Part #702 Revision: 07.05.2015

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

· Product identifier: SURETHANE ONE PART POLYURETHANE ADHESIVE/SEALANT

· Stock: CUSS · Code: 9020

Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

· Sector of Use

SU3 Industrial uses: uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· Product category PC1 Adhesives, sealants

· Process category

PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises

- Environmental release category ERC5 Industrial use resulting in inclusion into or onto a matrix
- · Application of the substance / the preparation : Polyurethane sealant
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  DOMINION SURE SEAL LTD.
  6175 Danville Road
  Mississauga, Ontario

CANADA L5T 2H7 Phone: 905-670-5411 Fax: 905-670-5174

Internet: http://www.dominionsureseal.com

· Information department: Laboratory

· Emergency telephone number: (905) 670-5411

#### 2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Sensitising

R42: May cause sensitisation by inhalation.

Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS08

Signal word Danger

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Trade name: SURETHANE BLACK CUSS

(Contd. of page 1)

#### · Hazard-determining components of labelling:

4,4'-methylenediphenyl diisocyanate

· Hazard statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### · Precautionary statements

P261 Avoid breathing vapours.

P284 In case of inadequate ventilation wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents and container in accordance with local regulations.

#### · Phrases in case of sale to the general public

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

#### · Advised precautionary statements

Wear protective gloves.

Keep out of reach of children.

#### · Additional information :

Contains isocyanates. May produce an allergic reaction.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: Adhesive containing a polyurethane prepolymer based on diphenylmethanediisocyanate

CAS: 9002-86-2	polyvinyl chloride substance with a Community workplace exposure limit	20-50%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	xylene, mixture of isomers  Xn R20/21; Xi R38  R10  ♦ Flam. Liq. 3, H226; ♦ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	4-7%
CAS: 13463-67-7 EINECS: 236-675-5 Reg.nr.: 01-2119489379-17	titanium dioxide substance with a Community workplace exposure limit	< 5%
CAS: 1305-78-8 EINECS: 215-138-9 Reg.nr.: 01-2119475325-36	calcium oxide Xi R38-41	< 2%

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CAS: 100-41-4	ethylbenzene	td. of page < 2%
EINECS: 202-849-4	xn R20; ⋒ F R11	~ 276
EC number: 926-141-6 Reg.nr.: 01-2119456620-43	hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics  Xn R65 R66  Asp. Tox. 1, H304	< 2%
CAS: 1309-37-1 EINECS: 215-168-2 Reg.nr.: 01-2119457614-35	diiron trioxide substance with a Community workplace exposure limit	< 2%
CAS: 1305-62-0 EINECS: 215-137-3 Reg.nr.: 01-2119475151-45	calcium dihydroxide Xi R38-41	< 1%
CAS: 101-68-8 EINECS: 202-966-0 Reg.nr.: 01-2119457014-47	4,4'-methylenediphenyl diisocyanate  Xn R20-40-48/20; Xn R42/43; Xi R36/37/38	< 0.5%
CAS: 1333-86-4 EINECS: 215-609-9 Reg.nr.: 01-2119384822-32	carbon black substance with a Community workplace exposure limit	< 0.5%

## 4 First aid measures

- · Description of first aid measures
- General information Immediately remove any clothing soiled by the product.
- · After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness, place patient stably in side position for transportation.

- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- · After eve contact Rinse opened eve for several minutes under running water. Then consult a doctor.
- · Most important symptoms and effects, both acute and delayed

Drowsiness

Headache

Dizziness

Nausea

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### 5 Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents

Carbon dioxide

Foam

Fire-extinguishing powder

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Trade name: SURETHANE BLACK CUSS

(Contd. of page 3)

· For safety reasons unsuitable extinguishing agents Water with full jet.

· Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Nitrogen oxides (NOx)

In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen cyanide (HCN)

Isocyanates

- Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Keep away from ignition sources.

- Environmental precautions: Do not allow product to reach sewage system or any water course.
- · Methods and material for containment and cleaning up:

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Do not close them (reaction with water forming carbon dioxide).

· Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

- · Handling
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: Provide ventilation for receptacles.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep receptacle tightly sealed.

Store in dry conditions.

Store in a cool place.

· Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

### 9002-86-2 polyvinyl chloride

WEL Long-term value: 10\* 4\*\* mg/m³

\*inhalable dust \*\*respirable dust

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1220_20_7	xylene, mixture of isomers (Contd. of p
WEL	
VVEL	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm
	Sk: BMGV
13463-67-7	7 titanium dioxide
WEL	Long-term value: 10* 4** mg/m³
	*total inhalable **respirable
1305-78-8	calcium oxide
WEL	Long-term value: 2 mg/m³
100-41-4 e	thylbenzene
WEL	Short-term value: 552 mg/m³, 125 ppm
	Long-term value: 441 mg/m³, 100 ppm
	Sk
-	ons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
RCP-TWA	Long-term value: 1200 mg/m³
VME	Long-term value: 1200 mg/m³
1309-37-1	diiron trioxide
WEL	Short-term value: 10* mg/m³
	Long-term value: 5* 10** 4*** mg/m³
	*fume (as Fe),**total respirable,***respirable
	calcium dihydroxide
WEL	Long-term value: 5 mg/m³
101-68-8 4	,4'-methylenediphenyl diisocyanate
WEL	Short-term value: 0.07 mg/m³
	Long-term value: 0.02 mg/m <sup>3</sup>
	Sen; as -NCO
	carbon black
WEL	Short-term value: 7 mg/m³
	Long-term value: 3.5 mg/m³
Ingredient	's with biological limit values:
1330-20-7	xylene, mixture of isomers
	0 mmol/mol creatinine
	dium: urine
Sa	mpling time: post shift rameter: methyl hippuric acid

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Personal protective equipment
- General protective and hygienic measures

Avoid close or long term contact with the skin.

Wash hands before breaks and at the end of work.

Do not eat, drink, smoke while working.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Short term filter device:

Filter AB

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#### · Protection of hands:

PVA gloves of superior quality.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Eye protection: Tightly sealed goggles.

· Body protection: Protective work clothing.

## 9 Physical and chemical properties

<u> </u>	
· Information on basic physical and chemical pr · General Information · Appearance:	•
Form:	Pasty
Colour:	CUSS Black; CUSSW White
· Odour:	Light
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	undetermined 137 °C
· Flash point:	40-55 °C
riden pema	(in closed cup)
· Flammability (solid)	The product is not subject to classification because its speed of combustion is lower than the limit of the regulation.
· Self-ignition temperature:	> 200 °C
· Self igniting:	Product is not selfigniting at room temperature.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible
· Explosion limits:	
Lower:	0.6 Vol %
Upper:	7 Vol %
Density at 20 °C:	1.16
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Other information	No further relevant information available.
· Volatile organic compounds (VOC) having at	

293,15 K a vapour pressure of 0,01 kPa or more

(directive 1999/13/EC) : < 9 %

### 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided:
   No decomposition if used according to specifications.

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(Contd. of page 6)

· Possibility of hazardous reactions

Reacts with alcohols, amines, aqueous acids and alkalis.

Reacts with water forming carbon dioxide. Danger of receptacles bursting because of vapour overpressure.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

Addit toxiony.		
· LD/LC50	values tha	t are relevant for classification:
1330-20-7	xylene, n	nixture of isomers
Oral	LD50	8700 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rbt)
Inhalative	LC50/4 h	6350 mg/l (rat)
100-41-4	ethylbenz	ene
Oral	LD50	3500 mg/kg (rat)
Dermal	LD50	17800 mg/kg (rbt)

- Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye. No irritating effect.
- · Sensitization: Sensitization possible through inhalation.
- · Additional toxicological information: Non-irritating to rabbit's eye (method : OECD guideline 405)

### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must be disposed of in an incinerator for hazardous waste according to official regulations.

· Waste disposal key: 08 04 09\*

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- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number	
ADR, ADN, IMDG, IATA	Void
UN proper shipping name	
ADR, ADN, IMDG	Void
IATA	Not regulated
Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Void
Packing group	
ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex	ll of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not classified as hazardous for transport as specified paragraphs 2.2.41.1.5 of the ADR code, 2.4.2.2.2.1 of IMDG code and 3.4.1.1.2.1 of the IATA code as the product is a solid and as its combustion speed is lowe than 2.2 mm/s
UN "Model Regulation":	

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Chemical safety assessment: A Chemical Safety Assessment has been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This data sheet is particularly in accordance with the european regulations 1907/2006/EC, 1272/2008/EC and their amendments; it is written according to annex II of the european regulation 453/2010/EC.

#### · Relevant phrases

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.

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Trade name: SURETHANE BLACK CUSS

	(Contd. of page 8
H318	Causes serious eye damage.
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.
R10	Flammable.
R11	Highly flammable.
R20	Harmful by inhalation.
R20/21	Harmful by inhalation and in contact with skin.
	8 Irritating to eyes, respiratory system and skin.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R42/43	May cause sensitisation by inhalation and skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
Contact:	ent issuing MSDS: Laboratory cf. § 1
Review :	ak in the markin of a never work manner amondments in comparison to the farmer version
	sk in the margin of a paragraph means amendments in comparison to the former version.
	rd européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the
	al Carriage of Dangerous Goods by Road)
IMDG: Inter	rnational Maritime Code for Dangérous Goods
	national Air Transport Association
	ally Harmonized System of Classification and Labelling of Chemicals
	uropean Inventory of Existing Commercial Chemical Substances uropean List of Notified Chemical Substances
	nical Abstracts Service (division of the American Chemical Society)
	al concentration, 50 percent
	al dose, 50 percent
	: Flammable liquids, Hazard Category 2
	2: Flammable liquids, Hazard Category 3
	4: Acute toxicity, Hazard Category 4 Skin corrosion/irritation, Hazard Category 2
	Skin corrosion/imation, Hazard Category 2 : Serious eye damage/eye irritation, Hazard Category 1
_yo Daiii. I	. Serious eye darinagereye imitation, Hazard Category 1

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
App. Tox. 1: Application beaters! Hazard Category 1

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

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### Annex: Exposure scenario 1

- · Name 4,4'-methylenediphenyl diisocyanate
- · Short title of the exposure scenario

Industrial use for rigid foam, coatings and adhesives and sealants

Professional end use in rigid foam, coatings, adhesives and sealants and other composite material Consumer end use in rigid foam, coatings and adhesives and sealants

Sector of Use

SU3 Industrial uses: uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU21 Consumer uses: Private households / general public / consumers

· Product category

PC1 Adhesives, sealants

PC9a Coatings and paints, thinners, paint removers

PC32 Polymer preparations and compounds

· Process category

PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises

PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC7 Industrial spraying

PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC15 Use as laboratory reagent

· Environmental release category

ERC5 Industrial use resulting in inclusion into or onto a matrix

ERC8c Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC8f Wide dispersive outdoor use resulting in inclusion into or onto a matrix

ERC2 Formulation of preparations

Conditions of use According to directions for use.

· Duration and frequency

up to 8 hour(s) per day

For consumer end use in rigid foam, coatings and adhesives and sealants:

Covers use up to 1 day/year

Covers skin contact area up to 2 cm2

- · Physical parameters
- · Physical state Liquid
- · Concentration of the substance in the mixture Raw material.
- · Other operational conditions
- · Other operational conditions affecting environmental exposure

Local fresh water dilution factor: 10

Local marine water dilution factor: 100

· Other operational conditions affecting worker exposure

Avoid contact with the skin and eyes.

Indoor application.

Outdoor application.

Do not breathe gas/vapour/aerosol.

- Other operational conditions affecting consumer exposure Keep out of the reach of children.
- Other operational conditions affecting consumer exposure during the use of the product Not applicable.

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#### · Risk management measures

#### · Worker protection

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Provide extraction ventilation at points where emissions occur. Provide extract ventilation to material transfer points and other openings. Handle in a fumecupboard or under extract ventilation.

If above technical/organisational control measures are not feasible, then adopt following PPE: wear a respirator conforming to EN140 with Type A filter or better.

Use suitable eye protection and gloves. Wear suitable coveralls to prevent exposure to the skin.

#### · Organisational protective measures

Ensure that activities are executed by specialists or authorised personnel only.

### · Technical protective measures

Ensure that suitable extractors are available on processing machines

Work only in fume cupboard.

Ensure good ventilation/exhaustion at the workplace.

#### · Personal protective measures

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Tightly sealed goggles.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Short term filter device:

Filter A2B2-P3

Butyl, nitrile or polychloroprene rubber gloves of superior quality.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Protective work clothing.

#### · Measures for consumer protection

Ensure adequate labelling.

Keep locked up and out of the reach of children.

Protective gloves

Tightly sealed goggles.

#### · Environmental protection measures

- · Air No special measures required.
- · Water Do not allow to reach ground water, water bodies or sewage system.
- · Soil Prevent contamination of soil.
- · Disposal measures Disposal must be made according to official regulations.

#### · Disposal procedures

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

#### · Exposure estimation

#### · Worker (dermal)

The highest dermal exposure to be expected is 5.0 mg / kg / day. (estimations using EASE)

· Worker (inhalation) The highest inhalative exposure to be expected is 0.05 ppm.

#### Environment

Prediction of highest expected environmental exposure (soil) is 0.27 mg/kg dry weight The highest environmental exposure to be expected for surface waters is 0.0687 mg / L. Prediction of highest expected environmental exposure (sea water) is 0.000543 mg/kg

#### Consumer

The highest inhalative exposure to be expected for consumers is 0.020 ppm. The highest dermal exposure to be expected for consumers is 0.069 mg / kg / day. (Consexpo model)

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• Guidance for downstream users

For the risk assessment, the tools recommended by ECHA can be used.

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### Annex: Exposure scenario 2

- · Name xylene, mixture of isomers
- · Short title of the exposure scenario

Industrial use for rigid foam, coatings and adhesives and sealants

Professional end use in rigid foam, coatings, adhesives and sealants and other composite material Consumer end use in rigid foam, coatings and adhesives and sealants

· Sector of Use

SU3 Industrial uses: uses of substances as such or in preparations at industrial sites

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU3 Industrial uses: uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU21 Consumer uses: Private households / general public / consumers

#### · Product category

PC1 Adhesives, sealants

PC32 Polymer preparations and compounds

#### Process category

PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises

PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC7 Industrial spraying

PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC15 Use as laboratory reagent

#### · Environmental release category

ERC2 Formulation of preparations

ERC5 Industrial use resulting in inclusion into or onto a matrix

ERC8c Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC8f Wide dispersive outdoor use resulting in inclusion into or onto a matrix

#### Description of the activities / processes covered in the Exposure Scenario

See section 1 of the annex to the Safety Data Sheet.

#### Conditions of use

Customary application according to section 1.

According to directions for use.

#### Duration and frequency

SU3 and SU22:

Up to 8 h per day, 300 days per year

SU21, PC1 (adhesives, sealants):

Up to 1 times per day, 365 days per year

Concentrations up to 25 %

Exposed skin surface (hands) up to 35.73 cm2

Amounts used/applied per event: 75 g

Room volume : > 20 m3

Exposition up to 1 hour(s) per event

#### · Physical parameters

- · Physical state Fluid
- · Concentration of the substance in the mixture Raw material.

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Trade name: SURETHANE BLACK CUSS

(Contd. of page 13)

· Other operational conditions

· Other operational conditions affecting environmental exposure

Local fresh water dilution factor: 10 Local marine water dilution factor: 100

· Other operational conditions affecting worker exposure

Indoor application.

Outdoor application.

Do not breathe gas/vapour/aerosol.

Avoid contact with the skin, eyes and clothing.

Avoid contact with the skin.

- · Other operational conditions affecting consumer exposure Keep out of the reach of children.
- Other operational conditions affecting consumer exposure during the use of the product Application temperature : room temperature
- · Risk management measures
- · Worker protection

SU3:

Avoid direct contact with skin. Identify potential areas for indirect contact with the skin. Wear gloves (EN 374) if there is a risk of contact of the substance with the skin. Remove impurities / quantities immediately after spilling. Wash skin immediately after handling. Complete basic training of personnel, so that exposure is minimized and eventually the skin problems are reported. Other measures of skin protection are required, such as waterproof clothing and a protective mask during activities with high spread, leading to the likely significant release of aerosols (e.g. spraying).

Mixing operations (closed systems): provide adequate general ventilation (not less than 3 to 5 air changes per hour).

Preparation of material for application / blending operations (open systems): provide adequate controlled ventilation (10 to 15 air changes per hour).

Spray (automatic / robotic): carry out in ventilated booth with laminar air flow.

Spray: ensure an adequate controlled ventilation (10 to 15 air changes per hour). Wear a respiratory protection (standard EN 140 with Type A filter or better).

Roller coating, spraying and flow coating: provide additional ventilation where emissions occur.

Storage with occasional controlled exposure: store substance in a closed system.

Cleaning : ensure an adequate controlled ventilation (10 to 15 air changes per hour) SU 22 :

Avoid direct contact with skin. Identify potential areas for indirect contact with the skin. Wear gloves (EN 374) if there is a risk of contact of the substance with the skin. Remove impurities / quantities immediately after spilling. Wash skin immediately after handling. Complete basic training of personnel, so that exposure is minimized and eventually the skin problems are reported. Other measures of skin protection are required, such as waterproof clothing and a protective mask during activities with high spread, leading to the likely significant release of aerosols (e.g. spraying).

Preparation of material for indoor application: provide adequate controlled ventilation (10 to 15 air changes per hour); avoid activities with more than 1 hour exposure.

Preparation of material for outdoor application: ensure that exploitation takes place outdoors; avoid activities with more than 1 hour exposure.

Indoor roller coating, spraying and flow coating: ensure adequate controlled ventilation (10 to 15 air changes per hour); wear respiratory protection (standard EN 140 with Type A filter or better).

Outdoor roller coating, spray and flow coating : ensure that the operation takes place outdoors, wear respiratory protection (standard EN 140 with Type A filter or better).

Indoor spraying: carry out in ventilated booth with laminar air flow.

Outdoor spraying: ensure that the operation takes place outdoors; avoid activities with more than 4 hours exposure; wear a full face respirator according to standard EN136 with Type A filter or better. Cleaning and maintenance of equipment: extinguish systems before opening and maintenance of equipment; avoid activities with more than 4 hours exposure.

Storage with occasional controlled exposure : store substance in a closed system ; ensure an adequate controlled ventilation (10 to 15 air changes per hour).

Do not eat, drink, smoke while working.

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#### · Organisational protective measures

SU3 and SU 22:

Do not apply industrial sludge to natural soils.

Sewage sludge has to be incinerated, stored or treated.

Ensure that activities are executed by specialists or authorised personnel only.

#### · Technical protective measures

Ensure good ventilation/exhaustion at the workplace.

Ensure that suitable extractors are available on processing machines

Take note of emission threshold.

#### · Personal protective measures

Avoid contact with the eyes and skin.

Wear approved protective gloves (EN 374); if contamination of hands is likely, wash skin contamination immediately.

Do not inhale gases / fumes / aerosols.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Wear a respiratory protection (standard EN 140 with Type A filter or better).

Avoid contact with the skin.

Protective work clothing.

#### · Measures for consumer protection

Ensure adequate labelling.

Protective gloves

Tightly sealed goggles.

Keep out of reach of children.

Keep locked up and out of the reach of children.

### · Environmental protection measures

· Air No special measures required.

#### · Water

Do not allow to reach sewage system.

On-site wastewater treatment (before release into the water) to achieve the required level of cleaning : 93.6 %

Do not allow to reach ground water, water bodies or sewage system.

· Soil Prevent contamination of soil.

#### · Disposal measures

Do not apply industrial sludge to natural soils.

Ensure that waste is collected and contained.

#### · Disposal procedures

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

#### · Guidance for downstream users

For the risk assessment, the tools recommended by ECHA can be used.