




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

- **1.1 Product identifier**
- **Trade name:** MSV Multisolve
- **Article number:** MSV 683041 and 683042
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Removing adhesive, degreasing and cleaning
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
CT1 NORGE
Maskin-Elektrisk AS
Øvre Storgate 136,
N-3018 DRAMMEN
Email: post@ct1.no
- **Website:** www.ct1.no
- **Further information obtainable from:**
Product safety department.
post@ct1.no
- **1.4 Emergency telephone number:**
Tel: +47 22591300 (Open 24 hours 7 days a week)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 -  GHS02 flame
 - Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
 -  GHS07
 - STOT SE 3 H336 May cause drowsiness or dizziness.
 - Asp. Tox.1 H304 May be fatal if swallowed and enters airways.
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- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 -  F+; Extremely flammable
 - R12: Extremely flammable.
 - R66-67: Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Harmful: may cause lung damage if swallowed.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms



GHS02



GHS07

· Signal word Danger

· Hazard-determining components of labelling:

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H336 May cause drowsiness or dizziness.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing vapours or spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves.

P312 Call a POISON CENTER/doctor if you feel unwell.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P501 Dispose of contents/container to hazardous or special waste collection point.

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

Buildup of explosive mixtures possible without sufficient ventilation.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.









· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.



· Dangerous components:

EC number: 919-857-5	Hydrocarbons C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics  Xn R65 R10-66-67 -----  Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  STOT SE 3, H336	50-100%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane  F+ R12 -----  Flam. Gas 1, H220; Press. Gas C, H280	20-25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane  F+ R12 -----  Flam. Gas 1, H220; Press. Gas C, H280	10-20%

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CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane  F+ R12 -----  Flam. Gas 1, H220; Press. Gas C, H280	2.5-10%
· Regulation (EC) No 648/2004 on detergents / Labelling for contents		
aliphatic hydrocarbons		≥ 30%
aromatic hydrocarbons		< 5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· After inhalation:

Supply fresh air; consult doctor in case of complaints.
Take affected persons into fresh air and keep quiet.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.
Immediately remove any clothing soiled by the product.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents:

Foam
Fire-extinguishing powder
Carbon dioxide

· For safety reasons unsuitable extinguishing agents:

Water with full jet

· 5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

· 5.3 Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

· Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

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- **6.2 Environmental precautions: No special measures required.**
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections** See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with skin and eyes.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
Do not spray onto a naked flame or any incandescent material.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:

106-97-8 butane

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Recommended filter device for short term use:** Filter AX
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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· **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.7 mm

· **Penetration time of glove material**

≥ 240 min

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Aerosol
· Colour:	Colourless
· Odour:	Solvent-like

· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Not applicable, as aerosol.

· **Flash point:** Not applicable, as aerosol.

· **Ignition temperature:** >200 °C

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Density at 20 °C:** 0.65991 g/cm³

· **Solubility in / Miscibility with**

· water:	Not miscible or difficult to mix.
· Organic solvents:	100.0 %

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity**

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:**

Aldehyde

Carbon monoxide and carbon dioxide

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SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity:

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Inhalative	LC50/4 h	25.8 mg/l (rat)
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H hydrocarbons C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

Oral	LD50	8000 mg/kg (rat)
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Dermal	LD50	4000 mg/kg (rat)
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Inhalative	LC50/4 h	<18.5 mg/l (rat)
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75-28-5 isobutane

Inhalative	LC50/4 h	>50 mg/l (rat)
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74-98-6 propane

Inhalative	LC50/4 h	20 mg/l (rat)
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106-97-8 butane

Inhalative	LC50/4 h	658 mg/l (rat)
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· Primary irritant effect:

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitisation:** No sensitising effects known.

· **Additional toxicological information:** Vapours have narcotic effect.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

EC50/48 h	>1000 mg/l (daphnia)
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· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

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

· 12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

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



· **European waste catalogue**

16 05 04	gases in pressure containers (including halons) containing dangerous substances
15 01 04	metallic packaging

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name · ADR · IMDG · IATA	1950 AEROSOLS AEROSOLS AEROSOLS, flammable
· 14.3 Transport hazard class(es) · ADR  · Class · Label	2.5F Gases 2.1
· IMDG, IATA  · Class 2.1 · Label 2.1	2.1 2.1
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Danger code (Kemler): - · EMS Number:	Warning: Gases. - F-D,S-U
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information: · ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity

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Safety data sheet

according to 1907/2006/EC, Article 31

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Version Number 15

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· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H220 Extremely flammable gas.
- H226 Flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H336 May cause drowsiness or dizziness.
- R10 Flammable.
- R12 Extremely flammable.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

· Abbreviations and acronyms:

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Flam. Gas 1: Flammable gases, Hazard Category 1
- Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
- Press. Gas C: Gases under pressure: Compressed gas
- Flam. Liq. 3: Flammable liquids, Hazard Category 3
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1

- * **Data compared to the previous version altered.**