AFCAT

# AFCAT Drywall Gasket PU Foam 550222


## SAFETY DATA SHEET

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

#### 1.1 Product identifier

| | |
|---|---|
| Trade Name | AFCAT Group Inc |
| Product Code | 550222 |
| Product Form | Mixture |

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

**1.2.1 Relevant identified uses**

Consumer (SU21), Professional (SU22) Adhesives, Sealants (PC.1)

**1.2.2 Uses advised against**

No information available

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

AFCAT Group Inc

4520 South Buckner Boulevard, Ste A, Dallas, Texas 75227

Tel. +1 (469) 678-1008

**1.4** Emergency telephone number

For urgent inquiries refer to **1-800-535-5053**

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment is given in sections 11 and 12 of this document.

**Hazard classification and indication:**

| | |
|---|---|
| Aerosol, category 1 | H222 Extremely flammable aerosol. |
| | H229 Pressurised container: may burst if heated. |

| | |
|---|---|
| Carcinogenicity, category 2 | H351 Suspected of causing cancer. |
| Acute toxicity, category 4 | H332 Harmful if inhaled. |
| Specific target organ toxicity - repeated exposure, category 2 | H373 May cause damage to organs through prolonged or repeated exposure. |
| Eye irritation, category 2 | H319 Causes serious eye irritation. |
| Skin irritation, category 2 | H315 Causes skin irritation. |
| Specific target organ toxicity - single exposure, category 3 | H335 May cause respiratory irritation. |
| Respiratory sensitization, category 1 | H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitization, category 1 | H317 May cause an allergic skin reaction. |

**2.2 Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Danger

Hazard statements:

| | |
|---|---|
| **H222** | Extremely flammable aerosol. |
| **H229** | Pressurized container: may burst if heated. |
| **H351** | Suspected of causing cancer. |
| **H332** | Harmful if inhaled. |
| **H373** | May cause damage to organs through prolonged or repeated exposure. |
| **H319** | Causes serious eye irritation. |
| **H315** | Causes skin irritation. |
| **H335** | May cause respiratory irritation. |
| **H334** | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| **H317** | May cause an allergic skin reaction. |

Precautionary statements:

| | |
|---|---|
| **P210** | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| **P251** | Do not pierce or burn, even after use. |
| **P410+P412** | Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F. |
| **P211** | Do not spray on an open flame or other ignition source. |
| **P280** | Wear protective gloves/ protective clothing / eye protection / face protection. |
| **P102** | Keep out of reach of children. |
| **P260** | Do not breathe dust/fume/gas/mist/vapors/spray. |
| **P284** | [In case of inadequate ventilation] wear respiratory protection. |
| **P302+P352** | IF ON SKIN: Wash with plenty of water |
| **P305+P351+P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **P342+P311** | If experiencing respiratory symptoms: Call a POISON CENTER / doctor |
| **P501** | Dispose of an approved waste disposal plant, contents and container to hazardous or special waste collection point, in |

| | |
|---|---|
| | accordance with local, regional, national and/or international regulation |
| **Contains** | Diphenylmethane-4,4'-diisocyanate, Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate |

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. As from 24 August 2023 adequate training is required before industrial or professional use.

**2.3 Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage than 0,1%. The product does not contain substances with endocrine disrupting properties in concentration 0.1%.

**SECTION 3: Composition/information on ingredients**

**3.1 Substances**
Not applicable

**3.2 Mixtures**

| Name | Product identifier | % | Classification (EC) 1272/2008 (CLP) |
|---|---|---|---|
| 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate | (CAS-No.) 101-68-8<br>(EC-No.) 202-966-0<br>(EC Index-No.) 615-005-00-9<br>(REACH-no) 01-211945701447-0000 | 10 - 15 | Carc. 2 H351,<br>Acute Tox. 4 H332,<br>STOT RE 2 H373,<br>Eye Irrit. 2 H319,<br>Skin Irrit. 2 H315,<br>STOT SE 3 H335,<br>Resp. Sens. 1 H334,<br>Skin Sens. 1 H317<br>Skin Irrit. 2 H315: 5%,<br>Eye Irrit. 2 H319: 5%,<br>Resp. Sens. 1 H334: 0.1%,<br>STOT SE 3 H335: 5%<br>STA Inhalation mists/powders: 1.5 mg/l |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate | (EC-No.) 905-806-4<br>(EC Index-No.) 615-005-00-9<br>(REACH-no) 01-2119457015-45-xxxx | 10 - 15 | Carc. 2 H351,<br>Acute Tox. 4 H332,<br>STOT RE 2 H373,<br>Eye Irrit. 2 H319,<br>Skin Irrit. 2 H315,<br>STOT SE 3 H335,<br>Resp. Sens. 1 H334,<br>Skin Sens. 1B H317<br>Skin Irrit. 2 H315: 5%,<br>Eye Irrit. 2 H319: 5%,<br>Resp. Sens. 1 H334: 0.1%,<br>STOT SE 3 H335: 5%<br>STA Inhalation mists/powders: 1.5 mg/l |
| isobutane | (CAS-No.) 75-28-5<br>(EC-No.) 200-857-2<br>(REACH-no) 01-2119485395-27-xxxx | 2.5 - 10 | Flam. Gas 1A H220,<br>Press. Gas H280 |
| propane | (CAS-No.) 74-98-6<br>(EC-No.) 200-827-9<br>(REACH-no) 01-2119486944-21-xxxx | 1 - 5 | Flam. Gas 1A H220,<br>Press. Gas H280 |
| butane | (CAS-No.) 106-97-8<br>(EC-No.) 203-448-7<br>(Index No) 01-2119474691-32-xxxx | 1 - 5 | Flam. Gas 1, H220<br>Press. Gas |
| dimethyl ether | (CAS-No.) 115-10-6<br>(EC-No.) 204-065-8 | 2.5 - 10 | Flam. Gas 1A H220,<br>Press. Gas H280 |

| | | | |
|---|---|---|---|
| | (REACH-no) 01-2119472128-37-xxxx | | |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problems persist, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorized by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

**5.3 Advice for firefighters**

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

**6.2 Environmental precautions**

Do not disperse in the environment.

**SECTION 7: Precautions for safe handling**

**7.1 Personal precautions, protective equipment and emergency procedures**

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapors may catch fire and an explosion may occur; vapor accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

**7.2 Conditions for safe storage, including any incompatibilities**

Do not disperse in the environment.

**7.3 Specific end uses**

Information not available

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Regulatory References

| | | |
|---|---|---|
| BGR | България | НАРЕДБА 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.) |
| CZE | Česká Republika | Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů |
| DEU | Deutschland | Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56 |
| DNK | Danmark | Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019 |
| ESP | España | Límites de exposición profesional para agentes químicos en España 2021 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
| FIN | Suomi | HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25 |
| GRC | Ελλάδα | Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ` ` σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία` ` » |
| HUN | Magyarország | Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről |
| HRV | Hrvatska | Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021) |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
| NOR | Norge | Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255 |
| NLD | Nederland | Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit |
| PRT | Portugal | Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos |

| | | |
|---|---|---|
| POL | Polska | Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy |
| ROU | România | Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006 |
| SWE | Sverige | Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1) |
| SVK | Slovensko | NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov |
| TUR | Türkiye | Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733 |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| EU | OEL EU | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2022 |

| **Butane** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Threshold Limit Value** | | | | | | | |
| Type | Country | TWA/8h | | STEL/1min | | Remarks/Observations | |
| | | mg/m3 | ppm | mg/m3 | pm | | |
| TLV | BGR | 1900 | | | | | |
| AGW | DEU | 2400 | 1000 | 9600 | 4000 | | |
| MAK | DEU | 2400 | 1000 | 9600 | 4000 | | |
| TLV | DNK | 1200 | 500 | | | | |
| VLA | ESP | | 1000 | | | | Gases |
| VLEP | FRA | 1900 | 800 | | | | |
| HTP | FIN | 1900 | 800 | 2400 | 1000 | | |
| TLV | GRC | 2350 | 1000 | | | | |
| AK | HUN | 2350 | | 9400 | | | |
| GVI/KGVI | HRV | 1450 | 600 | 1810 | 750 | | |
| TLV | NOR | 600 | 250 | | | | |
| TGG | NLD | 1430 | | | | | |
| NDS/NDSCh | POL | 1900 | | 3000 | | | |
| WEL | GBR | 1450 | 600 | 110 | 750 | | |
| WEL | GBR | | 4 | | | RESP | |
| TLV-ACGIH | | | | | 1000 | | |

| **DIPHENYLMETHANE-4,4'-DIISOCYANATE** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Threshold Limit Value** | | | | | | | |
| Type | Country | TWA/8h | | STEL/15min | | Remarks/Observations | |
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| TLV | CZE | 0.05 | | 0.1 | | | |
| AGW | DEU | 0.05 | | 0.05 (C) | | INHAL | C = 0,1 mg/m3 |
| MAK | DEU | 0.05 | | 0.05 (C) | | INHAL | C = 0,1 mg/m3 |
| MAK | DEU | 0.05 | | 0.05 | | SKIN | C = 0,1 mg/m3 |
| TLV | DNK | 0.05 | 0.005 | | | | |
| VLA | ESP | 0.052 | 0.005 | | | | |
| VLEP | FRA | 0.1 | 0.01 | 0.2 | | | |
| TLV | GRC | 0.2 | | 0.2 | | | |
| AK | HUN | 0.05 | | 0.05 | | | |
| TLV | NOR | 0.05 | 0.005 | | | | |
| NDS/NDSCh | POL | 0.03 | | 0.09 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TLV | ROU | | | 0.15 | | | |
| NGV/KGV | SWE | 0.03 | 0.002 | 0.05 | 0.005 | | STEL: 5 min |
| NPEL | SVK | 0.03 | 0.002 | | | | |
| TLV-ACGIH | | 0.051 | 0.005 | | | | |

| **Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate** | | |
|---|---|---|
| Predicted no-effect concentration - PNEC | | |
| Normal value in fresh water | 3.7 | µg/l |
| Normal value in marine water | 0.37 | µg/l |
| Normal value for water, intermittent release | 37 | µg/l |

| **Health – Derived no-effect level – DNEL/DMEL** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Effects on consumers** | | | | **Effects on workers** | | | |
| Route of Exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | 0.05 mg/m3 | | 0.025 mg/m3 | | 0.1 mg/m3 | | 0.05 mg/m3 | |

Legend: (C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

**8.2 Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
Provide an emergency shower with face and eye wash station.
Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION
Protective Gloves

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

**SECTION 9: Physical and chemical properties**

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

| **Properties** | **Value** |
|---|---|
| Appearance | Liquid under pressure |
| Colour | various |
| Odour | not available |
| Melting point / freezing point | not available |
| Initial boiling point | not available |
| Flammability | Extremely flammable aerosol |
| Lower explosive limit | not available |

| | |
|---|---|
| Upper explosive limit | not available |
| Flash point | not available |
| Auto-ignition temperature | not available |
| Decomposition temperature | not available |
| pH | not available |
| Kinematic viscosity | not available |
| Solubility | not available |
| Partition coefficient: n-octanol/water | not available |
| Vapor pressure | 5 Bar |
| Density and/or relative density | not available |
| Relative vapor density | not available |
| Particle characteristics | not applicable |

**9.2 Other information**

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

Information not available

**9.2.2 Other safety characteristics**

Information not available

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**DIPHENYLMETHANE-4,4'-DIISOCYANATE**

Decomposes at 274°C/525°F.

With water it develops carbon dioxide and forms an insoluble solid polymer and consequently any wet material recovered must be stored in open containers.

**10.2 Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3 Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**DIPHENYLMETHANE-4,4'-DIISOCYANATE**

May react dangerously with: alcohols, amines, ammonia, sodium hydroxide, acids, water, strong acids, strong bases.

**10.4 Conditions to avoid**

Avoid overheating.

**10.5 Incompatible materials**

Strong reducing or oxidizing agents, strong acids or alkalis, hot material.

**10.6 Hazardous decomposition products**

**DIPHENYLMETHANE-4,4'-DIISOCYANATE**

May develop: nitric oxide, carbon oxides, hydrogen cyanide.

**SECTION 11: Toxicological information**

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

Metabolism, toxicokinetic, mechanism of action and other information

Information not available

Information on likely routes of exposure

**DIPHENYLMETHANE-4,4'-DIISOCYANATE**
WORKERS: inhalation; contact with the skin.
POPULATION: inhalation of ambient air; contact with the skin of products containing the substance.

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

**DIPHENYLMETHANE-4,4'-DIISOCYANATE**
Causes symptoms of irritation of the eye mucous membranes, upper respiratory and digestive tract and also to the skin; lung irritation of the bronchitis type (chest pains, cough, asthmatic wheezing), neurological symptoms (dizziness, balance disorders, headaches and consciousness disturbances). In severe cases, may give rise to delayed pulmonary edema (INRS, 2009). May cause hypersensitivity pneumonia which, in the event of continuous exposure, may progress to interstitial fibrosis (INRS, 2009).

Interactive effects

**DIPHENYLMETHANE-4,4'-DIISOCYANATE**
Cross sensitizations with other isocyanates are possible, in particular with TDI (toluene diisocyanate).

Acute Toxicity

| | |
|---|---|
| ATE (Inhalation - mists / powders) of the mixture: | 4.5 mg/l |
| ATE (Oral) of the mixture: | Not classified (no significant component) |
| ATE (Dermal) of the mixture: | Not classified (no significant component) |

DIPHENYLMETHANE-4,4'-DIISOCYANATE

| | |
|---|---|
| STA (Inhalation mists/powders): | 1.5 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture) |

**Reaction mass of 4,4’-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate**

| | |
|---|---|
| STA (Inhalation mists/powders): | 1.5 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture) |

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitizing for the skin
Sensitizing for the respiratory system

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Suspected of causing cancer

**DIPHENYLMETHANE-4,4'-DIISOCYANATE**
Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation
STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## SECTION 12: Ecological information

### 12.1 Toxicity

Information not available

### 12.2 Persistence and degradability

| | |
|---|---|
| BUTANE | |
| Solubility in water | 0,1 – 100 mg/l |
| Rapidly degradable | |
| | |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | |
| Solubility in water | 0,1 - 100 mg/l |
| NOT rapidly degradable | |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| BUTANE | |
| Partition coefficient: n-octanol/water | 1.09 |
| | |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | |
| Partition coefficient: n-octanol/water | 4.51 |
| | |
| PROPANE | |
| Partition coefficient: n-octanol/water | 1.09 |

### 12.4 Mobility in soil

Information not available

**12.5 Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage than 0,1%.

**12.6 Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7 Other adverse effects**

Information not available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## SECTION 14: Transport information

**14.1 UN number or ID number**

ADR / RID, IMDG, IATA: 1950

**14.2 UN proper shipping name**

ADR / RID: AEROSOLS

IMDG: AEROSOLS

IATA: AEROSOLS, FLAMMABLE

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

ADR / RID: Class: 2 Label: 2.1

IMDG: Class: 2 Label: 2.1

IATA: Class: 2 Label: 2.1

**14.4 Packing group**

ADR / RID, IMDG, IATA: -

**14.5 Environmental hazards**

| | |
|---|---|
| ADR / RID: | NO |
| IMDG: | NO |
| IATA: | NO |

**14.5 Environmental hazards**

| | |
|---|---|
| ADR / RID: | NO |
| IMDG: | NO |
| IATA: | NO |

**14.6 Special precautions for user**

| | | | |
|---|---|---|---|
| ADR / RID: | HIN – Kemler: --<br>Special Provision: - | Limited Quantities: 1 L | Tunnel restriction code: (D) |
| IMDG: | EMS: F-D, S-U | Limited Quantities: 1 L | |
| IATA: | Cargo: | Maximum quantity: 150 Kg | Packaging instructions: 203 |
| | Passengers: | Maximum quantity: 75 Kg | Packaging instructions: 203 |
| | Special provision: | A145, A167, A802 | |

**14.7 Maritime transport in bulk according to IMO instruments**

Information not relevant

**SECTION 15: Regulatory information**

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

Seveso Category - Directive 2012/18/EU: P3a

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

| | |
|---|---|
| 56. Methylenediphenyl diisocyanate (MDI)<br>CAS No 26447-40-5<br>EC No 247-714-0<br>including the following specific isomers:<br>(a) 4,4'-Methylenediphenyl diisocyanate:<br>CAS No 101-68-8<br>EC No 202-966-0;<br>(b) 2,4'-Methylenediphenyl diisocyanate:<br>CAS No 5873-54-1<br>EC No 227-534-9;<br>(c) 2,2'-Methylenediphenyl diisocyanate:<br>CAS No 2536-05-2<br>EC No 219-799-4 | 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging: (a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC (*******); (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures: '— Persons already sensitised to diisocyanates may develop allergic reactions when using this product. — Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. — This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.' |

| | |
|---|---|
| 74. Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length | 1. Shall not be used as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 August 2023, unless: (a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the employer or self-employed ensures that industrial or professional user(s) have successfully completed training on the safe use of diisocyanates prior to the use of the substance(s) or mixture(s). 2. Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 February 2022, unless: (a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the supplier ensures that the recipient of the substance(s) or |

| | |
|---|---|
| | mixture(s) is provided with information on the requirements referred to in point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: 'As from 24 August 2023 adequate training is required before industrial or professional use'. |

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not Applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage than 0,1%.

Substances subject to authorization (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

**SECTION 16: Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|---|---|
| **Flam. Gas 1A** | Flammable gas, category 1A |
| **Aerosol 1** | Aerosol, category 1 |
| **Aerosol 3** | Aerosol, category 3 |
| **Press. Gas** | Pressurized gas |
| **Press. Gas (Liq.)** | Liquefied gas |
| **Carc. 2** | Carcinogenicity, category 2 |
| **Acute Tox. 4** | Acute toxicity, category 4 |
| **STOT RE 2** | Specific target organ toxicity - repeated exposure, category 2 |
| **Eye Irrit. 2** | Eye irritation, category 2 |
| **Skin Irrit. 2** | Skin irritation, category 2 |
| **STOT SE 3** | Specific target organ toxicity - single exposure, category 3 |
| **Resp. Sens. 1** | Respiratory sensitization, category 1 |
| **Skin Sens. 1** | Skin sensitization, category 1 |
| **Skin Sens. 1B** | Skin sensitization, category 1B |
| **H220** | Extremely flammable gas. |
| **H222** | Extremely flammable aerosol. |
| **H229** | Pressurized container: may burst if heated. |
| **H280** | Contains gas under pressure; may explode if heated. |

| | |
|---|---|
| **H351** | Suspected of causing cancer. |
| **H332** | Harmful if inhaled. |
| **H373** | May cause damage to organs through prolonged or repeated exposure. |
| **H319** | Causes serious eye irritation. |
| **H315** | Causes skin irritation. |
| **H335** | May cause respiratory irritation. |
| **H334** | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| **H317** | May cause an allergic skin reaction. |

Use descriptor system:

| | | |
|---|---|---|
| PC | 1 | Adhesive, sealants |

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous Goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
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2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
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4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
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16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
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- The Merck Index. - 10th Edition
- Handling Chemical Safety
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- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
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- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

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