

SAFETY DATA SHEET**Zettex Activator**

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product name Zettex Activator

Container size 200ml, 400ml

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

Identified uses Activator For Cyanoacrylate Adhesives

1.3. Details of the supplier of the safety data sheet

Supplier Zettex Europe BV
Plaza 20
4782 SK
Moerdijk
The Netherlands
Tel: +31 888 938839
Fax: +31 888 938888
info@zettex.nl

1.4. Emergency telephone number

Emergency telephone Zettex Europe BV 031 (0) 888 938 839 (Mon-Fri 09:00-17:00)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

Physical hazards Aerosol 1 - H222, H229

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements**Pictogram**

Signal word Danger

Hazard statements H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P211 Do not spray on an open flame or other ignition source.
	P251 Do not pierce or burn, even after use.
	P261 Avoid breathing vapour/ spray.
	P271 Use only outdoors or in a well-ventilated area.
	P273 Avoid release to the environment.
	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P302+P352 IF ON SKIN: Wash with plenty of water.
	P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/ container in accordance with national regulations.	

Contains	Hydrocarbons, C6-C7, N-Alkanes, Isoalkanes, Cyclics, <5% N-Hexane, N,N-DIMETHYL-P-TOLUIDINE
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2.3. Other hazards

Containers should be thoroughly emptied before disposal because of the risk of an explosion. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. In use may form flammable/explosive vapour-air mixture. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hydrocarbons, C6-C7, N-Alkanes, Isoalkanes, Cyclics, <5% N-Hexane CAS number: 64742-49-0 EC number: 265-151-9	30-60%
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	
PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE CAS number: 68476-85-7 EC number: 270-704-2	30-60%
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280	

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N,N-DIMETHYL-P-TOLUIDINE		1-5%
CAS number: 99-97-8	EC number: 202-805-4	REACH registration number: 01-2119937766-23
Classification Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 2 - H330 STOT RE 2 - H373 Aquatic Chronic 3 - H412		Classification (67/548/EEC or 1999/45/EC) T;R23/24/25. R33.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. If breathing stops, provide artificial respiration. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Get medical attention. Do not induce vomiting.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Coughing, chest tightness, feeling of chest pressure. Exposure may cause coughing or wheezing. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.
Ingestion	There may be soreness and redness of the mouth and throat.
Skin contact	Prolonged contact may cause redness, irritation and dry skin. Product has a defatting effect on skin.
Eye contact	There may be irritation and redness. Eyes may water profusely. Irritating to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Show this safety data sheet to the doctor in attendance. The following symptoms may occur: Nausea, headache, dizziness, coughing and breathing difficulty.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water spray, dry powder or carbon dioxide. Alcohol-resistant foam.
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Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Forms explosive mixtures with air. May explode when heated or when exposed to flames or sparks. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

Hazardous combustion products Oxides of carbon. Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting Use water to keep fire exposed containers cool and disperse vapours. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not breathe vapour. Avoid contact with eyes and prolonged skin contact.

For non-emergency personnel For the greatest protection, clothing should include anti-static overalls, boots and gloves.

For emergency responders For the greatest protection, clothing should include anti-static overalls, boots and gloves.

6.2. Environmental precautions

Environmental precautions Contain the spillage using bunding. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Avoid water contacting spilled material or leaking containers. Approach the spillage from upwind. Take precautionary measures against static discharge. Use only non-sparking tools.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 7 for information on safe handling. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Wear protective clothing as described in Section 8 of this safety data sheet. Read and follow manufacturer's recommendations. Do not use in confined spaces without adequate ventilation and/or respirator. Do not eat, drink or smoke when using this product.

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Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Wash after use and before eating, smoking and using the toilet. Do not smoke in work area. Clean equipment and the work area every day.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid contact with oxidising agents. Store away from the following materials: Alkalis.

Storage class

Extremely Flammable Aerosol

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage description

Store in a flammable storage cupboard according to national regulations. Solvent based aerosol.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

WEL = Workplace Exposure Limit

Hydrocarbons, C6-C7, N-Alkanes, Isoalkanes, Cyclics, <5% N-Hexane (CAS: 64742-49-0)

DNEL

Workers - Dermal; Long term systemic effects: 773 mg/kg/day

General population - Inhalation; Long term systemic effects: 608 mg/m³

General population - Dermal; Long term systemic effects: 699 mg/kg/day

General population - Oral; Long term systemic effects: 699 mg/kg/day

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Ensure that the direction of airflow is clearly away from the worker. Use approved respirator if air contamination is above an acceptable level. Observe any occupational exposure limits for the product or ingredients. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof electrical, ventilating and lighting equipment. Ensure operatives are trained to minimise exposure. Refer to protective measures listed in sections 7 and 8.

Personal protection

Wear protective work clothing.

Eye/face protection

Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. (PE/PA/PE), 2.5mil (0.06mm), >480 min. Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

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Other skin and body protection	Provide eyewash station. Avoid contact with skin. Wear suitable coveralls to prevent exposure to the skin.
Hygiene measures	Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Use appropriate hand lotion to prevent defatting and cracking of skin. Wash at the end of each work shift and before eating, smoking and using the toilet.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. For short term use an AX filter is recommended.
Thermal hazards	Extremely cold, can cause frost bite.
Environmental exposure controls	Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Clear.
Odour	Hydrocarbons.
Odour threshold	Data lacking.
pH	pH (concentrated solution): 7
Melting point	Data lacking.
Initial boiling point and range	75-93°C @ 760 mm Hg. Boiling point of hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics.
Flash point	Not applicable.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	No specific test data are available.
Other flammability	No specific test data are available.
Vapour density	Not available.
Relative density	0.67-0.69 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Explosive properties	In use may form flammable/explosive vapour-air mixture.
Explosive under the influence of a flame	Yes In use may form flammable/explosive vapour-air mixture.
Oxidising properties	Does not meet the criteria for classification as oxidising.

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Comments A flash point method is not available but the major hazardous component, the Propellant has a flash point of <-60°C with flammability limits of 10.9% vol. upper and 1.4% vol. lower.

9.2. Other information

Other information Not available.

Volatile organic compound This product contains a maximum VOC content of 605 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended transport or storage conditions.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Highly volatile.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise. In use may form flammable/explosive vapour-air mixture.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Avoid the accumulation of vapours in low or confined areas.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong oxidising agents. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 8,333.33

Acute toxicity - dermal

ATE dermal (mg/kg) 25,000.0

Acute toxicity - inhalation

ATE inhalation (gases ppm) 8,333.33

ATE inhalation (vapours mg/l) 41.67

ATE inhalation (dusts/mists mg/l) 4.17

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation High exposures may cause an abnormal heart rhythm and prove suddenly fatal. Very high atmospheric concentrations may cause anaesthetic effects and asphyxiation.

Ingestion May cause soreness and redness of mouth and throat.

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Skin contact	Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting.
Acute and chronic health hazards	Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting. Arrhythmia (deviation from normal heart beat).
Route of exposure	Inhalation
Target organs	Central nervous system Respiratory system, lungs
Medical symptoms	Narcotic effect. Vapours may cause drowsiness and dizziness.

Toxicological information on ingredients.

Hydrocarbons, C6-C7, N-Alkanes, Isoalkanes, Cyclics, <5% N-Hexane

Skin sensitisation

Skin sensitisation Not sensitising.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Skin contact Irritating to skin.

Eye contact No significant hazard at normal ambient temperatures.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

Toxicological effects Information given is based on product data, a knowledge of the components and the toxicology of similar products.

Acute toxicity - oral

Notes (oral LD₅₀) Not applicable.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not applicable.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >20 mg/l, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

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Carcinogenicity

Carcinogenicity Carcinogenicity in humans is not expected.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure A single exposure may cause the following adverse effects: Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Inhalation

May cause respiratory system irritation.

Skin contact

Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.

Route of exposure

Inhalation Skin and/or eye contact

SECTION 12: Ecological information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Avoid the spillage or runoff entering drains, sewers or watercourses.

Ecological information on ingredients.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

Ecotoxicity Information given is based on product data, a knowledge of the components and the toxicology of similar products.

12.1. Toxicity

Toxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

Toxicity Not regarded as dangerous for the environment. The product is not believed to present a hazard due to its physical nature. Highly volatile.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

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Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Readily evaporates from water/soil due to high volatility.

Partition coefficient Not available.

Ecological information on ingredients.

Hydrocarbons, C6-C7, N-Alkanes, Isoalkanes, Cyclics, <5% N-Hexane

Partition coefficient Scientifically unjustified.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

Bioaccumulative potential Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility Volatile

Ecological information on ingredients.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not determined

Ecological information on ingredients.

Hydrocarbons, C6-C7, N-Alkanes, Isoalkanes, Cyclics, <5% N-Hexane

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS <0.1% 1,3 BUTADIENE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Ensure containers are empty before discarding (explosion risk). Must not be disposed of together with household waste.

Disposal methods Do not puncture or incinerate, even when empty. Avoid the spillage or runoff entering drains, sewers or watercourses. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

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Waste class Full or Partially Empty Aerosol: 16 05 04, Empty Aerosol: 15 01 10 (Containing hazardous residues), Empty Aerosol: 15 01 04 (No hazardous residues).

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AEROSOLS
Proper shipping name (IMDG)	AEROSOLS
Proper shipping name (ICAO)	AEROSOLS
Proper shipping name (ADN)	AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-D, S-U
ADR transport category	2
Tunnel restriction code	(D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824). Control of Substances Hazardous to Health Regulations 2002 (as amended). Health and Safety at Work etc. Act 1974 (as amended).
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Workplace Exposure Limits EH40.
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008	Aerosol 1 - H222, H229: Weight of evidence. Skin Irrit. 2 - H315: Calculation method. STOT SE 3 - H336: Calculation method. Aquatic Chronic 2 - H411: Calculation method.
Issued by	Technical Department
Revision date	07/08/2017
Revision	6
Supersedes date	17/06/2016
SDS number	20825
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H229 Pressurised container: may burst if heated. H280 Contains gas under pressure; may explode if heated. H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H315 Causes skin irritation. H330 Fatal if inhaled. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

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This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.