

SAFETY DATA SHEETS

This SDS packet was issued with item:

072361731

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

072361707 072361715 072361723 072361749 072361756 072361764

Other Clothing and Equipment: Face Mask
Ventilation: None required, local exhaust recommended

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure: Negligible
Vapor Density: >1
Evaporation Rate: <1
Solubility in Water: Slight
Boiling Point: ND
Specific Gravity: >1
Appearance and Odor: Tooth colored paste, slight odor

SECTION X: STABILITY AND REACTIVITY

Stable (x) Unstable ()
Conditions to Avoid: Heat in excess of 25°C, direct sunlight or intense light.
Incompatibility: Free radical initiators, oxidizing agents
Hazardous Decomposition Products: Acrylic smoke
Hazardous Polymerization: May occur () Will not occur (x)

SECTION XI: TOXICOLOGICAL INFORMATION

Carcinogens: None known.

SECTION XII: ECOLOGICAL INFORMATION

This material contains hazardous components. Allow materials to cure prior to disposal.

SECTION XIII: DISPOSAL CONSIDERATIONS

Dispose of safely in accordance with local, state, and federal regulations.

SECTION XIV: TRANSPORT INFORMATION

Stable under normal conditions of use, transportation, and storage.

SECTION XV: REGULATORY INFORMATION

510k #: K102753

SECTION XVI: OTHER INFORMATION

None

The data and information given in this msds are accurate on the date of preparation. It does not indicate any warranty or representation. We disclaim all liability relating to use of this material since this is beyond our control.



3420 FOSTORIA WAY STE. A-200 SAN RAMON, CALIFORNIA 94583 USA
PHONE 800/827-7940 FAX 925/973-0764

93280 Rev A

TurboTempTM 3



TurboTempTM 3 is a syringeable bis-acryl composite for chairside provisional restorations. TurboTemp 3 is fast and accurate, especially when used in conjunction with a quality vinyl polysiloxane impression material such as Danville's Star VPS. TurboTemp 3 is available in 6 shades: A1, A2, A3, A3.5, B1, and Bleach BL. All are delivered in 76g (50mL) cartridges designed to fit on a 10:1 style automix gun. Ten waste saver tips are included per kit.

INDICATIONS

Fabrication of provisional crowns, bridges, inlays, onlays, partial crowns and veneers.

PRECAUTIONS

1. TurboTemp 3 contains methacrylate monomers which can cause allergic reactions in susceptible individuals. Avoid contact between uncured product and skin, oral soft tissues or eyes. Do not take internally. Consult MSDS for more information.
2. Use as directed. This product is intended for use by dental practitioners only. Wear appropriate personal protective equipment.
3. TurboTemp 3 will adhesively bond to most dental adhesives and the air inhibited layer of fresh resin-based restoratives, making provisional removal for trimming difficult.
4. Contact with Eugenol containing products may interfere with the hardening of TurboTemp 3.
5. TurboTemp 3 **MUST BE REMOVED FROM THE PATIENT PRIOR TO 30 DAYS.**

TIMING

0:00-0:40 – Insertion in the mouth
2:00-2:30 – Removal from the mouth (if removed)
2:30-4:30 – Trimming/Finishing
5:00 – Final Hardness

RECOMMENDED METHOD

PRELIMINARY IMPRESSION: Prior to tooth preparation, place some flexible vinyl polysiloxane (First QuarterTM Monophase recommended) on a TRIPLE TRAY* and make a closed bite impression. Stiff heavy body materials (such as those for bite registration) must be avoided, as once removed, they will not go back well into undercuts. Alginate is an alternative, although less satisfactory.

PREP AND FINAL IMPRESSION: Prepare subject tooth and complete final impression. To preclude bonding to TurboTemp 3, cover any composite buildup with a separating agent.

IMMEDIATELY PRIOR TO USE: Remove cap and eject a pea size quantity of material out of the bare cartridge end. Eject slowly until a steady flow exudes from both compartments. Wipe off the end (without cross mixing) and install the mixing tip.

*Not a Danville trademark.

FABRICATE TEMPORARY:

I. CEMENTATION METHOD:

1. Discard first pea size of mixed material and inject TurboTemp 3 into the prep areas of the preliminary impression (using care to avoid trapping air bubbles) and have patient close on the tray.
2. Remove the tray when TurboTemp 3 has reached its elastic phase (approx. 2 minutes after injection). The provisional restoration will be retained in the tray and be slightly flexible. Remove excess material around the margins while it is still in the tray using an amalgam carver or #15

3. Immediately reset the tray and restoration in the mouth until completion of cure (approx. 5 minutes after injection).
4. Remove the provisional restoration from the mouth and complete trimming and finishing with a diamond. Cement into place using a non-eugenol temporary cement.
5. Porosity can be filled with flowable composite and light cured.

Note: If undercuts exist, such as inlay or onlay, brush non-eugenol cement (such as Nogenol) into the undercuts and let it set before placing the TurboTemp 3.

2. SHRINK FIT METHOD:

1. Discard first pea size of mixed material and inject TurboTemp 3 into the prep areas of the preliminary impression (using care to avoid trapping air bubbles) and have patient close on the tray.
2. Remove the tray when TurboTemp 3 has reached its trimming/finishing phase. Ideally the tray comes off the provisional restoration, leaving it firmly seated on the teeth. If not, immediately reseat the restoration on the teeth.
3. Trim off the flash with Danville's small Retract instrument, moving it vertically to cleave the flash off the margins. Alternatively use a #15 scalpel blade to trim off flash. (approx. 3 minutes after injection).
4. Porosity can be filled with flowable composite and light cured.
5. For removal, the restoration will need to be split with a diamond and pried off.

TURBOTEMP 3 BRIDGE FABRICATION:

Three units is the recommended maximum span. To add strength the proximals of posteriors, the connector areas should be modified to add bulk, prior to taking the preliminary impression. In the posterior, both buccal and lingual can be modified. In the anterior, most of the modification should be done on the lingual to preserve esthetics. The preferred block-out material is Ultradent Blue Blockout, but soft wax can also be used.

ADDITIONAL REINFORCEMENT: Wet Ribbond™ (or some other fiber) with E-Bond™, or Accolade™ flowable composite. Place the wetted fiber into the occlusal aspect of the preliminary impression. Using TurboTemp 3, infuse the fiber reinforcement and fill the remainder of the impression. Seat the filled preliminary impression in the mouth. Remove at approximately 2 minutes after injection. The reinforced provisional bridge will remain in the preliminary impression when it is removed from the mouth. Finish and cement as indicated in the recommended procedure.

*Not a Danville trademark.

HELPFUL HINTS

- When starting with a new cartridge: place cartridge in gun, remove cap, and extrude a small amount of material to insure both sides are flowing. NOTE: Always bleed the cartridge before installing a new tip.
- Make sure to mount the mixing tip properly. The tip has different size bores, and a notch to indicate proper orientation. Incorrectly mounting the tip can damage cartridge or cause cross-contamination.
- Waste the first pea size amount of mixed material that is extruded from tip to insure a full mix.
- Do not remove tip after use, it will serve as a new cap. Do not use cartridge intra-orally.
- A slightly gummy air inhibited layer will remain on the hardened surface of the provisional restoration. This layer allows bubble and margin defects to be minimized by directly bonding with a flowable composite such as StarFlow. The layer is easily removed with ethyl alcohol or polishing wheels/brushes.
- Exposure to temperatures below 74°F will extend the setting time of Turbo Temp 3. Set times are based on room temperature material. Refrigeration greatly retards set times.
- Normally there is no need for occlusal adjustments if vinyl polysiloxane is used.

STORAGE: Store TurboTemp 3 at temperatures lower than 82°F(28°C). Refrigeration may extend shelf life. Do not freeze. Do not use after expiration date.

SECTION I: IDENTIFICATION

Company Name:
Danville Materials
3420 Fostoria Way Suite A-200
San Ramon, CA 94583
Phone (800) 827-7940
Fax: (925) 973-0764
Prepared: December 5, 2011

SECTION II: HAZARD(S) IDENTIFICATION

OSHA Permissible Exposure Limits: None
Other Exposure Limit Used: None
ACGIH Threshold Exposure Limit: None
Chronic, Other: None

SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component	% by weight
Multifunctional Methacrylates	40-50
Malonylurea Derivative	Trace
Glass/Silica Filler	40-45
Polyvinyl esters	5-10

SECTION IV: FIRST-AID MEASURES

Primary Routes of Exposure: Skin, ingestion
Signs of Exposure: Severe skin or eye irritation, redness or burning sensation.
Ingestion may cause nausea.
Medical Conditions Generally Aggravated by Exposure: Allergies to methacrylates.
First Aid Procedures: For Skin - Wash off infected area with soap and water. For Ingestion - Seek medical advice, carry container with label and MSDS. For Eyes - Rinse immediately with plenty of water and consult physician.

SECTION V: FIRE-FIGHTING MEASURES

Flash Point: >100°C
Extinguishing Media: Carbon dioxide, foam, dry chemical
Special Fire Fighting Procedures: None
Flammable limits: ND
Unusual Fire and Explosion Hazards: Polymerizes upon heating.

SECTION VI: ACCIDENTAL RELEASE MEASURES

None

SECTION VII: HANDLING AND STORAGE

Spill Management: Use absorbent to collect the material. Wash contaminated surfaces with Soap and water

SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory: None
Eye Protection: Safety goggles
Gloves: Surgical, rubber/PVC gloves

1. Identification

Product identifier TurboTemp™ 2 & 3

Other means of identification

Document number SDS-013-ZD Rev. A

Recommended use Provisional dental composites.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Supplier

Company name Danville Materials

Address 2875 Loker Avenue East
Carlsbad, CA 92010

Telephone 1-800-827-7940

Contact Customer Service

E-mail danvillecs@zestdent.com

Website www.zestdent.com

Emergency telephone number 800-451-8346 / 760-602-8703

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Sensitization, skin	Category 1A
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause respiratory irritation.

Precautionary statement

Prevention Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/eye protection/face protection.

Response If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Ethoxylated bisphenol A dimethacrylate	24448-20-2	20 - 50
Diurethane dimethacrylate	41137-60-4	3 - 20
Fused silica	Proprietary	1 - 15

Composition comments	The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret. All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.
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4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Contains one or more components that will burn if involved in a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Persons susceptible to allergic reactions should not handle this product. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Fused silica	PEL	0.05 mg/m ³	Respirable dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Fused silica	TWA	0.05 mg/m ³	Respirable.
		1.2 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Fused silica	TWA	0.025 mg/m ³	Respirable fraction.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear approved chemical safety goggles. Face shield is recommended. Wear a full-face respirator, if needed.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Nitrile or butyl rubber gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

None required where adequate ventilation conditions exist. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state

Paste.

Form

Paste.

Color

Not available.

Odor

Not available.

Odor threshold

Not available.

pH

Not applicable.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point	Does not flash.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	> 20.5 mm ² /s
Viscosity temperature	104 °F (40 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Excessive heat.
Incompatible materials	Strong oxidizing agents. Free radical initiators. Iron.
Hazardous decomposition products	Thermal decomposition of this product can generate carbon monoxide and carbon dioxide. Silicon oxide fumes.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
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Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	May cause an allergic skin reaction.

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
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Carcinogenicity	Due to the form of the product, exposure to the potentially carcinogenic components is not expected.
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IARC Monographs. Overall Evaluation of Carcinogenicity

Fused silica (CAS Proprietary)

1 Carcinogenic to humans.

NTP Report on Carcinogens

Fused silica (CAS Proprietary)

Known To Be Human Carcinogen.
Reasonably Anticipated to be a Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Fused silica (CAS Proprietary)

Cancer

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
Further information	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Symptoms may be delayed.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	The product contains inorganic compounds which are not biodegradable.
Bioaccumulative potential	
Mobility in soil	No data available for this product.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Fused silica (CAS Proprietary)

Cancer
lung effects
immune system effects
kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations**US. Massachusetts RTK - Substance List**

Fused silica (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act

Fused silica (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

Fused silica (CAS Proprietary)

US. Rhode Island RTK

Fused silica (CAS Proprietary)

California Proposition 65

WARNING: This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Titanium dioxide (CAS 13463-67-7)

Listed: September 2, 2011

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Fused silica (CAS Proprietary)

16. Other information, including date of preparation or last revision

Issue date 21-February-2018

Revision date 27-February-2018

Version # 06

NFPA ratings



Disclaimer

Danville Materials cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.