

Part A: Smooth-Cast® 325 EU, 326 EU and 327 EU (SDS No. 1602A)

Part B: Smooth-Cast® 325 (SDS No. 488BEU)

# SAFETY DATA SHEET SDS No. 1602A

according to Regulation (EC) No. 1907/2006 as amended Version 4 Revision Date 12/28/2018

	Section 1 - Identification	on of the substance/mixture and of the company/undertaking			
1.1	<b>Product Identifier</b> Trade Name:	Part A for: Smooth-Cast <sup>®</sup> 325 EU, 326 EU and 327 EU			
1.2	<b>Relevant identified uses o</b> General Use: Restrictions on Use:	<b>the substance or mixture and uses advised against</b> Polyurethane Elastomer None known			
1.3	<b>Details of the supplier of t</b> Company: Telephone:	he safety data sheet: Smooth-On, Inc., 5600 Lower Macungie Rd., Macungie, PA 18062 Phone (610) 252-5800 Visit our website at <u>www.smooth-on.com</u> or email sds@smooth-on.com			
	E-mail address of person: responsible for the SDS				
1.4	Emergency Contact:	Chem-Tel Domestic: 800-255-3924 International: 813-248-0585			

## Section 2 – Hazard(s) Identification

## 2.1 Classification of the substance or mixture:

## Classification (REGULATION (EC) No 1272/2008) as amended

H315 Skin corrosion/irritation – Category 2
H317 Skin sensitization – Category 1
H319 Eye irritation – Category 2A
H332 Acute toxicity, inhalation – Category 4
H334 Respiratory Sensitization – Category 1
H335 Specific target organ toxicity – single exposure – Category 3 (respiratory)
H351 Carcinogenicity – Category 2
H373 Specific Target Organ Toxicity, repeated exposure Category 2 (respiratory)

For the full text of the H-Statements mentioned in this Section, see Section 16

## 2.2 Label elements, including precautionary statements

## Labelling (REGULATION (EC) No 1272/2008) as amended



Pictogram(s): Signal word: Danger

## Health Hazards:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

H332 Harmful if inhaled.	
	na symptoms or breathing difficulties if inhaled
H335 May cause respiratory irrita	
H351 Suspected of causing canc	
	ans through prolonged or repeated exposure.
General Precautions:	
	l, have product container or label at hand.
P102 Keep out of reach of childre	en.
P103 Read label before use.	
Prevention Precautions:	
P201 Obtain special instructions	before use.
P202 Do not handle until all safet	ty precautions have been read and understood.
P260 Do not breathe dust/fume/g	jas/mist/vapors/spray.
P264 Wash skin thoroughly after	handling.
P271 Use only outdoors or in a w	ell-ventilated area.
P272 Contaminated work clothing	g should not be allowed out of the workplace.
P280 Wear protective gloves/pro	tective clothing/eye protection/face protection.
P284 [In case of inadequate vent	ilation] wear respiratory protection.
Response Precautions:	
P302 + P352 IF ON SKIN: Wash with ple	enty of soap and water.
P304 + P340 IF INHALED: Remove pers	on to fresh air and keep comfortable for
breathing.	·
P305 + P351 + P338 IF IN EYES: Rinse cautious	ly with water for several minutes. Remove
contact lenses, if present a	nd easy to do. Continue rinsing.
	r doctor/physician if you feel unwell.
P332 + P313 IF SKIN irritation occurs: G	et medical advice/attention.
P362 + P364 Take off contaminated cloth	ning and wash it before reuse.
Storage Precautions:	
P403 + P233 Store in a well-ventilated pl	ace. Keep container tightly closed.
P405 Store locked up.	
Disposal Precautions:	
P501 Dispose of contents/contain	ner according to local, state and federal laws.

## Supplemental Hazard Statements:

None

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumul ative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# Section 3 - Composition / Information on Ingredients

## 3.1 Substances/Mixtures Hazardous ingredients according to Regulation (EC) No 1272/2008

Chemical name	Classification	Concentration	
Diphenylmethane-4,4'-diisocyanate			

CAS-No. EC-No. INDEX-No.	101-68-8 202-966-0 615-005-00-9	Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2, Acute Tox. 4, Resp. Sens. 1, STOT SE 3, Carc. 2, STOT RE 2, H315, H317, H319, H332, H334, H335, H351, H373 Concentration limits: >= 5 %: Eye Irrit. 2, H319; >= 5%: STOT SE 3, H335; >=5%: Skin Irrit. 2, H315; >=0.1%: Resp. Sens. 1, H334	35 – 85
--------------------------------	---------------------------------------	---	---------

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **Section 4 - First Aid Measures**

## 4.1 Description of first aid measures

## Inhalation

Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

## Eye Contact

Flush eyes with plenty of water. If irritation persists, seek medical attention.

## **Skin Contact**

In case of skin contact, wash thoroughly with soap and water.

## Ingestion

Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

- **4.2 Most important symptoms and effects, both acute and delayed** None known.
- 4.3 Indication of any immediate medical attention and specific treatment needed

## Section 5 - Fire-Fighting Measures

## 5.1 Extinguishing Media

Water Fog, Dry Chemical, and Carbon Dioxide Foam

5.2 Special hazards arising from the substance or mixture None known.

## 5.3 Advice for firefighters

Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure demand or positive-pressure mode.

#### Section 6 - Accidental Release Measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Only properly protected personnel should remain in the spill area; dike and contain spill. Stop or reduce discharge if it can be done safely.

## 6.2 Environmental precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains or unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. No special environmental precautions required.

## 6.3 Methods and material for containment and cleaning up

Put on appropriate protective gear including approved self-contained breathing apparatus, rubber boots and heavy rubber gloves. Dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

#### 6.4 Reference to other sections

See Section 3 for list of Hazardous Ingredients; Sections 8 for Exposure Controls; and Section 13 for Disposal.

## Section 7 - Handling and Storage

## 7.1 Precautions for safe handling

Use good general housekeeping procedures. Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet local standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination.

## 7.3 Specific end use(s)

These precautions are for room temperature handling. Other uses including elevated temperatures or aerosol/spray applications may require added precautions.

## Section 8 - Exposure Controls / Personal Protection

## 8.1 Control parameters:

## Components with workplace control parameters

Component	CAS-No.	Value Form of exposure	Control parameters	Basis
Diphenylmethane 4,4'-di-isocyanate	101-68-8	TWA	0.02 mg/m3	UK. EH40 WEL - Workplace Exposure Limits
		STEL	0.07 mg/m3	UK. EH40 WEL - Workplace Exposure Limits

asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. 54 Substances which may trigger the symptoms of asthma in people with pre-existing airway hyper- responsiveness, but which do not include the disease themselves. The latter substances are not classified asthmagens or respiratory sensitisers. Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational asthma and there should be appropriate consultation with an occupational asthma contact 'or - are listed in section C of HSE publication 'Asthmagen? Critical assessments of the evidence for agents insplicated in occupational asthma' as updated from time to time, or any other substances which the risk assessment has shown to be a potential cause of occupational asthma. The 'Sen' notation in the list of WELs has been assigned only to those	<b>–</b> :	
	Remarks	airway hyper-responsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper- responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. 54 Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper- responsiveness, but which do not include the disease themselves. The latter substances are not classified asthmagens or respiratory sensitisers. Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance. Capable of causing occupational asthma. The identified substances are those which: - are assigned the risk phrase 'R42: May cause sensitisation by inhalation'; or 'R42/43: May cause sensitisation by inhalation and skin contact' or - are listed in section C of HSE publicated in occupational asthma' as updated from time to time, or any other substance which the risk assessment has shown to be a potential cause of occupational asthma.

## **Biological occupational exposure limits**

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
Diphenylmethane 4,4'-di-isocyanate	101-68-8	urinary diamine	1µmol/mol creatinine	Urine	UK. Biological monitoring guidance values
	Remarks	Post task			
		urinary diamine	1µmol/mol creatinine	Urine	UK. Biological monitoring guidance values
		Post task			

# 8.2 Exposure controls:

## Engineering measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

## Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Protective measures**

Ensure that eye flushing systems and safety showers are located close to the working place.

#### **Section 9 - Physical and Chemical Properties**

## 9.1 Information on basic physical and chemical properties:

Appearance:	Clear liquid	Vapor pressure:	0.0013 hPa at 25 °C
Odor:	Odorless	Vapor density (Air=1):	No data
Odor threshold:	No data	Relative density:	1.066 g/cm3 at 25 °C
pH:	No data	Solubility:	Insoluble in water
		Partition coefficient	
Melting / freezing point:	26°C	(n-octanol/water):	No data
		Auto-ignition	
Low / high boiling point:	113°C	temperature:	No data
		Decomposition	
Flash Point:	200°C	temperature:	225 °C at 1,013 hPa
Evaporation rate:	No data	Viscosity:	No data
Flammability (solid, gas):	No data	Explosive properties:	No data
Upper/lower flammability			
or explosive limits:	No data	Oxidizing properties:	No data

## Section 10 - Stability and Reactivity

## 10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated., No corrosive effect on metal. Not fire propagating.

## 10.2 Chemical stability

These products are stable at room temperature in closed containers under normal storage and handling conditions.

# **10.3** Possibility of hazardous reactions

Hazardous polymerization cannot occur

## 10.4 Conditions to avoid

None known

## 10.5 Incompatible materials

Strong bases and acids

## 10.6 Hazardous decomposition products

Thermal oxidative decomposition can produce carbon oxides, gasses/vapors, and traces of incompletely burned carbon compounds.

#### Section 11- Toxicological Information

#### 11.1 Information on toxicological effects:

#### **Acute Toxicity**

LD50 Oral - Rat - 9,200 mg/kg Remarks: Behavioral Somnolence (general depressed activity). Behavioral Ataxia. Nutritional and Gross Metabolic Changes in Body temperature decrease.

LC50 Inhalation - Rat - male and female - 1 h - > 2.24 mg/l (OECD Test Guideline 403)

Skin Corrosion/Irritation

No data available

## Serious Eye Damage/Irritation

Eyes - Rabbit Result: Moderate eye irritation

#### **Respiratory/Skin Sensitization**

in vivo assay - Guinea pig in vivo assay – Mouse Result: May cause sensitisation by inhalation. Result: May cause sensitisation by skin contact.

#### Germ Cell Mutagenicity

Laboratory experiments have shown mutagenic effects. Ames test S. typhimurium Result: negative Mutagenicity (micronucleus test) Rat - male Result: negative

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Diphenylmethane-4,4'diisocyanate)

## **Reproductive Toxicity**

Reproductive toxicity - Rat - Inhalation Maternal Effects: Other effects. Specific Developmental Abnormalities: Musculoskeletal system.

## Specific Target Organ Toxicity – Single Exposure:

Inhalation - May cause respiratory irritation. - Respiratory system

#### Specific Target Organ Toxicity – Repeated Exposure:

Inhalation - May cause damage to organs through prolonged or repeated exposure. - Respiratory system

**Aspiration Hazard** 

No data available

## Potential Health Effects – Miscellaneous

RTECS: NQ9350000

Cough, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed.

## Section 12 - Ecological Information

## 12.1 Toxicity Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 0.35 mg/l - 24 h other aquatic invertebrates

- 12.2 Persistence and Degradability No data available
- **12.3 Bioaccumulative Potential** Bioaccumulation Cyprinus carpio (Carp) - 28 d - 0.0008 mg/l
- 12.4 Mobility in Soil

No data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other Adverse Effects

No data available

**Section 13 - Disposal Considerations** 

## 13.1 Waste treatment methods

## Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

**Section 14 - Transport Information** 

- **14.1 UN number:** 3082
- **14.2 UN proper shipping name:** Environmentally hazardous substance, liquid n.o.s. (bis(2-ethyl hexyl) phosphate)
- 14.3 Transport hazard class(es): 9
- 14.4 Packing group: III
- 14.5 Environmental hazards: Marine Pollutant
- 14.6 Special precautions for user: none known
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable

#### Section 15 - Regulatory Information

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

Authorisations and/or restrictions on use: REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

Diphenylmethane-4,4'-diisocyanate

## This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**California Proposition 65:** This product does not intentionally contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this substance/mixture by the supplier.

## 16 - Other Information

Date Prepared: December 28, 2018

Full text of H-Statements referred to under Sections 2 and 3.

- H315 Causes skin irritation
- H317 May cause an allergic skin
- reaction H319 Causes serious eye irritation
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if
- inhaled H335 May cause respiratory irritation
- H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

## Abbreviations and acronyms:

ATE - Acute Toxicity Estimate; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006; EINECS - European Inventory of Existing Commercial Chemical Substances

ELINCS - European List of Notified Chemical Substances; CAS# - Chemical Abstract Service number; PPE - Personal Protection Equipment; Kow - octanol-water partition coefficient; DNEL - Derived No Effect Level; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); NOEC - No Observed Effect Concentration; PNEC - Predicted No Effect Concentration; RMM - Risk Management Measure; OEL - Occupational Exposure Limit; PBT -Persistent, Bioaccumulative and Toxic; vPvB - Very Persistent and Very Bioaccumulative; STOT -Specific Target Organ Toxicity; CSA - Chemical Safety Assessment; EN - European Standard; UN -United Nations; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; WGK -Water Hazard Class

**Disclaimer:** The information contained in this Safety Data Sheet (SDS) is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.

Revision:4



Part A: Smooth-Cast® 325 EU, 326 EU and 327 EU (SDS No. 1602A)

# SAFETY DATA SHEET

**SDS No. 488B** according to Regulation (EC) No. 1907/2006 as amended Version 2 Revision Date 11/14/2017

Part B: Smooth-Cast® 325 (SDS No. 488BEU)

# Section 1 - Identification of the substance/mixture and of the company/undertaking

- 1.1
   Product Identifier

   Trade Name:
   Smooth-Cast<sup>®</sup> 325 Part B
- 1.2
   Relevant identified uses of the substance or mixture and uses advised against

   General Use:
   Polyurethane Elastomer

   Restrictions on Use:
   None known
- 1.3Details of the supplier of the safety data sheet:<br/>Company:Smooth-On, Inc.,<br/>5600 Lower Macungie Rd., Macungie, PA 18062<br/>Phone (610) 252-5800

E-mail address of person: Visit our website at <u>www.smooth-on.com</u> or email sds@smooth-on.com

**1.4 Emergency Contact**: Chem-Tel Domestic: 800-255-3924 International: 813-248-0585

## Section 2 – Hazard(s) Identification

## 2.1 Classification of the substance or mixture

Classification REGULATION (EC) No 1272/2008 (CLP) as amended Not a hazardous substance or mixture.

## 2.2 Label elements

#### Labelling REGULATION (EC) No 1272/2008 (CLP) as amended Not a hazardous substance or mixture.

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumul ative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## Section 3 - Composition / Information on Ingredients

#### 3.1 Substances/Mixtures

No ingredients are hazardous according to Regulation (EC) No 1272/2008.

## Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

## **Eye Contact**

Flush eyes with plenty of water. If irritation persists, seek medical attention.

#### Skin Contact

In case of skin contact, wash thoroughly with soap and water.

#### Ingestion

Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

**4.2 Most important symptoms and effects, both acute and delayed** None known.

#### 4.3 Indication of any immediate medical attention and specific treatment needed

## **Section 5 - Fire-Fighting Measures**

## 5.1 Extinguishing Media Water Fog, Dry Chemical, and Carbon Dioxide Foam

5.2 Special hazards arising from the substance or mixture None known.

## 5.3 Advice for firefighters

Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure demand or positive-pressure mode.

## Section 6 - Accidental Release Measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Only properly protected personnel should remain in the spill area; dike and contain spill. Stop or reduce discharge if it can be done safely.

## 6.2 Environmental precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains or unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. No special environmental precautions required.

#### 6.3 Methods and material for containment and cleaning up

Put on appropriate protective gear including approved self-contained breathing apparatus, rubber boots and heavy rubber gloves. Dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

## 6.4 Reference to other sections

See Section 3 for list of Hazardous Ingredients; Sections 8 for Exposure Controls; and Section 13 for Disposal.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

Use good general housekeeping procedures. Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet local standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination.

## 7.3 Specific end use(s)

These precautions are for room temperature handling. Other uses including elevated temperatures or aerosol/spray applications may require added precautions.

#### Section 8 - Exposure Controls / Personal Protection

#### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls:

#### Engineering measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government

standards such as NIOSH (US) or CEN (EU).

#### **Protective measures**

Ensure that eye flushing systems and safety showers are located close to the working place.

#### **Section 9 - Physical and Chemical Properties**

#### 9.1 Information on basic physical and chemical properties:

Appearance:	Liquid	Vapor pressure:	No data
Odor:	Mild to sweet	Vapor density (Air=1):	>1.0
Odor threshold:	No data	Relative density:	No data
pH:	No data	Solubility:	Insoluble in water
		Partition coefficient	
Melting / freezing point:	No data	(n-octanol/water):	No data
		Auto-ignition	
Low / high boiling point:	No data	temperature:	No data
		Decomposition	
Flash Point:	>150°C	temperature:	No data
Evaporation rate:	No data	Viscosity:	< 500 centipoise
Flammability (solid, gas):	No data	Explosive properties:	No data
Upper/lower flammability		Specific Gravity	
or explosive limits:	No data	(H2O=1, at 4 °C):	1.07

## Section 10 - Stability and Reactivity

#### 10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated., No corrosive effect on metal. Not fire propagating.

## 10.2 Chemical stability

These products are stable at room temperature in closed containers under normal storage and handling conditions.

# 10.3 Possibility of hazardous reactions

Hazardous polymerization cannot occur

# 10.4 Conditions to avoid None known

None know

10.5 Incompatible materials

Strong bases and acids

## 10.6 Hazardous decomposition products

Thermal oxidative decomposition can produce carbon oxides, gasses/vapors, and traces of incompletely burned carbon compounds.

## Section 11- Toxicological Information

11.1 Information on toxicological effects: Acute Toxicity No data available

**Skin Corrosion/Irritation** 

No data available

## Serious Eye Damage/Irritation

No data available

## **Respiratory/Skin Sensitization**

No data available

# Germ Cell Mutagenicity

No data available

# Carcinogenicity

No data available

## **Reproductive Toxicity**

No data available

#### **Specific Target Organ Toxicity – Single Exposure** No data available

Specific Target Organ Toxicity – Repeated Exposure No data available

Aspiration Hazard No data available

## **Potential Health Effects – Miscellaneous** No data available

## Section 12 - Ecological Information

#### 12.1 Toxicity No data available

- **12.2 Persistence and Degradability** No data available
- **12.3 Bioaccumulative Potential** No data available
- **12.4 Mobility in Soil** No data available
- **12.5 Results of PBT and vPvB assessment** No data available
- **12.6 Other Adverse Effects** No data available

## Section 13 - Disposal Considerations

## 13.1 Waste treatment methods

## Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

## **Contaminated packaging**

Dispose of as unused product.

#### Section 14 - Transport Information

## Not hazardous according to ADR/RID, IMDG, and IATA

- 14.1 UN number: none
- 14.2 UN proper shipping name: none
- 14.3 Transport hazard class(es): not applicable
- **14.4 Packing group:** not applicable
- 14.5 Environmental hazards: none known
- **14.6** Special precautions for user: none known
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable

#### Section 15 - Regulatory Information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this substance/mixture by the supplier.

## 16 - Other Information

## Full text of H-Statements referred to under Sections 2 and 3.

#### Abbreviations and acronyms:

ATE - Acute Toxicity Estimate; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006; EINECS - European Inventory of Existing Commercial Chemical Substances ELINCS - European List of Notified Chemical Substances; CAS# - Chemical Abstract Service number; PPE - Personal Protection Equipment; Kow - octanol-water partition coefficient; DNEL - Derived No Effect Level; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); NOEC - No Observed Effect Concentration; PNEC - Predicted No Effect Concentration; RMM - Risk Management Measure; OEL - Occupational Exposure Limit; PBT - Persistent, Bioaccumulative and Toxic; vPvB - Very Persistent and Very Bioaccumulative; STOT - Specific Target Organ Toxicity; CSA - Chemical Safety Assessment; EN - European Standard; UN - United Nations; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; WGK - Water Hazard Class

**Disclaimer:** The information contained in this Safety Data Sheet (SDS) is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.