



SAFETY DATA SHEET

HEAVY DUTY FLUX REMOVER - SUPRCLEAN, BULK

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

1.1. Product identifier

Product name	HEAVY DUTY FLUX REMOVER - SUPRCLEAN, BULK
Product number	MCC-SPRL, MCC-SPRG, MCC-SPRP, MCC-SPRD, MCC-SPRGL, MCC-SPRGG
Synonyms; trade names	"SPR - SUPRCLEAN Nonflammable Flux Remover"

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

Identified uses	Cleaning agent.
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1.3. Details of the supplier of the safety data sheet

Supplier	MICROCARE EUROPE BVBA VEKESTRAAT 29 B11 INDUSTRIEZONE 'T SAS 1910 KAMPENHOUT, Belgium Phone +32.2.251.95.05 Fax +32.2.400.96.39
Manufacturer	MICROCARE CORPORATION 595 John Downey Drive New Britain, CT 06051 United States of America CAGE: OATV9 Tel: +1 800-638-0125, +1 860-827-0626 Fax: +1 860-827-8105 techsupport@microcare.com

1.4. Emergency telephone number

Emergency telephone	CHEMTREC UK (London) +(44)-870-8200418 +1 703-741-5970 (from anywhere in the world)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Acute Tox. 4 - H302
Environmental hazards	Aquatic Chronic 3 - H412
Human health	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash.
Environmental	The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
Physicochemical	Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Gas or vapour displaces oxygen available for breathing (asphyxiant).

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2.2. Label elements

Pictogram



Signal word	Warning
Hazard statements	H302 Harmful if swallowed. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. P314 Get medical advice/ attention if you feel unwell. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH210 Safety data sheet available on request. RCH001a For use in industrial installations only.
Contains	trans-DICHLOROETHYLENE
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P330 Rinse mouth.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

trans-DICHLOROETHYLENE	60-100%
CAS number: 156-60-5	EC number: 205-860-2
	REACH registration number: 05-2114285321-54-0000
Classification	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H332	
Aquatic Chronic 3 - H412	
1,1,1,2,2,3,4,5,5,5-decafluoropentane	10-30%
CAS number: 138495-42-8	EC number: 420-640-8
	REACH registration number: 01-2119446695-28-0000
Classification	
Aquatic Chronic 3 - H412	
ETHANOL	5-10%
CAS number: 64-17-5	EC number: 200-578-6
	REACH registration number: 05-2114285309-40-0000
Classification	
Flam. Liq. 2 - H225	

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The full text for all hazard statements is displayed in Section 16.

Composition

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Never give anything by mouth to an unconscious person. Do not induce vomiting. Place unconscious person on the side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Consult a physician for specific advice.
Skin contact	Remove contaminated clothing and rinse skin thoroughly with water.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Consult a physician for specific advice.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. Difficulty in breathing. Upper respiratory irritation. Severe irritation of nose and throat.
Ingestion	May cause stomach pain or vomiting. Drowsiness, dizziness, disorientation, vertigo.
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	Irritation of eyes and mucous membranes. Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Neutral
Hazardous combustion products	Heating may generate the following products: Toxic and corrosive gases or vapours. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Move containers from fire area if it can be done without risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Bursting aerosol containers may be propelled from a fire at high speed.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level.

6.2. Environmental precautions

Environmental precautions Contain spillage with sand, earth or other suitable non-combustible material. Avoid release to the environment.

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. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation.

6.4. Reference to other sections

Reference to other sections See Section 11 for additional information on health hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Reference to other sections. Store away from incompatible materials (see Section 10).

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

trans-DICHLOROETHYLENE

Long-term exposure limit (8-hour TWA): ACGIH

Short-term exposure limit (15-minute): ACGIH 200 ppm

1,1,1,2,2,3,4,5,5-decafluoropentane

No information available that would effect occupational exposure limit values.

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

WEL = Workplace Exposure Limit

Additional Occupational Exposure Limits

Ingredient comments ACGIH = US Standard. WEL = Workplace Exposure Limits

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. When using do not eat, drink or smoke.

Respiratory protection

Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear self-contained breathing apparatus with full facepiece.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Slight. Ether.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	41°C/106°F @ 101.3 kPa
Flash point	The product is not flammable.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 14.4 %(V) Lower flammable/explosive limit: 5.0 %(V)
Other flammability	The product is not flammable. Aerosol ignition distance: none at 0.0 cm
Vapour pressure	37.9 kPa @ 20°C
Vapour density	3.4
Relative density	1.26 g/cc
Bulk density	No information available.
Solubility(ies)	0.3 % water @ 20°C

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Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	0.48 cP @ 20°C
Explosive properties	No information available.
Oxidising properties	Not known.
Comments	Aerosol

9.2. Other information

Refractive index	No information available.
Particle size	No information available.
Molecular weight	Not applicable.
Volatility	100%
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	This product contains a maximum VOC content of 1080 g/l.
UDF Phrase 1	The product is not flammable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Strong alkalis.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.
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10.5. Incompatible materials

Materials to avoid	Alkali metals. Alkaline earth metals. Powdered metal.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Heating may generate the following products: Toxic and corrosive gases or vapours. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO ₂). Carbon monoxide (CO).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	1,810.85
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Skin sensitisation	Not sensitising. - Guinea pig: Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	Does not contain any substances known to be carcinogenic.
IARC carcinogenicity	Not listed.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
<u>Skin contact</u>	
Skin contact	Skin irritation should not occur when used as recommended. May cause defatting of the skin but is not an irritant.
<u>Eye contact</u>	
Eye contact	May cause eye irritation.
<u>Acute and chronic health hazards</u>	
Acute and chronic health hazards	There is no evidence that the product can cause cancer.

ETHANOL

<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	20,000.0
ATE inhalation (vapours mg/l)	20,000.0
<u>Carcinogenicity</u>	
IARC carcinogenicity	IARC Group 1 Carcinogenic to humans.

SECTION 12: Ecological Information

Ecological information on ingredients.

trans-DICHLOROETHYLENE

Ecotoxicity	Low acute toxicity to aquatic organisms.
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1,1,1,2,2,3,4,5,5,5-decafluoropentane

Ecotoxicity	It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnies.
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12.1. Toxicity

Toxicity	Very toxic to aquatic organisms.
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Ecological information on ingredients.

trans-DICHLOROETHYLENE

Acute toxicity - fish	LC ₅₀ , 96 hours: 1350 mg/l, Algae
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Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 220 mg/l, Daphnia magna

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Acute toxicity - fish LC₅₀, 96 hours: 13.9 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 11.7 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >120 mg/l, Fish

ETHANOL

Acute toxicity - fish LC₅₀, 96 hours: >10,000 mg/l, Algae

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 7,800 mg/l, Daphnia magna

Acute toxicity - aquatic plants , 96 hours: 1000 mg/l, Freshwater algae

12.2. Persistence and degradability

Ecological information on ingredients.

ETHANOL

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

trans-DICHLOROETHYLENE

Bioaccumulative potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Bioaccumulative potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

Partition coefficient Pow: 2.7

ETHANOL

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility The product contains volatile substances which may spread in the atmosphere.

Ecological information on ingredients.

HEAVY DUTY FLUX REMOVER - SUPRCLEAN, BULK**trans-DICHLOROETHYLENE**

Mobility The product has poor water-solubility.

ETHANOL

Mobility The product is soluble in water.

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.

12.6. Other adverse effects

Other adverse effects The product contains a substance or substances that will contribute to global warming (greenhouse effect).

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Not regulated. The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number**14.2. UN proper shipping name**

Proper shipping name (ADR/RID) Not Hazardous Not Regulated

Proper shipping name (IMDG) Not Hazardous Not Regulated

Proper shipping name (ICAO) Not Hazardous Not Regulated

Proper shipping name (ADN) Not Hazardous Not Regulated

14.3. Transport hazard class(es)

Not applicable. No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards**14.6. Special precautions for user**

Not applicable. No information required.

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. No information required.

SECTION 15: Regulatory information

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

National regulations	Neutral
EU legislation	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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	07/08/2017
Revision	37
Supersedes date	03/08/2017
SDS number	BULK - SPR
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H332 Harmful if inhaled. H412 Harmful 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.