \pm 3	205 \pm 3	205 \pm 3	205 \pm 3	205 \pm 3	205 \pm 3
Residual on Sieve \leq	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Loss on Heating \leq	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Ash Content \leq	0.015 \pm 0.005	0.015 \pm 0.005	0.015 \pm 0.005	0.015 \pm 0.005	0.015 \pm 0.005	0.015 \pm 0.005	0.015 \pm 0.005	0.015 \pm 0.005
PH	6.5-7.5	6.5-7.5	6.5-7.5	6.5-7.5	6.5-7.5	6.5-7.5	6.5-7.5	6.5-7.5
Bag Packing(20GP) Without pallet	16. Ornts	17. Ornts	18. Ornts	20. Ornts	20. Ornts	20. Ornts	20. Ornts	20. Ornts
Application	ADC Blowing Agent is widely used in the non-pressurized and pressurized blowing of PVC, PE, PP, EVA synthetic and natural rubber, etc.							

REACH REGISTRATION CERTIFICATE

This is to certify that the non-EU entity:

Jiangxi Selon Industrial Co., Ltd.

Jiangxi Province Leping City Jiedu town

Has completed the Registration according to

Regulation (EC) No 1907/2006

For the following substance:

C,C'-azodi(formamide),

EC No.: 204-650-8 CAS No.: 123-77-3

Registration No.	
Tonnage band	Between 100 to 1000 tonnes/year
Type of Registration	Full Registration
UUID	ECHA-607540ee-3be0-4635-9ba1-8c671851a044
REACH Only Representative	REACH24H Consulting Group

Certification NO.: 

Issue Date: 3/7/2013

Authorized signature



REACH Compliance Services Limited

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E-mail: info@reach24h.com

Address: Suite 1E, Paramount Court, Corrig Road, Sandyford, Dublin 18, Ireland

Note: to fully comply with REACH Regulation, the above entity or EU importers shall apply for tonnage coverage certificate from RCS before placing products in EU. The certification remains the property of REACH Compliance Services Limited to whom it must be returned on request.

Product Specification Report

5-0669-Rev.00/8-12



Softens and removes spillages of polyelectrolytes

X-POL

Polyelectrolyte remover

FEATURES/BENEFITS:

Powerful	Quickly softens and removes spillages of polyelectrolytes with the minimum mechanical effect.
Reduces slip hazards	Polyelectrolyte spillages create extremely hazardous, slippery conditions, especially when wet. X-Pol helps to reduce these health and safety hazards.
Versatile	Can be used on all surfaces including concrete, asphalt, thermoplastic tiles, terrazzo and painted surfaces.
Safer	Non-flammable, non-acidic and not classified as dangerous or harmful to the environment.
Economical	Can be diluted with up to 30 parts of water.
Easy to use	Spray or mop the solution of X-Pol onto the surface to be cleaned. Allow to penetrate and wash off or mop with clean water.

USE:

Dilute with up to 30 parts of water. Spray or mop the solution onto the surface to be cleaned. Allow to penetrate and wash off or mop with clean water.

APPLICATIONS:

Polyelectrolytes are widely used in the water treatment industries. Spillages often prove difficult to remove, resulting in slip hazards. X-Pol removes these spillages from all surfaces including concrete, asphalt, thermoplastic tiles, terrazzo and painted surfaces.

PRECAUTIONS:

For further information see MSDS.

SPECIFICATIONS:

Form	Liquid
Colour	Blue
Odour	Slight detergent
Melting point	Less than 0°C
Boiling point	Greater than 100°C
Flash point	Not applicable
Density (20 °C)	1.1 g/cm ³
Miscibility in water	Soluble
pH (20°C)	Approximately 13.0

All information in this document is based on our practical experience and/or laboratory tests. Due to the multiplicity of conditions for usage and variable human factors, we recommend that you always test our products for suitability prior to use. At any time, this version of the product specification report may have been revised based on legislation, availability of the individual ingredients or newly acquired information. The current approved version is available upon request.