



# SAFETY DATA SHEET

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

### 1.1. Product identifier

Trade name or designation of the mixture      BRAKLEEN PRO

Registration number      -

Synonyms      None.

Product code      BDS001856AE

Issue date      17-July-2020

Version number      4.0

Revision date      14-November-2022

Supersedes date      20-October-2021

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

Identified uses      Cleaners - Heavy duty

Uses advised against      None known.

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

Company name      CRC Industries Europe bv

Address      Touwslagerstraat 1  
9240 Zele  
Belgium

Telephone      +32(0)52/45.60.11

Fax      +32(0)52/45.00.34

E-mail      hse@crcind.com

Website      www.crcind.com

1.4. Emergency telephone number      Tel.: +32(0)52/45.60.11 (office hours: 9-17h CET)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 as amended

#### Physical hazards

Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
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#### Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.
Aspiration hazard	Category 1	H304 - May be fatal if swallowed and enters airways.

#### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Contains:      acetone; propan-2-one; propanone, Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic, Propan-2-ol; Isopropanol

Hazard pictograms      None.

Signal word      None.

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

## Precautionary statements

### Prevention

P102	Keep out of reach of children.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurised container: Do not pierce or burn, even after use.
P261	Avoid breathing mist/vapours.
P271	Use only outdoors or in a well-ventilated area.

### Response

Not assigned.

### Storage

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
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### Disposal

P501	Dispose of contents/container (in accordance with related regulations).
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**Supplemental label information** Regulation (EC) No 648/2004 on detergents:  
aliphatic hydrocarbons > 30 %  
perfumes

**2.3. Other hazards** None known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane	25 - 50	- 921-024-6	01-2119475514-35	-	
<b>Classification:</b> Flam. Liq. 2;H225, Skin Irrit. 2;H315, STOT SE 3;H336, Asp. Tox. 1;H304, Aquatic Chronic 2;H411					
Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic	25 - 50	- 927-510-4	01-2119475515-33	649-328-00-1	
<b>Classification:</b> Flam. Liq. 2;H225, Skin Irrit. 2;H315, STOT SE 3;H336, Asp. Tox. 1;H304, Aquatic Chronic 2;H411					
acetone; propan-2-one; propanone	5 - 10	67-64-1 200-662-2	01-2119471330-49	606-001-00-8	#
<b>Classification:</b> Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336					
Carbon dioxide	5 - 10	124-38-9 204-696-9	-	-	#
<b>Classification:</b> Press. Gas;H280					
Propan-2-ol; Isopropyl alcohol; Isopropanol	5 - 10	67-63-0 200-661-7	01-2119457558-25	603-117-00-0	#
<b>Classification:</b> Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336					

## SECTION 4: First aid measures

**General information** Not available.

### 4.1. Description of first aid measures

<b>Inhalation</b>	Not available.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Ingestion</b>	In the unlikely event of swallowing contact a physician or poison control centre.

**4.2. Most important symptoms and effects, both acute and delayed** Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

## SECTION 5: Firefighting measures

General fire hazards Not available.

### 5.1. Extinguishing media

Suitable extinguishing media Not available.

Unsuitable extinguishing media Not available.

5.2. Special hazards arising from the substance or mixture Not available.

### 5.3. Advice for firefighters

Special protective equipment for firefighters Not available.

Special fire fighting procedures Containers should be cooled with water to prevent vapour pressure build up.

## SECTION 6: Accidental release measures

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

For non-emergency personnel Not available.

For emergency responders Not available.

6.2. Environmental precautions Not available.

6.3. Methods and material for containment and cleaning up Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Following product recovery, flush area with water.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

7.1. Precautions for safe handling Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use only in well-ventilated areas.

7.2. Conditions for safe storage, including any incompatibilities Store away from incompatible materials (see Section 10 of the SDS). Storage class (TRGS 510): 2B (Aerosol dispensers and lighters)

7.3. Specific end use(s) Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	3620 mg/m <sup>3</sup>
		1500 ppm
	TWA	1210 mg/m <sup>3</sup>
Carbon dioxide (CAS 124-38-9)		500 ppm
	STEL	27400 mg/m <sup>3</sup>
		15000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)		9150 mg/m <sup>3</sup>
	TWA	5000 ppm
	STEL	1250 mg/m <sup>3</sup>
		500 ppm

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value
	TWA	999 mg/m <sup>3</sup> 400 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)****General population**

Components	Value	Assessment factor	Notes
acetone; propan-2-one; propanone (CAS 67-64-1)			
Long-term, Systemic, Dermal	62 mg/kg bw/day	20	
Long-term, Systemic, Inhalation	200 mg/m <sup>3</sup>	5	
Long-term, Systemic, Oral	62 mg/kg bw/day	2	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (CAS -)			
Long-term, Systemic, Dermal	699 mg/kg bw/day		
Long-term, Systemic, Inhalation	608 mg/m <sup>3</sup>		
Long-term, Systemic, Oral	699 mg/kg bw/day		
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
Long-term, Systemic, Dermal	319 mg/kg bw/day	2	Repeated dose toxicity
Long-term, Systemic, Inhalation	89 mg/m <sup>3</sup>	2	Repeated dose toxicity
Long-term, Systemic, Oral	26 mg/kg bw/day	2	Repeated dose toxicity

**Workers**

Components	Value	Assessment factor	Notes
acetone; propan-2-one; propanone (CAS 67-64-1)			
Long-term, Systemic, Dermal	186 mg/kg bw/day		
Long-term, Systemic, Inhalation	1210 mg/m <sup>3</sup>		
Short-term, Local, Inhalation	2420 mg/m <sup>3</sup>		
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (CAS -)			
Long-term, Systemic, Dermal	773 mg/kg bw/day		
Long-term, Systemic, Inhalation	2035 mg/m <sup>3</sup>		
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
Long-term, Systemic, Dermal	888 mg/kg bw/day	1	
Long-term, Systemic, Inhalation	500 mg/m <sup>3</sup>	1	

**Predicted no effect concentrations (PNECs)**

Components	Value	Assessment factor	Notes
acetone; propan-2-one; propanone (CAS 67-64-1)			
Freshwater	10.6 mg/l	50	
Marine water	1.06 mg/l	500	
Sediment (freshwater)	30.4 mg/kg		
Sediment (marine water)	3.04 mg/kg		
Soil	29.5 mg/kg		
STP	100 mg/l	10	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
Freshwater	140.9 mg/l	1	
Secondary poisoning	160 mg/kg	30	Oral
Sediment (freshwater)	552 mg/kg		
Soil	28 mg/kg		

**8.2. Exposure controls**

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**General information** Not available.

**Eye/face protection** Wear safety glasses with side shields (or goggles). Use eye protection conforming to EN 166.

**Skin protection**

<b>- Hand protection</b>	When handling the product wear chemical-resistant gloves (standard EN 374). The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through. For prolonged or repeated skin contact use suitable protective gloves. Full contact: Glove material: Neoprene. Use gloves with breakthrough time of 480 minutes. Minimum glove thickness 0.38 mm.
<b>- Other</b>	Not available.
<b>Respiratory protection</b>	Chemical respirator with organic vapour cartridge and full facepiece. (Filter type AX)
<b>Thermal hazards</b>	Not available.
<b>Hygiene measures</b>	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
<b>Environmental exposure controls</b>	Not available.

## SECTION 9: Physical and chemical properties

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

#### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol.
<b>Colour</b>	Not available.
<b>Odour</b>	Not available.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	-94.7 °C (-138.5 °F) estimated
<b>Initial boiling point and boiling range</b>	56 - 99 °C (132.8 - 210.2 °F)
<b>Flash point</b>	-26.0 °C (-14.8 °F)
<b>Evaporation rate</b>	2.8 (Ether=1)
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	2.5 % estimated
<b>Explosive limit – upper (%)</b>	12.8 % estimated
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	3 at 20°C
<b>Relative density</b>	0.71 g/cm <sup>3</sup> at 20°C
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	> 200 °C (> 392 °F)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Oxidising properties</b>	Not available.

### 9.2. Other information

<b>VOC</b>	685 g/l
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## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	Not available.
<b>10.2. Chemical stability</b>	Not available.
<b>10.3. Possibility of hazardous reactions</b>	Not available.
<b>10.4. Conditions to avoid</b>	Avoid high temperatures.
<b>10.5. Incompatible materials</b>	Not available.
<b>10.6. Hazardous decomposition products</b>	Carbon oxides.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

**Inhalation** Not available.

**Skin contact** Not available.

**Eye contact** Not available.

**Ingestion** Not available.

**Symptoms** Not available.

### 11.1. Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

Components	Species	Test Results
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acetone; propan-2-one; propanone (CAS 67-64-1)

#### Acute

##### **Dermal**

LD50	Rat	15800 mg/kg
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##### **Inhalation**

LC50	Rat	50.1 mg/l, 8 Hours
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##### **Oral**

LD50	Rat	5800 mg/kg
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Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

#### Acute

##### **Dermal**

LD50	Rat	2920 mg/kg bw/day, 24 h
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##### **Inhalation**

LC50	Rat	25200 mg/m <sup>3</sup> , 4 h
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##### **Oral**

LD50	Rat	5840 mg/kg bw/day
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Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic

#### Acute

##### **Dermal**

LD50	Rat	2920 mg/kg
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##### **Inhalation**

LC50	Rat	23.3 mg/l
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##### **Oral**

LD50	Rat	5840 mg/kg
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Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)

#### Acute

##### **Inhalation**

LC50	Rat	> 25000 mg/m <sup>3</sup> , 6 h
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**Skin corrosion/irritation** Not available.

**Serious eye damage/eye irritation** Not available.

**Respiratory sensitisation** Not available.

**Skin sensitisation** Not available.

**Germ cell mutagenicity** Not available.

**Carcinogenicity** Not available.

**Reproductive toxicity** Not available.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** Not available.

**Aspiration hazard** Not available.

Mixture versus substance information Not available.

## SECTION 12: Ecological information

### 12.1. Toxicity

Components		Species	Test Results
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	> 30 - < 100 mg/l, 72 h
Crustacea	EC50	Daphnia	3 mg/l, 48 h
Fish	LC50	Fish	11.4 mg/l, 96 h
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Daphnia	3 mg/l, 48 hours
Fish	LC50	Fish	> 13.4 mg/l, 96 hours
<i>Chronic</i>			
Crustacea	NOEC	Daphnia	0.17 mg/l, 21 days
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	LC50	Brine shrimp ( <i>Artemia salina</i> )	> 10000 mg/l, 24 hours
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )	> 1400 mg/l, 96 hours

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

### Partition coefficient n-octanol/water (log Kow)

acetone; propan-2-one; propanone -0.24  
Propan-2-ol; Isopropyl alcohol; Isopropanol 0.05

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects GWP: 0

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging Do not re-use empty containers.

EU waste code Not available.

Disposal methods/information Contents under pressure. Do not puncture, incinerate or crush.

## SECTION 14: Transport information

### ADR

- 14.1. UN number UN1950  
14.2. UN proper shipping name AEROSOLS, flammable  
14.3. Transport hazard class(es)  
Class 2.1  
Subsidiary risk -  
Label(s) 2.1  
Hazard No. (ADR) Not assigned.  
Tunnel restriction code D  
ADR/RID - Classification code: 5F  
14.4. Packing group Not assigned.  
14.5. Environmental hazards Yes

14.6. Special precautions for user Not assigned.

#### IATA

14.1. UN number UN1950  
14.2. UN proper shipping name Aerosols, flammable

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

Class 2.1  
Subsidiary risk -

14.4. Packing group Not assigned.

14.5. Environmental hazards Yes

ERG Code 10L

14.6. Special precautions for user Not assigned.

#### Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

#### IMDG

14.1. UN number UN1950

14.2. UN proper shipping name Aerosols, flammable, MARINE POLLUTANT

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

Class 2.1  
Subsidiary risk -

14.4. Packing group Not assigned.

#### 14.5. Environmental hazards

Marine pollutant Yes

EmS F-D, S-U

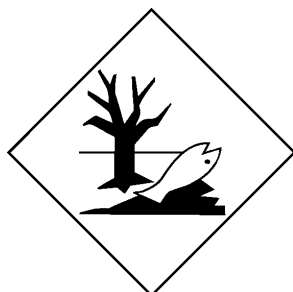
14.6. Special precautions for user Not assigned.

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

ADR; IATA; IMDG



Marine pollutant



## SECTION 15: Regulatory information

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

Retained direct EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

acetone; propan-2-one; propanone (CAS 67-64-1)

Carbon dioxide (CAS 124-38-9)

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

**Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

acetone; propan-2-one; propanone (CAS 67-64-1)

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

acetone; propan-2-one; propanone (CAS 67-64-1)

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)

**Other regulations**

Not available.

**15.2. Chemical safety assessment**

Not available.

**SECTION 16: Other information**

**List of abbreviations**

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

Ceiling: Short Term Exposure Limit Ceiling value.

CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.

GWP: Global Warming Potential.

IATA: International Air Transport Association.

MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).

REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).

RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).

STEL: Short term exposure limit.

TLV: Threshold Limit Value.

TWA: Time Weighted Average.

VOC: Volatile organic compounds.

STEL: Short-term Exposure Limit.

**References**

Not available.

**Information on evaluation method leading to the classification of mixture**

Not available.

**Full text of any statements, which are not written out in full under sections 2 to 15**

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

**Revision information**

Product and Company Identification: Product Registration Numbers  
SECTION 2: Hazards identification: Response  
SECTION 2: Hazards identification: Supplemental label information  
Composition / Information on Ingredients: Disclosure Overrides  
SECTION 8: Exposure controls/personal protection: Eye/face protection  
SECTION 8: Exposure controls/personal protection: - Hand protection  
SECTION 8: Exposure controls/personal protection: Respiratory protection  
Physical & Chemical Properties: Multiple Properties  
SECTION 12: Ecological information: 12.6. Other adverse effects  
Transport Information: Material Transportation Information  
SECTION 15: Regulatory information: Restrictions on use

**Training information**

Not available.