SAFETY DATA SHEET

Adhesive Spray for detachable joints

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

1.1 Product identifier

Product name : Adhesive Spray for detachable joints

UFI : HQR1-K0EW-W00E-6W5T

Product code : 118020

Color : Colorless to light yellow.

Product description : Aerosol product-Adhesives

Product type : Aerosol.

Other means of identification : Not available.

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

Identified uses

Aerosol product-Adhesives

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

WEICON GmbH & Co. KG
Königsberger Str. 255,
48157 Münster, Germany
phone:+49 251 93220,
email: info@weicon.de,
URL: www.weicon.de

e-mail address of person responsible for this SDS : msds@weicon.de

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : EMERGENCY CONTACT – UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)
TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

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
Skin Irrit. 2, H315
Aquatic Chronic 3, H412

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

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

SECTION 2: Hazards identification

Hazard pictograms :

Signal word : Danger

Hazard statements : H222, H229 - Extremely flammable aerosol. Pressurized container: may burst if heated.
H315 - Causes skin irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

General : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.

Prevention : 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.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves.

Response : P362 + P364 - Take off contaminated clothing and wash it before reuse.

Storage : P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal : P501 - Dispose of waste according to applicable legislation.

Hazardous ingredients : Not applicable.

Supplemental label elements : Not applicable.

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.

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.

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

Aspiration hazard - Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥25 - ≤50	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	-	[1] [2]
dimethoxymethane	REACH #: 01-2119664781-31 EC: 203-714-2 CAS: 109-87-5	≥25 - ≤50	Flam. Liq. 2, H225	-	[1] [2]
propane	REACH #: 01-2119486944-21 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥10 - ≤25	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	-	[1] [2]
Isobutane	REACH #: 01-2119485395-27 EC: 200-857-2 CAS: 75-28-5 Index: 601-004-00-0	≥5 - ≤10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	-	[1] [2]
ethyl acetate	REACH #: 01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5	≥1 - ≤3	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	-	[1] [2]
Hydrocarbons, C6, isoalkanes, <5% n-hexane	EC: 931-254-9	≥1 - ≤3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	-	[1]
heptane	REACH #: 01-2119457603-38 EC: 205-563-8 CAS: 142-82-5 Index: 601-008-00-2	≥0.3 - <1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1] [2]
cyclohexane	REACH #: 01-2119463273-41 EC: 203-806-2 CAS: 110-82-7 Index: 601-017-00-1	≥0.3 - <1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1] [2]
Isopropyl alcohol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥0.3 - <1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	-	[1] [2]
pentane	REACH #:	≥0.1 - ≤0.2	Flam. Liq. 2, H225	-	[1] [2]

SECTION 3: Composition/information on ingredients

	01-2119459286-30 EC: 203-692-4 CAS: 109-66-0 Index: 601-006-00-1		STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066		
vinyl acetate	REACH #: 01-2119471301-50 EC: 203-545-4 CAS: 108-05-4 Index: 607-023-00-0	≤0.1	Flam. Liq. 2, H225 Acute Tox. 4, H332 Carc. 2, H351 STOT SE 3, H335 **See Section 16 for the full text of the H statements declared above.**	ATE [Inhalation (vapours)] = 11.4 mg/l	[1] [2]

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.

Type

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

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 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 adverse health effects persist or are severe. 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 : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. 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 adverse health effects persist or are severe. 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

SECTION 4: First aid measures

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

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

Ingestion : No specific data.

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 harmful 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 pressurized 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

SECTION 6: Accidental release measures

For emergency responders : If specialized 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 spilled 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.

6.3 Methods and materials 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. Absorb with an inert 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 release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

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). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. 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

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. 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
P3a	150 tonnes	500 tonnes

SECTION 7: Handling and storage

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

Product/ingredient name	Exposure limit values
butane	**DFG MAC-values list (Germany, 7/2024) [Butane]** Develop D. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 4000 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 2400 mg/m³. PEAK 15 minutes: 9600 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 2400 mg/m³. PEAK 15 minutes: 9600 mg/m³. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 4000 ppm.
dimethoxymethane	**DFG MAC-values list (Germany, 7/2024)** Develop C. TWA 8 hours: 500 ppm. PEAK 15 minutes: 1000 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 1600 mg/m³. PEAK 15 minutes: 3200 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 1600 mg/m³. TWA 8 hours: 500 ppm. PEAK 15 minutes: 3200 mg/m³. PEAK 15 minutes: 1000 ppm.
propane	**DFG MAC-values list (Germany, 7/2024)** Develop D. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 4000 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 1800 mg/m³. PEAK 15 minutes: 7200 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 1800 mg/m³. PEAK 15 minutes: 7200 mg/m³. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 4000 ppm.
Isobutane	**DFG MAC-values list (Germany, 7/2024) [Butane]** Develop D. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 4000 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 2400 mg/m³. PEAK 15 minutes: 9600 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 2400 mg/m³. PEAK 15 minutes: 9600 mg/m³. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 4000 ppm.
ethyl acetate	**DFG MAC-values list (Germany, 7/2024)** Develop C. TWA 8 hours: 200 ppm. PEAK 15 minutes: 400 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 750 mg/m³. PEAK 15 minutes: 1500 mg/m³ 4 times per shift [Interval: 1 hour].

SECTION 8: Exposure controls/personal protection

	TRGS 900 OEL (Germany, 3/2025) TWA 8 hours: 730 mg/m³. PEAK 15 minutes: 1460 mg/m³. TWA 8 hours: 200 ppm. PEAK 15 minutes: 400 ppm. **EU OEL (Europe, 1/2022)** STEL 15 minutes: 400 ppm. STEL 15 minutes: 1468 mg/m³. TWA 8 hours: 200 ppm. TWA 8 hours: 734 mg/m³.
heptane	**DFG MAC-values list (Germany, 7/2024)** Develop D. TWA 8 hours: 500 ppm. PEAK 15 minutes: 500 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 2100 mg/m³. PEAK 15 minutes: 2100 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 2100 mg/m³. PEAK 15 minutes: 2100 mg/m³. TWA 8 hours: 500 ppm. PEAK 15 minutes: 500 ppm. **EU OEL (Europe, 1/2022)** TWA 8 hours: 500 ppm. TWA 8 hours: 2085 mg/m³.
cyclohexane	**DFG MAC-values list (Germany, 7/2024)** Develop D. TWA 8 hours: 200 ppm. PEAK 15 minutes: 800 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 700 mg/m³. PEAK 15 minutes: 2800 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 700 mg/m³. PEAK 15 minutes: 2800 mg/m³. TWA 8 hours: 200 ppm. PEAK 15 minutes: 800 ppm. **EU OEL (Europe, 1/2022)** TWA 8 hours: 700 mg/m³. TWA 8 hours: 200 ppm.
Isopropyl alcohol	**DFG MAC-values list (Germany, 7/2024)** Develop C. TWA 8 hours: 200 ppm. PEAK 15 minutes: 400 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 500 mg/m³. PEAK 15 minutes: 1000 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 500 mg/m³. PEAK 15 minutes: 1000 mg/m³. TWA 8 hours: 200 ppm. PEAK 15 minutes: 400 ppm.
pentane	**DFG MAC-values list (Germany, 7/2024) [Pentane]** Develop C. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 2000 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 3000 mg/m³. PEAK 15 minutes: 6000 mg/m³ 4 times per shift [Interval: 1 hour]. **TRGS 900 OEL (Germany, 3/2025)** TWA 8 hours: 3000 mg/m³. PEAK 15 minutes: 6000 mg/m³. TWA 8 hours: 1000 ppm. PEAK 15 minutes: 2000 ppm. **EU OEL (Europe, 1/2022)** TWA 8 hours: 3000 mg/m³. TWA 8 hours: 1000 ppm.
vinyl acetate	**DFG MAC-values list (Germany, 7/2024)** Carc 4, Develop C.

SECTION 8: Exposure controls/personal protection

	Absorbed through skin. CEIL: 71 mg/m³. CEIL: 20 ml/m³. PEAK 15 minutes: 36 mg/m³ 4 times per shift [Interval: 1 hour]. PEAK 15 minutes: 10 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 36 mg/m³. TWA 8 hours: 10 ppm. **TRGS 900 OEL (Germany, 3/2025)** Absorbed through skin. TWA 8 hours: 36 mg/m³. TWA 8 hours: 10 ppm. PEAK 15 minutes: 36 mg/m³. PEAK 15 minutes: 10 ppm. CEIL: 20 ppm. CEIL: 72 mg/m³. **EU OEL (Europe, 1/2022)** TWA 8 hours: 17.6 mg/m³. TWA 8 hours: 5 ppm. STEL 15 minutes: 35.2 mg/m³. STEL 15 minutes: 10 ppm.

Biological exposure indices

Product/ingredient name	Exposure indices
heptane	**DFG BEI-values list (Germany, 7/2024)** BEI: 250 µg/l, heptane-2,5-dione [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 10/2024)** BEI: 250 µg/l, heptane-2,5-dione [in urine]. Sampling time: end of exposure or end of shift.
cyclohexane	**DFG BEI-values list (Germany, 7/2024)** BEI: 150 mg/g creatinine, 1,2-cyclohexanediol (after hydrolysis) [in urine]. Sampling time: at the end of the shift, for long-term exposures after several previous shifts. **TRGS 903 - BEI Values (Germany, 10/2024)** BEI: 150 mg/g creatinine, 1,2-cyclohexanediol (after hydrolysis) [in urine]. Sampling time: at the end of the shift, for long-term exposure after several previous shifts.
Isopropyl alcohol	**DFG BEI-values list (Germany, 7/2024)** BEI: 25 mg/l, acetone [in blood]. Sampling time: end of exposure or end of shift. BEI: 25 mg/l, acetone [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 10/2024)** BEI: 25 mg/l, acetone [in whole blood]. Sampling time: end of exposure or end of shift. BEI: 25 mg/l, acetone [in urine]. Sampling time: end of exposure or end of shift.

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

Product/ingredient name	Result

SECTION 8: Exposure controls/personal protection

dimethoxymethane

DNEL - Workers - Long term - Dermal
17.9 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Oral
18.1 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Dermal
18.1 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Inhalation
31.5 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Inhalation
126.6 mg/m³
Effects: Systemic

ethyl acetate

DNEL - General population - Long term - Oral
4.5 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Dermal
37 mg/kg bw/day
Effects: Systemic

DNEL - Workers - Long term - Dermal
63 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Inhalation
367 mg/m³
Effects: Local

DNEL - General population - Long term - Inhalation
367 mg/m³
Effects: Systemic

DNEL - General population - Short term - Inhalation
734 mg/m³
Effects: Local

DNEL - General population - Short term - Inhalation
734 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Inhalation
734 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
734 mg/m³
Effects: Systemic

DNEL - Workers - Short term - Inhalation
1468 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
1468 mg/m³
Effects: Systemic

SECTION 8: Exposure controls/personal protection

heptane

DNEL - General population - Long term - Oral
149 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Dermal
149 mg/kg bw/day
Effects: Systemic

DNEL - Workers - Long term - Dermal
300 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Inhalation
447 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Inhalation
2085 mg/m³
Effects: Systemic

cyclohexane

DNEL - General population - Long term - Oral
59.4 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Inhalation
206 mg/m³
Effects: Local

DNEL - General population - Long term - Inhalation
206 mg/m³
Effects: Systemic

DNEL - General population - Short term - Inhalation
412 mg/m³
Effects: Local

DNEL - General population - Short term - Inhalation
412 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Inhalation
700 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
700 mg/m³
Effects: Systemic

DNEL - General population - Long term - Dermal
1186 mg/kg bw/day
Effects: Systemic

DNEL - Workers - Short term - Inhalation
1400 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
1400 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Dermal
2016 mg/kg bw/day
Effects: Systemic

SECTION 8: Exposure controls/personal protection

Isopropyl alcohol	**DNEL - General population - Long term - Oral** 26 mg/kg bw/day Effects: Systemic **DNEL - General population - Short term - Oral** 51 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 89 mg/m³ Effects: Systemic **DNEL - General population - Short term - Inhalation** 178 mg/m³ Effects: Systemic **DNEL - General population - Long term - Dermal** 319 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Inhalation** 500 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Dermal** 888 mg/kg bw/day Effects: Systemic **DNEL - Workers - Short term - Inhalation** 1000 mg/m³ Effects: Systemic
pentane	**DNEL - General population - Long term - Oral** 214 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Dermal** 214 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Dermal** 432 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 643 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Inhalation** 3000 mg/m³ Effects: Systemic
vinyl acetate	**DNEL - Workers - Long term - Dermal** 0.42 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Inhalation** 17.6 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 17.6 mg/m³

SECTION 8: Exposure controls/personal protection

Effects: Systemic

DNEL - Workers - Short term - Inhalation
35.2 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
35.2 mg/m³
Effects: Systemic

PNECs

Not available.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, 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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

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. Recommended : 1 - 4 hours (breakthrough time): Protective gloves made of nitrile rubber (material thickness of 0,4 mm); EN 374-5 Cat. III 4 - 8 hours (breakthrough time): Protective gloves made of Viton®/ butyl rubber (material thickness of 0,7 mm); EN388 Cat.II / EN374 Cat.III / EN374-2

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. Recommended : organic vapor (Type AX) and particulate filter

SECTION 8: Exposure controls/personal protection

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 : Gas. [Aerosol]

Color : Colorless to light yellow.

Odor : Characteristic.

Odor threshold : Not available.

Melting point/freezing point : Not applicable.

Boiling point or initial boiling point and boiling range : -44.5°C (-48.1°F)

Flammability : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.

Lower and upper explosion limit : Lower: 1.1%
Upper: 19.9%

Flash point : Closed cup: -97°C (-142.6°F)

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

pH : Not applicable.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.

Solubility :

Not available.

Solubility in water : Not available.

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

Vapor pressure : 1106.6 kPa (8300 mm Hg)

Relative density : Not applicable.

Density : 0.682 g/cm³ [20°C (68°F)]

Relative vapor density : Not available.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Heat of combustion : 38.53 kJ/g

Explosive properties : Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.

Oxidizing properties : Not available.

Aerosol product

Type of aerosol : Spray

9.2.2 Other safety characteristics

Miscible with water : No.

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

Product/ingredient name	Result
butane	**Rat - Inhalation - LC50 Vapor** 658000 mg/m³ [4 hours]
dimethoxymethane	**Rat - Oral - LD50** 6653 mg/kg
Isobutane	**Rat - Inhalation - LC50 Vapor** 658000 mg/m³ [4 hours]
ethyl acetate	**Rat - Oral - LD50** 5620 mg/kg
heptane	**Rat - Inhalation - LC50 Vapor** 103 g/m³ [4 hours] **Rat - Inhalation - LC50 Gas.** 48000 ppm [4 hours]
cyclohexane	**Rat - Oral - LD50** 6240 mg/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Gastrointestinal - Changes in structure or function of salivary glands Gastrointestinal - Hypermotility, diarrhea
Isopropyl alcohol	**Rabbit - Dermal - LD50** 12800 mg/kg **Rat - Oral - LD50** 5000 mg/kg Toxic effects: Behavioral - General anesthetic
pentane	**Rat - Inhalation - LC50 Vapor** 364 g/m³ [4 hours]
vinyl acetate	**Rat - Oral - LD50** 2900 mg/kg **Rabbit - Dermal - LD50** 2335 mg/kg **Rat - Inhalation - LC50 Vapor**

SECTION 11: Toxicological information

11400 mg/m³ [4 hours]

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
butane	N/A	N/A	N/A	658	N/A
dimethoxymethane	6653	N/A	N/A	N/A	N/A
Isobutane	N/A	N/A	N/A	658	N/A
ethyl acetate	5620	N/A	N/A	N/A	N/A
heptane	N/A	N/A	48000	103	N/A
cyclohexane	6240	N/A	N/A	N/A	N/A
Isopropyl alcohol	5000	12800	N/A	N/A	N/A
pentane	N/A	N/A	N/A	364	N/A
vinyl acetate	2900	2335	N/A	11.4	N/A

Skin corrosion/irritation

Product/ingredient name	Result
Isopropyl alcohol	**Rabbit - Skin - Mild irritant** Amount/concentration applied: 500 mg

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
dimethoxymethane	**Rabbit - Eyes - Moderate irritant** Amount/concentration applied: 100 uL
cyclohexane	**Rabbit - Eyes - Severe irritant** Amount/concentration applied: 0.1 Ml
Isopropyl alcohol	**Rabbit - Eyes - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg **Rabbit - Eyes - Moderate irritant** Amount/concentration applied: 10 mg **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 100 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

SECTION 11: Toxicological information

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

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
ethyl acetate	STOT SE 3, H336 (Narcotic effects)
Hydrocarbons, C6, isoalkanes, <5% n-hexane	STOT SE 3, H336 (Narcotic effects)
heptane	STOT SE 3, H336 (Narcotic effects)
cyclohexane	STOT SE 3, H336 (Narcotic effects)
Isopropyl alcohol	STOT SE 3, H336 (Narcotic effects)
pentane	STOT SE 3, H336 (Narcotic effects)
vinyl acetate	STOT SE 3, H335 (Respiratory tract irritation)

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Hydrocarbons, C6, isoalkanes, <5% n-hexane	ASPIRATION HAZARD - Category 1
heptane	ASPIRATION HAZARD - Category 1
cyclohexane	ASPIRATION HAZARD - Category 1
pentane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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

SECTION 11: Toxicological information

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

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

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

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] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
dimethoxymethane	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 29 to 31 days; Size: 19.6 mm; Weight: 0.102 g 6990 mg/l [96 hours] Effect: Mortality
ethyl acetate	**Acute - LC50 - Fresh water** Daphnia - Water flea - *Daphnia cucullata* Age: 11 days 154 mg/l [48 hours] Effect: Mortality **Acute - LC50 - Fresh water** Fish - Indian catfish - *Heteropneustes fossilis* Size: 14.16 cm; Weight: 25.54 g 212.5 mg/l [96 hours] Effect: Mortality **Acute - EC50 - Fresh water**

SECTION 12: Ecological information

	Algae - Green algae - *Selenastrum sp.* 2500 mg/l [96 hours] Effect: Population **Chronic - NOEC - Fresh water** Fish - Fathead minnow - *Pimephales promelas* - Embryo Age: <24 hours 75.6 mg/l [32 days] Effect: Mortality **Chronic - NOEC - Fresh water** Daphnia - Water flea - *Daphnia magna* Age: ≤24 hours 2.4 mg/l [21 days] Effect: Mortality
heptane	**Acute - LC50 - Fresh water** Fish - Mozambique tilapia - *Oreochromis mossambicus* Size: 99 mm; Weight: 10 g 375 mg/l [96 hours] Effect: Mortality
cyclohexane	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 30 days; Size: 20.5 mm; Weight: 0.119 g 4530 µg/l [96 hours] Effect: Mortality
Isopropyl alcohol	**Acute - LC50 - Marine water** Crustaceans - Common shrimp, sand shrimp - *Crangon crangon* 1400 mg/l [48 hours] Effect: Mortality **Acute - LC50 - Fresh water** Fish - Harlequinfish, red rasbora - *Rasbora heteromorpha* Size: 1 to 3 cm 4200 mg/l [96 hours] Effect: Mortality
vinyl acetate	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 1 days 14 mg/l [96 hours] Effect: Mortality **Acute - LC50 - Marine water** Crustaceans - Common shrimp, sand shrimp - *Crangon crangon* - Larvae 10 to 100 mg/l [48 hours] Effect: Mortality

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
butane	1.09	-	Low
dimethoxymethane	0	-	Low
propane	1.09	-	Low
Isobutane	1.09	-	Low
ethyl acetate	0.68	30	Low
heptane	4.66	552	High
cyclohexane	3.44	167	Low
Isopropyl alcohol	0.05	-	Low
pentane	3.45	171	Low
vinyl acetate	0.73	3.16	Low

12.4 Mobility in soil

Soil/Water partition coefficient

Product/ingredient name	logKoc	Koc
butane	1.4	22.8012
dimethoxymethane	1	11.108
propane	0.94	8.6207
Isobutane	1.3	17.8833
ethyl acetate	1.3	18.1744
heptane	2.5	321.749
cyclohexane	2	96.5031
Isopropyl alcohol	0.54	3.4364
pentane	1.5	34.1828
vinyl acetate	1.4	23.6504

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
butane	No	No	No	No	No	No	No
dimethoxymethane	No	No	No	No	No	No	No
propane	No	No	No	No	No	No	No
Isobutane	No	No	No	No	No	No	No
ethyl acetate	No	No	No	No	No	No	No
Hydrocarbons, C6, isoalkanes, <5% n-hexane	No	No	No	No	No	No	No
heptane	No	No	No	No	No	No	No
cyclohexane	No	No	No	No	No	No	No
Isopropyl alcohol	No	No	No	No	No	No	No
pentane	No	No	No	No	No	No	No
vinyl acetate	No	No	No	No	No	No	No

Mobility : Not available.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
butane	No	N/A	N/A	No	N/A	N/A	N/A
dimethoxymethane	No	N/A	N/A	No	N/A	N/A	N/A
propane	No	N/A	N/A	No	N/A	N/A	N/A
Isobutane	No	N/A	N/A	No	N/A	N/A	N/A
ethyl acetate	No	N/A	No	No	No	N/A	No
Hydrocarbons, C6, isoalkanes, <5% n-hexane	No	N/A	N/A	No	N/A	N/A	N/A
heptane	No	N/A	No	No	No	N/A	No
cyclohexane	No	N/A	No	No	No	N/A	No
Isopropyl alcohol	No	N/A	N/A	No	N/A	N/A	N/A
pentane	No	N/A	No	No	No	N/A	No
vinyl acetate	No	N/A	No	No	No	N/A	No

SECTION 12: Ecological information

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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
butane	No	No	No	No	No	No	No
dimethoxymethane	No	No	No	No	No	No	No
propane	No	No	No	No	No	No	No
Isobutane	No	No	No	No	No	No	No
ethyl acetate	No	No	No	No	No	No	No
Hydrocarbons, C6, isoalkanes, <5% n-hexane	No	No	No	No	No	No	No
heptane	No	No	No	No	No	No	No
cyclohexane	No	No	No	No	No	No	No
Isopropyl alcohol	No	No	No	No	No	No	No
pentane	No	No	No	No	No	No	No
vinyl acetate	No	No	No	No	No	No	No

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

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 minimized 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 : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
16 05 04*	gases in pressure containers (including halons) containing hazardous substances

Packaging

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

Type of packaging	European waste catalogue (EWC)	
Can	15 01 10*	packaging containing residues of or contaminated by hazardous substances

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 (butane, dimethoxymethane)	AEROSOLS (butane, dimethoxymethane)	AEROSOLS (butane, dimethoxymethane)	Aerosols, flammable (butane, dimethoxymethane)
14.3 Transport hazard class(es)	2 	2 	2.1 	2.1 
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	Yes.	No.	No.	No.

Additional information

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Limited quantity 1 L
Special provisions 190, 327, 625, 344
Tunnel code (D)
ADR Classification Code: 5F

ADN : **Special provisions** 190, 327, 625, 344

IMDG : **Emergency schedules** F-D, S-U
Special provisions 63, 190, 277, 327, 344, 381, 959

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 75 kg. Packaging instructions: 203. Cargo Aircraft Only: 150 kg. Packaging instructions: 203. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y203.
Special provisions A145, A167, A802

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 authorization

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

SECTION 15: Regulatory information

Product/ingredient name	%	Designation [Usage]
propane cyclohexane	≥10 - ≤25 ≥0.3 - <1	40 57 [Neoprene-based contact adhesive]

Labeling : Not applicable.

Synthetic polymer microparticles - Designation 78

Generic identity of polymer(s) : Not applicable.

Total percentage of synthetic polymer microparticles : Not applicable.

Other EU regulations

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

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

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Aerosol dispensers :

3

Extremely flammable

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P3a

VOC content : 95.56 %

VOC (g/L) : 651.7

National regulations

SECTION 15: Regulatory information

Product/ingredient name	List name	Name on list	Classification	Notes
butane	DFG MAC-values list	Butane	Develop D	-
Methylal	DFG MAC-values list	-	Develop C	-
propane	DFG MAC-values list	-	Develop D	-
isobutane	DFG MAC-values list	Butane	Develop D	-
ethyl acetate	DFG MAC-values list	-	Develop C	-
heptane	DFG MAC-values list	-	Develop D	-
cyclohexane	DFG MAC-values list	-	Develop D	-
propan-2-ol	DFG MAC-values list	-	Develop C	-
pentane	DFG MAC-values list	Pentane	Develop C	-
vinyl acetate	DFG MAC-values list	-	Carc 4, Develop C	-

Storage class (TRGS 510) : 2B

Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Danger criteria

Category	Reference number
P3a	1.2.3.1

Hazard class for water : 2

Technical instruction on air quality control (TA Luft)

Number [Class]	Description	%
5.2.5	Organic substances	104.3
5.2.5 [I]	Organic substances	102.6

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 : Not determined.

Canada : Not determined.

China : Not determined.

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

Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

SECTION 15: Regulatory information

Viet Nam : Not determined.

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 Skin Irrit. 2, H315 Aquatic Chronic 3, H412	On basis of test data Expert judgment Calculation method

Full text of abbreviated H statements

H220	Extremely flammable gas.
H222, H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H225	Highly flammable liquid and vapor.
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SECTION 16: Other information

EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aerosol 1	AEROSOLS - Category 1
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 2	CARCINOGENICITY - Category 2
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Gas 1A	FLAMMABLE GASES - Category 1A
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Press. Gas (Comp.)	GASES UNDER PRESSURE - Compressed gas
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

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