# SAFETY DATA SHEET

Chemtronics®

Flux-Off® No Clean Plus (UFI)

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

### 1.1 Product identifier

**Product name** : Flux-Off® No Clean Plus (UFI)

**UFI** : DNC8-E01Y-S009-538S

**Product code** : ES896BE

**Product description** : Fluxing agents Remover.

**Product type** : Aerosol.

**Other means of identification** : Fluxing agents Remover.
Industrial/Professional use
UFI:DNC8-E01Y-S009-538S

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

| Identified uses |
|---|
| Processing aid Fluxing agents Remover. Product Application and Material uses Reference Website: or Label QR code |

| Uses advised against | Reason |
|---|---|
| Other | Industrial/Professional use |

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

Manufacturer
Chemtronics
8125 Cobb Center Drive
Kennesaw, GA 30152

Tel. 770-424-4888 or toll free 800-645-5244

Distributor

Importer
ITW Contamination Control BV
Saffierlaan 5
VZ-2132 Hoofddorp
The Netherlands

Email: info@itw-cc.com

Tel: +31 88 1307 400
FAX: +31 88 1307 499
Website: www.Chemtronicseu.com

**e-mail address of person responsible for this SDS** : Only Representative
Bay 150
Shannon Industrial Estate
Shannon
County Clare
Ireland
V14 DF82
+353 61 771 500
customerservice.shannon@itwpp.com

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

## National contact

ITW Contamination Control BV
Saffierlaan 5
VZ-2132 Hoofddorp
The Netherlands

Email: info@itw-cc.com

Tel: +31 88 1307 400
FAX: +31 88 1307 499
Website: www.Chemtronicseu.com

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

**Telephone number** : EMERGENCY HEALTH INFORMATION:
Austria 01 406 43 43, Belgium +070 245 245, Bulgaria +359 2 9154 233, Croatia +3851 2348 342, Cyprus 1401, Czech Republic +420224 919 293, Denmark +45 8212 1212, Estonia 16662, Finland 0800 147 111, France +33 (0) 1 45 42 59 59, Germany Bonn Poison Center +49-228 192 40, Greece (0300) 2107793777, Hungary +36-80-201-199, Iceland 543-4071, Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9DOV2NHO, Ireland Members of the Public Number (8 am to 10 pm) "+353-(0) 1 809 2166" Healthcare professional telephone Number (24 hrs) "353 (0) 1 809 ' , Italy CAV "Ospedale Pediatrico Bambino Gesù" - Rome Tel. (+39) 06.6859.3726, CAV "Azienda Ospedaliera Università di Foggia" - Foggia Tel. 800.183.459, CAV "Azienda Ospedaliera A. Cardarelli" - Naples Tel. (+39) 081.545.3333, CAV Policlinico "Umberto I" - Rome Tel. (+39) 06.4997.8000, CAV Policlinico "A. Gemelli" - Rome Tel. (+39) 06.305.4343, CAV Azienda Ospedaliera "Careggi" U.O. Tossicologia Medica - Florence Tel. (+39) 055.794.7819, CAV National Centre for Toxicological Information - Pavia Tel. (+39) 0382.24.444, CAV Niguarda Hospital - Milan Tel. (+39) 02.66.1010.29, CAV Azienda Ospedaliera Papa Giovanni XXIII - Bergamo Tel. 800.88.33.00, CAV Veneto Poison Control Centre - Verona Tel. 800.011.858, Latvia +371 67042473, Lithuania +370 (85)2362052, Luxembourg +352 8002 5500, Netherland +31 88 75 585 61, Norway +47 22 59 13 00, Poland +48 42 2530 400, Portugal +351 800 250 250, Romania +40 21 599 2300, Slovakia +421 2 5477 4166, Slovenia 112, Spain +34 91 562 04 20, Sweden 112 United Kingdom (England or Wales) 0845 46 47 or Scotland 08454 24 24 24 (UK only)

**Supplier**

**Telephone number** : Chemtronics Product Information: 800-TECH-401 (800-832-4401)
Chemtronics Customer Service: 800-645-5244

**Hours of operation** : 8:00 AM to 5:00 PM

**Information limitations** : EMERGENCY HEALTH INFORMATION:
EMERGENCY SPILL INFORMATION:
Transport information

# SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Aerosol 1, H222, H229
Acute Tox. 3, H311
Acute Tox. 3, H331
Skin Irrit. 2, H315
Eye Irrit. 2, H319
STOT SE 3, H336
Aquatic Chronic 1, H410

## SECTION 2: Hazards identification

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

**Ingredients of unknown toxicity** : 68 percent of the mixture consists of component(s) of unknown acute oral toxicity
100 percent of the mixture consists of component(s) of unknown acute dermal toxicity
100 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

**Ingredients of unknown ecotoxicity** : Contains 7.5% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol. Pressurised container: may burst if heated.
Toxic in contact with skin or if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : Wear protective gloves and protective clothing. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Avoid release to the environment. Avoid breathing dust or mist. Wash thoroughly after handling. Do not pierce or burn, even after use.

**Response** : Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. Take off immediately all contaminated clothing and wash it before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

**Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep container tightly closed.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : FOR INDUSTRIAL USE ONLY
For professional use only.
UFI:DNC8-E01Y-S009-538S

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

## SECTION 2: Hazards identification

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006.** :

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| acetone | EC: 200-662-2<br>CAS: 67-64-1<br>Index: 606-001-00-8 | ≥25 - ≤50 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336<br>Aquatic Chronic 1, H410<br>EUH066 | M [Chronic] = 10 | [1] [2] |
| 2-methylpentane (containing < 5 % n-hexane (203-777-6)) | EC: 203-523-4<br>CAS: 107-83-5<br>Index: 601-007-00-7 | ≥25 - ≤50 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 | - | [1] |
| 3-methylpentane | EC: 202-481-4<br>CAS: 96-14-0<br>Index: 601-007-00-7 | ≥10 - ≤25 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 | - | [1] |
| 2,3-dimethylbutane | EC: 201-193-6<br>CAS: 79-29-8<br>Index: 601-007-00-7 | ≥10 - ≤25 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 | - | [1] |
| Carbon dioxide, gas | REACH #: Annex IV<br>EC: 204-696-9<br>CAS: 124-38-9 | ≤10 | Press. Gas (Comp.), H280 | - | [2] |
| 2,2-dimethylbutane | EC: 200-906-8<br>CAS: 75-83-2<br>Index: 601-007-00-7 | ≤10 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 | - | [1] |
| methanol | EC: 200-659-6<br>CAS: 67-56-1<br>Index: 603-001-00-X | ≤1.8 | Flam. Liq. 2, H225<br>Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Acute Tox. 3, H331 | ATE [Oral] = 100 mg/kg<br>ATE [Dermal] = 300 mg/kg | [1] [2] |

## SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---|---|---|---|
| | | | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 1, H370 | ATE [Inhalation (vapours)] = 3 mg/l<br>STOT SE 1, H370: C ≥ 10%<br>STOT SE 2, H371: 3% ≤ C < 10% | |
| n-hexane | EC: 203-777-6<br>CAS: 110-54-3<br>Index: 601-037-00-0 | <1 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Repr. 2, H361f<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 | STOT RE 2, H373: C ≥ 5% | [1] [2] |

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

**See Section 16 for the full text of the H statements declared above.**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

## SECTION 4: First aid measures

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

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : Adverse symptoms may include the following:
Ingestion Seek medical attention.

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

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

**Hazards from the substance or mixture** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

# SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

## 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

## 6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

# SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## 7.1 Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## 7.2 Conditions for safe storage, including any incompatibilities

## SECTION 7: Handling and storage

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Seveso Directive - Reporting thresholds

#### Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|---|---|---|
| H2<br>P3b<br>E1 | 50 tonne<br>5000 tonne<br>100 tonne | 200 tonne<br>50000 tonne<br>200 tonne |

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

#### Biological exposure indices

No exposure indices known.

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

Not available.

#### PNECs

Not available.

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

## SECTION 8: Exposure controls/personal protection

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

**Appearance**

**Physical state** : Liquid. [Aerosol.]

**Colour** : Colourless.

**Odour** : Hydrocarbon. [Slight]

**Odour threshold** : Not available.

**Melting point/freezing point** : Not available.

**Boiling point or initial boiling point and boiling range** : 49°C (120.2°F)

**Flammability** : Not available.

**Lower and upper explosion limit** : Not available.

**Flash point** : Closed cup: <-7°C (<19.4°F) [Tagliabue]

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

## SECTION 9: Physical and chemical properties

**pH** : Not available.

**Viscosity** : Not available.

**Solubility** :

Not available.

**Solubility in water** : Not available.

**Partition coefficient n-octanol/water (log Pow)** : Not applicable.

**Vapour pressure** :

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|---|---|---|---|---|---|---|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| Carbon dioxide, gas | 42903.49 | 5720 | | | | |
| acetone | 180.01 | 24 | | | | |
| 2-methylpentane (containing < 5 % n-hexane (203-777-6)) | 172.51 | 23 | | | | |
| 3-methylpentane | 153.76 | 20.5 | | | | |
| n-hexane | 127.51 | 17 | | | | |
| methanol | 126.96 | 16.9 | | | | |

**Relative density** : 0.71

**Relative vapour density** : >1 [Air = 1]

**Particle characteristics**

**Median particle size** : Not applicable.

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes

**Heat of combustion** : 23.8 kJ/g

**Explosive properties** : Not applicable

**Oxidising properties** : Not available.

**Aerosol product**

**Type of aerosol** : Spray

#### 9.2.2 Other safety characteristics

**Evaporation rate** : <1 (butyl acetate = 1)

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**10.5 Incompatible materials** : No specific data.

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# SECTION 11: Toxicological information

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Acute toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

**Acute toxicity estimates**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| acetone | 5800 | N/A | N/A | N/A | N/A |
| methanol | 100 | 300 | 64000 | 3 | N/A |
| n-hexane | 15840 | N/A | 48000 | N/A | N/A |

### Skin corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

### Serious eye damage/eye irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

### Respiratory or skin sensitization

Not available.

**Skin**

**Conclusion/Summary [Product]** : Not available.

**Respiratory**

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Carcinogenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Reproductive toxicity

## SECTION 11: Toxicological information

Not available.

**Conclusion/Summary [Product]** : Not available.

**Specific target organ toxicity (single exposure)**

| Product/ingredient name | Result |
|---|---|
| acetone | - |
| 2-methylpentane (containing < 5 % n-hexane (203-777-6)) | - |
| 3-methylpentane | - |
| 2,3-dimethylbutane | - |
| 2,2-dimethylbutane | - |
| methanol | - |
| n-hexane | - |

**Specific target organ toxicity (repeated exposure)**

| Product/ingredient name | Result |
|---|---|
| n-hexane | - |

**Aspiration hazard**

| Product/ingredient name | Result |
|---|---|
| 2-methylpentane (containing < 5 % n-hexane (203-777-6)) | ASPIRATION HAZARD - Category 1 |
| 3-methylpentane | ASPIRATION HAZARD - Category 1 |
| 2,3-dimethylbutane | ASPIRATION HAZARD - Category 1 |
| 2,2-dimethylbutane | ASPIRATION HAZARD - Category 1 |
| n-hexane | ASPIRATION HAZARD - Category 1 |

**Information on likely routes of exposure**

Not available.

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : Toxic in contact with skin. Causes skin irritation.

**Ingestion** : Can cause central nervous system (CNS) depression.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : Adverse symptoms may include the following:
Ingestion Seek medical attention.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Short term exposure**

## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**Conclusion/Summary [Product]** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : Not available.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### 12.2 Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : Not available.

### 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| acetone | -0.23 | - | Low |
| 3-methylpentane | 3.6 | - | Low |
| 2,3-dimethylbutane | 3.42 | - | Low |
| Carbon dioxide, gas | 0.83 | - | Low |
| 2,2-dimethylbutane | 3.82 | - | Low |
| methanol | -0.77 | <10 | Low |
| n-hexane | 4 | 501.187 | High |

### 12.4 Mobility in soil

**Soil/water partition coefficient**

Not available.

**Results of PMT and vPvM assessment**

**Mobility** : Not available.

**Conclusion/Summary** : Not available.

### 12.5 Results of PBT and vPvB assessment

## SECTION 12: Ecological information

**Regulation (EC) No. 1907/2006 [REACH]**

**Regulation (EC) No. 1272/2008 [CLP]**

**Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP]** : Not available.

### 12.6 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

**Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---|---|---|---|---|
| **14.1 UN number or ID number** | UN1950 | UN1950 | UN1950 | UN1950 |
| **14.2 UN proper shipping name** | AEROSOLS | AEROSOLS | AEROSOLS | Aerosols, flammable |
| **14.3 Transport hazard class(es)** | 2  | 2  | 2.1  | 2.1  |
| **14.4 Packing group** | - | - | - | - |
| **14.5 Environmental hazards** | Yes. | Yes. | Yes. | Yes. The environmentally hazardous substance mark is not required. |

**Additional information**

## SECTION 14: Transport information

**ADR/RID** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
**Tunnel code** (D)

**ADN** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**

None of the components are listed above the relevant limit.

**Substances of very high concern**

None of the components are listed above the relevant limit.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

**Labelling** : Not applicable.

**Other EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**Explosive precursors** :

**(EC) No 273/2004 on drug precursors**

Not listed.

**(EC) No 111/2005 Trade between the Union and third countries in drug precursors**

Not listed.

**Ozone depleting substances (EU 2024/590)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

## SECTION 15: Regulatory information

**Aerosol dispensers** :

3



Extremely flammable

**Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria**

| Category |
| --- |
| H2<br>P3b<br>E1 |

**National regulations**

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

**Australia** : All components are listed or exempted.

**Canada** : All components are listed or exempted.

**Chile** :

**China** : All components are listed or exempted.

**Colombia** :

**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.

**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.
**Japan inventory (ISHL)**: All components are listed or exempted.

**New Zealand** : All components are listed or exempted.

**Philippines** : All components are listed or exempted.

**Republic of Korea** : All components are listed or exempted.

**Taiwan** : All components are listed or exempted.

**Thailand** : Not determined.

**Turkey** : Not determined.

**United States** : All components are active or exempted.

**Viet Nam** : All components are listed or exempted.

## SECTION 15: Regulatory information

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
B = Bioaccumulative
BCF = Bioconcentration Factor
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
M = Mobile
N/A = Not available
P = Persistent
PBT = Persistent, Bioaccumulative and Toxic
PMT = Persistent, Mobile and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SGG = Segregation Group
T = Toxic
vB = Very Bioaccumulative
vM = Very Mobile
vP = Very Persistent
vPvB = Very Persistent and Very Bioaccumulative
vPvM = Very Persistent and Very Mobile

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

| Classification | Justification |
|---|---|
| Aerosol 1, H222, H229 | On basis of test data |
| Acute Tox. 3, H311 | Calculation method |
| Acute Tox. 3, H331 | Calculation method |
| Skin Irrit. 2, H315 | Calculation method |
| Eye Irrit. 2, H319 | Calculation method |
| STOT SE 3, H336 | Calculation method |
| Aquatic Chronic 1, H410 | Calculation method |

**Full text of abbreviated H statements**

| | |
|---|---|
| H222, H229 | Extremely flammable aerosol. Pressurised container: may burst if heated. |
| H225 | Highly flammable liquid and vapour. |
| H280 | Contains gas under pressure; may explode if heated. |
| H301 | Toxic if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H311 | Toxic in contact with skin. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H361f | Suspected of damaging fertility. |
| H370 | Causes damage to organs. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |

## SECTION 16: Other information

| | |
|---|---|
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

**Full text of classifications [CLP/GHS]**

| | |
|---|---|
| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
| Aerosol 1 | AEROSOLS - Category 1 |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Press. Gas (Comp.) | GASES UNDER PRESSURE - Compressed gas |
| Repr. 2 | REPRODUCTIVE TOXICITY - Category 2 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 1 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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