



# NIELSEN

## SAFETY DATA SHEET BRAKELEC III

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

#### 1.1. Product identifier

Product name BRAKELEC III

Internal identification L630

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

Identified uses Cleaning agent.

#### 1.3. Details of the supplier of the safety data sheet

Supplier NIELSEN CHEMICALS  
RAWDON ROAD  
MOIRA  
SWADLINCOTE  
DERBYSHIRE  
DE12 6DA  
info@nielsenchemicals.com  
TEL: +44 (0) 1283 222277  
FAX: +44 (0) 1283 225731

#### 1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs). +44 (0) 1865 407333 (24 hrs). MEDICAL AND ENVIRONMENTAL EMERGENCIES ONLY.

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67.

#### 2.2. Label elements

Pictogram



Signal word

Danger

## BRAKELEC III

<b>Hazard statements</b>	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P332+P313 If skin irritation occurs: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations. P280 Wear protective gloves, eye and face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P310 Immediately call a POISON CENTER/ doctor.
<b>Contains</b>	HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC</b>	<b>60-100%</b>
CAS number: 142-82-5	EC number: 927-510-4
	REACH registration number: 01-2119475515-33-xxxx
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Flam. Liq. 2 - H225	Xn;R65. Xi;R38. F;R11. N;R51/53. R67.
Skin Irrit. 2 - H315	
STOT SE 3 - H336	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

## BRAKELEC III

<b>Inhalation</b>	May cause drowsiness or dizziness.
<b>Ingestion</b>	Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	May cause discomfort.

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

**Notes for the doctor**            Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**    Extinguish with the following media: Foam, carbon dioxide or dry powder.

**Unsuitable extinguishing media**    Do not use water, if avoidable.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards**                    Highly flammable liquid and vapour.

**Hazardous combustion products**    Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

### 5.3. Advice for firefighters

**Protective actions during firefighting**    Use water to keep fire exposed containers cool and disperse vapours.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions**            Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. No smoking, sparks, flames or other sources of ignition near spillage. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Provide adequate ventilation. Take precautionary measures against static discharges. Avoid contact with contaminated tools and objects. Wash thoroughly after dealing with a spillage.

### 6.2. Environmental precautions

**Environmental precautions**    Do not discharge into drains or watercourses or onto the ground. Toxic to aquatic life with long lasting effects.

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

**Methods for cleaning up**            Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. Do not touch or walk into spilled material. Provide adequate ventilation. Absorb spillage with inert, damp, non-combustible material. Wipe up with an absorbent cloth and dispose of waste safely. Absorb small quantities with paper towels and evaporate in a safe place. Once evaporation is complete, place paper in a suitable waste disposal container and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Wash thoroughly after dealing with a spillage.

### 6.4. Reference to other sections

**Reference to other sections**    Wear protective clothing as described in Section 8 of this safety data sheet.

## SECTION 7: Handling and storage

## BRAKELEC III

### 7.1. Precautions for safe handling

#### Usage precautions

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Static electricity and formation of sparks must be prevented. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and spray/mists. Avoid release to the environment. Avoid contact with contaminated tools and objects. Do not reuse empty containers. Do not use in paint spraying equipment. Do not empty into drains. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage precautions

Store at temperatures between 4°C and 40°C. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### Storage class

Flammable liquid storage.

### 7.3. Specific end use(s)

#### Specific end use(s)

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

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC

Long-term exposure limit (8-hour TWA): WEL 1000 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL No std.

WEL = Workplace Exposure Limit

#### HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC (CAS: 142-82-5)

#### DNEL

Industry - Dermal; Long term : 300 mg/kg/day  
 Industry - Inhalation; Long term : 2085 mg/m<sup>3</sup>  
 Consumer - Dermal; Long term : 149 mg/kg/day  
 Consumer - Inhalation; Long term : 447 mg/m<sup>3</sup>

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

## BRAKELEC III

<b>Hand protection</b>	It is recommended that chemical-resistant, impervious gloves are worn. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. For exposure up to 4 hours, wear gloves made of the following material: Nitrile rubber. Thickness: > 0.54 mm Neoprene. Thickness: > 0.67 mm Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.
<b>Hygiene measures</b>	Good personal hygiene procedures should be implemented. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Clear liquid. Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Slight. Solvent.
<b>pH</b>	Not applicable.
<b>Flash point</b>	- 4°C TCC (Tag closed cup).
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 1.1 Upper flammable/explosive limit: 7.0
<b>Vapour density</b>	> 1
<b>Relative density</b>	0.708 @ 25°C
<b>Solubility(ies)</b>	Insoluble in water.
<b>Viscosity</b>	Kinematic viscosity ≤ 20.5 mm <sup>2</sup> /s.

#### 9.2. Other information

<b>Other information</b>	Not determined.
--------------------------	-----------------

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
-------------------	---

#### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
------------------	---

#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Not determined.
---	-----------------

#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
----------------------------	---

#### 10.5. Incompatible materials

<b>Materials to avoid</b>	Keep away from flammable and combustible materials.
---------------------------	---

## BRAKELEC III

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances:  
Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Aspiration hazard

**Aspiration hazard** Aspiration hazard if swallowed. May be fatal if swallowed and enters airways. Kinematic viscosity  $\leq 20.5 \text{ mm}^2/\text{s}$ .

**Inhalation** May cause drowsiness or dizziness.

**Ingestion** Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.

**Skin contact** Causes skin irritation.

**Eye contact** May cause discomfort.

#### Toxicological information on ingredients.

##### HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,840.0

**Species** Rat

**ATE oral (mg/kg)** 5,840.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 2,920.0

**Species** Rat

**ATE dermal (mg/kg)** 2,920.0

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 23.3

**Species** Rat

**ATE inhalation (vapours mg/l)** 23.3

### SECTION 12: Ecological Information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

#### 12.1. Toxicity

**Acute toxicity - fish** Not determined.

#### Ecological information on ingredients.

##### HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC

## BRAKELEC III

<b>Toxicity</b>	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
<b>Acute toxicity - fish</b>	LC50, 96 hours: > 13.4 mg/l, Onchorhynchus mykiss (Rainbow trout) LC50, 96 hours: <10 mg/l, Fish
<b>Acute toxicity - aquatic invertebrates</b>	EC50, 48 hours: 3 mg/l, Daphnia magna EC50, 48 hours: <10 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	IC50, 72 hours: <10 mg/l, Algae
<b>Chronic toxicity - fish early life stage</b>	NOEC, 28 days: 1.53 mg/l, Onchorhynchus mykiss (Rainbow trout)
<b>Chronic toxicity - aquatic invertebrates</b>	NOEC, 21 days: 1 mg/l, Daphnia magna

### 12.2. Persistence and degradability

**Persistence and degradability** The product is expected to be biodegradable.

### Ecological information on ingredients.

#### HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC

<b>Persistence and degradability</b>	The product is not readily biodegradable.
<b>Biodegradation</b>	- 98%: 28 days

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product is not bioaccumulating.

### 12.4. Mobility in soil

**Mobility** The product contains organic solvents which will evaporate easily from all surfaces. The product is insoluble in water and will spread on the water surface.

### 12.5. Results of PBT and vPvB assessment

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

### Ecological information on ingredients.

#### HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLIC

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

### 12.6. Other adverse effects

**Other adverse effects** Not determined.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

**Disposal methods** Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

## BRAKELEC III

### SECTION 14: Transport information

#### Special Provisions note

#### 14.1. UN number

UN No. (ADR/RID) 1206

UN No. (IMDG) 1206

UN No. (ICAO) 1206

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID) HEPTANES

Proper shipping name (IMDG) HEPTANES

Proper shipping name (ICAO) HEPTANES

#### 14.3. Transport hazard class(es)

ADR/RID class 3

IMDG class 3

ICAO class/division 3

#### Transport labels



#### 14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



#### 14.6. Special precautions for user

Tunnel restriction code (D/E)

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

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

### SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).



## BRAKELEC III

<b>EU legislation</b>	Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
<b>Guidance</b>	Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. vPvB: Very Persistent and Very Bioaccumulative. NOEC: No Observed Effect Concentration.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	21/07/2016
<b>Revision</b>	3.0
<b>Supersedes date</b>	12/06/2015
<b>Risk phrases in full</b>	R11 Highly flammable. R38 Irritating to skin. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.

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



# NIELSEN

## Exposure scenario USE IN CLEANING AGENTS

### Identification

<b>Product name</b>	BRAKELEC III
<b>REACH registration number</b>	01-2119475515-33-XXXX
<b>EC number</b>	927-510-4
<b>Revision date</b>	21/07/2016
<b>Version number</b>	1.0
<b>Es reference</b>	BRAKELEC III
<b>Supplier</b>	NIELSEN CHEMICALS RAWDON ROAD MOIRA SWADLINCOTE DERBYSHIRE DE12 6DA info@nielsenchemicals.com TEL: +44 (0) 1283 222277 FAX: +44 (0) 1283 225731

### 1. Title of exposure scenario

<b>Main title</b>	USE IN CLEANING AGENTS
<b>Process scope</b>	Covers the use as a component of cleaning products, including transfer from storage, pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance. Covers the use as a component of cleaning products, including pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand).
<b>Main sector</b>	SU3 Industrial uses SU22 Professional uses
<b>Sector of use</b>	SU3 Industrial uses SU22 Professional uses
<b>Environment</b>	
<b>Environmental release category</b>	ERC4 Industrial use of processing aids in processes and products, not becoming part of articles. ERC8a Wide dispersive indoor use of processing aids in open systems. ERC8d Wide dispersive outdoor use of processing aids in open systems.
<b>SPERC</b>	ESVOC SpERC 8.4b.v1 ESVOC SpERC 4.4a.v1
<b>Worker</b>	

## USE IN CLEANING AGENTS

Ad hoc manual application via trigger sprays, dipping, etc.

### Process category

PROC2 Use in closed, continuous process with occasional controlled exposure

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

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.

PROC10 Roller application or brushing of adhesive and other coating.

PROC11 Spraying outside industrial settings and/or applications.

PROC13 Treatment of articles by dipping and pouring.

## 2. Conditions of use affecting exposure (Industrial - Environment 1)

### Control of environmental exposure

#### Environmental release category

ERC8a Wide dispersive indoor use of processing aids in open systems.

ERC8d Wide dispersive outdoor use of processing aids in open systems.

#### SPERC

ESVOC SpERC 8.4b.v1

### Product characteristics

#### Physical state

Liquid

#### Vapour pressure

Vapour pressure < 0.5 kPa at STP.

### Other given operational conditions affecting environmental exposure

#### Emission factor - air

Release fraction to air from process (after typical onsite RMMs consistent with EU Solvent Emissions Directive requirements): 0.02

#### Emission factor - water

Release fraction to wastewater from process (initial release prior to RMM): 0.000001

#### Emission factor - soil

Release fraction to soil from process (initial release prior to RMM): 0

### Risk management measures

#### Good practice

No specific measures identified.

### Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

#### Air

Treat air emission to provide a typical removal efficiency of N/A%.

#### Water

No wastewater treatment required.

### Conditions and measures related to external recovery of waste

#### Recovery method

External recovery and recycling of waste should comply with applicable local and/or national regulations.

## 2. Conditions of use affecting exposure (Industrial - Environment 2)

### Control of environmental exposure

#### Environmental release category

ERC4 Industrial use of processing aids in processes and products, not becoming part of articles.

#### SPERC

ESVOC SpERC 4.4a.v1

### Product characteristics

#### Physical state

Liquid

#### Vapour pressure

Vapour pressure < 0.5 kPa at STP.

### Other given operational conditions affecting environmental exposure

## USE IN CLEANING AGENTS

**Emission factor - air** Release fraction to air from process (after typical onsite RMMs consistent with EU Solvent Emissions Directive requirements): 1.0

**Emission factor - water** Release fraction to wastewater from process (initial release prior to RMM): 0.000003

**Emission factor - soil** Release fraction to soil from process (initial release prior to RMM): 0

### Risk management measures

**Good practice** No specific measures identified.

### Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

**Air** Treat air emission to provide a typical removal efficiency of %.

**Water** Risk from environmental exposure is driven by freshwater sediment. Prevent discharge of undissolved substance to or recover from onsite waste water. Provide onsite wastewater removal efficiency of %. Typical onsite wastewater treatment technology provides removal efficiency of %.

### Conditions and measures related to external treatment of waste for disposal

**Sludge treatment** Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

### Conditions and measures related to external recovery of waste

**Recovery method** External recovery and recycling of waste should comply with applicable local and/or national regulations.

## 2. Conditions of use affecting exposure (Workers - Health 1)

### Control of workers exposure

**Process category** PROC2 Use in closed, continuous process with occasional controlled exposure  
 PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises.  
 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.  
 PROC10 Roller application or brushing of adhesive and other coating.  
 PROC13 Treatment of articles by dipping and pouring.

### Product characteristics

**Physical state** Liquid

**Vapour pressure** Vapour pressure < 0.5 kPa at STP.

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Setting** Indoor use.

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

**Ventilation rate** Provide enhanced general ventilation by mechanical means.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Clean equipment and the work area every day.

## USE IN CLEANING AGENTS

### Risk management measures

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

### **Additional advice**

Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

## 2. Conditions of use affecting exposure (Workers - Health 2)

### Control of workers exposure

#### **Process category**

PROC2 Use in closed, continuous process with occasional controlled exposure  
 PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises.  
 PROC7 Spraying in industrial settings and applications.  
 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.  
 PROC10 Roller application or brushing of adhesive and other coating.  
 PROC13 Treatment of articles by dipping and pouring.

### Product characteristics

#### **Physical state**

Liquid

#### **Vapour pressure**

Vapour pressure < 0.5 kPa at STP.

#### **Concentration details**

Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

#### **Setting**

Indoor/outdoor use.

### Organisational measures to prevent/limit releases, dispersion and exposure

#### **Organisational measures**

Clean equipment and the work area every day.

### Risk management measures

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

### **Additional advice**

Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

## 3. Exposure estimation (Environment 1)

#### **Environmental release category**

ERC8a Wide dispersive indoor use of processing aids in open systems.  
 ERC8d Wide dispersive outdoor use of processing aids in open systems.

#### **Sector of use**

SU22 Professional uses

#### **Assessment method**

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

## USE IN CLEANING AGENTS

### 4. Guidance to check compliance with the exposure scenario (Environment 1)

Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

### 3. Exposure estimation (Environment 2)

<b>Environmental release category</b>	ERC4 Industrial use of processing aids in processes and products, not becoming part of articles.
<b>Sector of use</b>	SU3 Industrial uses
<b>Assessment method</b>	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

### 4. Guidance to check compliance with the exposure scenario (Environment 2)

Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).