Issued: 11.05.2023

Revision: 17.04.2026
Version: 2.0

# Safety Data Sheet

in accordance the Commission Regulation (EU) No 2020/878 of 18 June 2020
amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council
concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

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

### 1.1. Product identifier

Name:
R-CAS-V

UFI Code: U9G1-R0XM-F001-CVQV

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

Uses identified: Industrial, professional and consumer uses
Uses discouraged: No uses discouraged.

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

| | |
|---|---|
| Name and address of the company: | Rawlplug S.A.<br><br>Kwidzyńska 6<br>51-416 Wrocław<br>Poland |
| Phone, Fax: | + 48 71 320 91 00 |
| E-Mail address of the person responsible for the safety data sheet: | infochem@rawlplug.com |

### 1.4 Emergency telephone number

Nationwide emergency phone number (8:00 – 16:00, monday-friday): + 48 71 320 91 00
PL: 112 (emergency call)

| **Emergency telephone number** | | | | |
|---|---|---|---|---|
| **Country** | **Official advisory body** | **Address** | **Emergency number** | **Remark** |
| Austria | Vergiftungsinformationszentra le (Poisons Information Centre) | Stubenring 6<br>1010 Wien | +43 1 406 43 43 | |
| Belgium | Centre Anti-Poisons/ Antigifcentrum c/o Hôpital Central de la Base – Reine Astrid | Rue Bruyn 1 B -1120 Bruxelles/Brussel | +32 70 245 245 | Please dial: 070 245245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee) |
| Bulgaria | Национален токсикологичен информационен център (National Toxicological Information Centre) Многопрофилна болница за активно лечение и спешна медицина "Н.И.Пирогов" (National Clinical Toxicology Centre), Emergency Medical Institute "Pirogov" | 21 Totleben Boulevard<br>1606 SOFIA | +359 2 9154 409 | |
| Croatia | Centar za kontrolu otrovanja Institut za medicinska istraživanja i medicinu rada | Ksaverska Cesta 2 p.p. 291<br>10000 Zagreb | +385 1 234 8342 | |
| Cyprus | Κέντρου Δηλητηριάσεων | | 1401 | Operating hours 24 hours / 24 hours, 7 days a week |
| Czech Republic | Toxikologickéinformačnístředisko Klinikapracovníholékařství VFN a 1. LF UK | Na Bojišti 1<br>120 00 Praha 2 | +420 224 919 293<br>+420 224 915 402 | |
| Denmark | Giftlinjen Bispebjerg Hospital | Bispebjerg Bakke 23<br>2400 København NV | +45 82 12 12 12 | |
| Estonia | Mürgistusteabekeskus | Gonsiori 29<br>15027 Tallinn | 16662<br>+372 626 93 90 | |
| Finland | Myrkytystietokeskus | Stenbäckinkatu 9 | +358 9 471 977 | |

| | | | | |
|---|---|---|---|---|
| | | PO BOX 100 29 Helsinki | +358 9 4711 | |
| France | Centre Antipoison et de Toxicovigilance de Paris Hôpital Fernand Widal | 200 rue du Faubourg Saint-Denis 75475 Paris Cedex 10 | +33 1 40 05 48 48 | |
| France | Centre Antipoison et de Toxicovigilance de Marseille Hôpital Sainte Marguerite | 270 boulevard de Sainte Marguerite 13274 Marseille Cedex 09 | +33 4 91 75 25 25 | |
| Germany | Giftnotruf München Toxikologische Abteilung der II. Med. Klinik und Poliklinik rechts der Isar der Technischen Universität München | Ismaninger Straße 22 81675 München | +49 (0) 89 19240 | |
| Germany | Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG | Hindenburgdamm 30 12203 Berlin | +49 (0) 30 19240 | |
| Greece | Poisons Information Centre Children's Hospital P&A Kyriakou | 11762 Athens | +30 2 10 779 3777 | |
| Hungary | Országos Kémiai Biztonsági Intézet Egészségügyi Toxikológiai Tájékoztató Szolgálat | Nagyvárad tér 2. 1437 Budapest, Pf. 839 1097 Budapest | +36 80 20 11 99 | |
| Iceland | Eitrunarmiðstöð Landspítali | Fossvogi 108 Reykjavik | +354 543 22 22 | |
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| Italy | Centro Antiveleni Dipartimento di Tossicologia Clinica, Universita Cattolica del Sacro Cuore | Largo Agostino Gemelli 8 168 Roma | +39 06 305 4343 | |
| Latvia | Valsts Toksikoloģijas centrs, Saindēšanās un zāļu informācijas centrs | Hipokrāta 2 1038 Rīga | +371 67 04 24 73 | |
| Lithuania | Apsinuodijimų informacijos biuras | Birutės g. 56 8110 Vilnius | +370 5 236 20 52 +370 687 53378 | |
| Luxembourg | Centre Anti-Poisons/ Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid | Rue Bruyn 1 1120 Bruxelles/Brussel | +352 8002 5500 | |
| Malta | Medicines & Poisons Info Office | Mater Dei Hospital MSD Msida | +356 2545 6504 | |
| Netherlands | Nationaal Vergiftigingen Informatie Centrum Universitair Medisch Centrum Utrecht, Het Nationaal Vergiftigingen Informatie Centrum (NVIC) informeert (dieren-) artsen, apothekers en andere professionele hulpverleners over de mogelijke gezondheidseffecten en behandelingsmogelijkheden bij vergiftigingen. Het NVIC is hiervoor dag en nacht bereikbaar, zowel telefonisch als via internet | Huispostnummer B.00.118 PO Box 85500 3508 GA Utrecht | +31 30 274 88 88 | Only for thepurpose of informing medical personnel in cases of acute intoxications |
| Norway | Giftinformasjonen Helsedirektoratet | P.O. Box 7000 St. Olavs Plass 130 Oslo | +47 22 591300 | |
| Poland | National Poisons Information Centre The Nofer Institute of Occupational Medicine (Łódź) | ul. Teresy 8 P.O. BOX 199 90950 Łódź | +48 42 63 14 724 | |
| Portugal | Centro de InformaçãoAntivenenosInstituto Nacional de Emergência Médica | Rua Almirante Barroso, 36 1000-013 Lisboa | +351 808 250 143 | |
| Romania | Department of Clinical Toxicology Spitalul de Urgenta Floreasca | Calea Floreasca Bucuresti | +40 21 230 8000 | |
| Serbia | Nacionalni centar za kontrolu trovanja - VMA | Crnotravska 17 11000 Beograd | +381 11 360 84 40 (24h) +381 11 3672 187 | |
| Slovakia | Národné toxikologickéinformačné centrum UniverzitnánemocnicaBratislava, pracoviskoKramáre, Klinikapracovnéholekárstva a toxikológie | Limbová 5 833 05 Bratislava | +421 2 54 77 41 66 | |
| Slovenia | Center za kliničnotoksikologijo in farmakologijoInternaklinika, UKCL | Zaloška cesta 7 1525 Ljubljana | +386 41 650 500 | |
| Spain | Servicio de Información Toxicológica Instituto Nacional de Toxicología y Ciencias Forenses, Departamento de Sevilla | Carretera de San Jerónimo Km 0,4 41080 Sevilla | +34 91 562 04 20 | (Toxicological emergencies only). Information in Spanish (24/7) |
| Sweden | Giftinformationscentralen | Box 60 500 171 76 Stockholm | 112 – begär Giftinformation +46 10 456 6700 (Från utlandet) | (from abroad: +41 44 251 51 51) non urgent inquiry: +41 44 251 66 66 |
| Switzerland | Tox Info Suisse | Freiestrasse 16 8032 Zürich | 145 | |

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Physical and chemical hazards:
This mixture does not present a physical hazard.

Health hazards:
**Eye irritation Hazard category 2 [Eye Irrit. 2]**
Causes serious eye irritation. (H319)
**Skin sensitisation Hazard category 1 [Skin Sens.1]**
May cause an allergic skin reaction. (H317)

Environmental hazards:
**Hazardous to the aquatic environment Hazard category 1 [Aquatic Aqute 1]**
Very toxic to aquatic life. (H400)
**Hazardous to the aquatic environment Hazard category 1 [Aquatic Chronic 1]**
Very toxic to aquatic life with long-lasting effects. (H410)

## 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008**
**Pictograms**



GHS07 GHS09

**Signal word:** Warning

Supplemental Hazard Statements on labels
Contains:
2,2'-Ethylenedioxydiethyl dimethacrylate
1,1'-(p-Tolylimino)dipropan-2-ol
Dibenzoyl peroxide

**Hazard statement(s)**
H319 Causes serious eye irritation.
H317 May cause allergic skin reaction
H410 Very toxic to aquatic life with long lasting effects
H400 Very toxic to aquatic life.

**Precautionary statement(s)**
P261 – Avoid breathing dust
P302 + P352 – IF ON SKIN: Wash with plenty of water
P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 – If eye irritation persists: Get medical advice/attention.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P264 – Wash hands thoroughly after handling.
P262+P364 Take off contaminated clothing and wash it before reuse.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.
P102 - Keep out of reach of children

**2.3 Other hazards**

The substances in this product do not meet the PBT or vPvB criteria according to Annex XIII of REACH.
PBT substances (persistent, bioaccumulative and toxic).
vPvB substances (substances with very persistence and very high bioaccumulative capacity)
The product does not contain substances that are included in the list drawn up in accordance with Article 59(1) for endocrine disrupting properties or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 in a concentration equal to or greater than 0,1 % by weight.

## Section 3: Composition/information on ingredients

**3.1. Substances**

Not applicable

**3.2. Mixtures**

| Product identifier | Ingredient name | Content (wt%) | Classification according to Regulation (EC) No 1272/2008 | |
|---|---|---|---|---|
| | | | Hazard class and category codes | CAS hazard statement codes |
| CAS: 109-16-0<br>EC: 203-652-6<br>Index number:-<br>REACH registration number:<br>01-2119969287-21-XXXX | 2,2'-Ethylenedioxydiethyl dimethacrylate | 10-20 | Skin Sens. 1 B | H317 |
| CAS: 38668-48-3<br>EC: 254-075-1<br>Index No: -<br>REACH Registration No.<br>01-2119980937-17-0005 | 1,1'-(p-Tolylimino)dipropan-2-ol | 0,1-1,0 | Acute Tox. 2 (oral)<br>Eye Irrit. 2<br>AquaticChronic 3 | H300<br>H319<br>H412 |
| CAS: 94-36-0<br>EC:202-327-6<br>Index No:617-008-00-0<br>REACH Registration No.:<br>01-2119511472-50-XXXX | Dibenzoyl peroxide | 2-3<br>[1] | Org. Perox. B<br>Aquatic Acute 1 (M=10)<br>Aquatic Chronic 1 (M=10)<br>EyeIrrit 2<br>SkinSens 1 | H241<br>H400<br>H411<br>H319<br>H317 |
| CAS: 94-49-5<br>EC: 202-338-6<br>Index No:617-008-00-0<br>REACH Registration No.:<br>01-2120759933-41-XXXX | Ethane-1,2-diyl dibenzoate | 2-3 | Aquatic Chronic 2 | H411 |

[1] Substance with national exposure limit in the workplace
[2] Substance with UE exposure limit in the workplace

Full H phrases are specified in point 16 hereof.
This mixture contains nanoforms of:
**Silicon dioxide**
Particle characteristics:
Particle size: 4-95nm
Assessment: This mixture contains nanoforms based on supplier data
Shape: sphere

## Section 4: First aid measures

### 4.1. Description of first aid measures

| | |
|---|---|
| Inhalation: | Remove the injured person to fresh air and provide conditions for rest in a position that allows free breathing. If the person is not breathing, breathing irregularly, or when breathing has stopped, qualified personnel should perform artificial respiration or administer oxygen. In the event of loss of consciousness, place the patient in a safe fixed side position. Seek medical advice and contact a poison center. |
| Skin contact: | Rinse impure skin immediately with plenty of soap and water for at least 10 minutes. Remove contaminated clothing and shoes. If you are allergic to the skin, contact your doctor, avoid re-exposure. |
| Eye contact: | Rinse contaminated eyes immediately with plenty of water for at least 15 minutes. Seek medical advice immediately. |
| Gastrointestinal tract: | Rinse mouth with water. Remove to fresh air and provide conditions for rest in a position that allows free breathing. Do not induce vomiting unless recommended by a healthcare professional. If vomiting occurs, prevent vomit from entering the lungs by head low. Never administer any medication orally to an unconscious person. In the event of loss of consciousness, place the patient in a safe fixed side position. Loosen tight clothing. Seek medical advice immediately. |

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

| | |
|---|---|
| Contact with skin: | May cause an allergic reaction of the skin. |
| In contact with eyes: | Causes serious eye irritation. |
| If swallowed: | May cause gastrointestinal |
| After inhalation: | May cause respiratory irritation. |

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

Show the safety data sheet or label/packaging to the medical personnel providing assistance. Treat symptomatically.

## Section 5: Firefighting measures

### 5.1. Extinguishing media

| | |
|---|---|
| Suitable extinguishing media: | Use dry extinguishing powders (ABC powder) or CO2, alcohol-resistant foam, or a stream of water spray. |
| Unsuitable extinguishing media: | Do not use tight water jets |

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

Combustible component. It forms an explosive mixture of steam and air. In the event of a fire, there is a risk of the formation of dangerous decomposition products: carbon monoxides, unidentified hydrocarbons.

### 5.3. Advice for firefighters

Wear gas-tight protective clothing and breathing apparatus independent of ambient air. The basic level of protection in chemical accidents is provided by the clothing used by firefighters (including helmets, safety boots and gloves), in accordance with the European standard EN 469. Containers not affected by fire and exposed to fire should be cooled with a dispersed water jet, if possible, removed from the hazard area .

## Section 6: Accidental release measures

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

For Non-Emergency Personnel:

Restrict access by bystanders to the area of the emergency until appropriate clean-up operations have been completed. In
the case of large releases, isolate the affected area. Avoid contact with skin and eyes. Use personal protective equipment
.

For Responders:

Ensure that only trained personnel carry out the removal of the failure and its consequences. Use personal protective equipment.

**6.2. Environmental precautions**

Prevent ingress into sewers, surface water, groundwater and soil. Secure manholes. If possible, collect with absorbent material, avoiding dust. Place the damaged ackaging in a replacement package.

**6.3. Methods and material for containment and cleaning up**

Collect mechanically. Wash the soiled area with water and then wipe dry. Place in marked waste containers. Dispose of at a licensed waste disposal company. Contaminated absorbent material can pose the same hazard as a spilled product.

**6.4 Reference to other sections**

See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

## Section 7: Handling and storage

**7.1. Precautions for safe handling**

Prevent contact with eyes, skin and clothing. Do not inhale steam and mist. Wash hands thoroughly after use. Use only with adequate ventilation. Protect from heat and direct sunlight Remove contaminated clothing immediately and wash before putting it back on. Protect against ingress into the sewage system, surface and groundwater and soil.

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

Store the product tightly closed in its original packaging, away from sunlight and other sources of heat, in a dry, well ventilated room. Do not store food or drinks nearby. Store at a temperature between 5 and 25°C. To maintain shelf life, avoid temperature fluctuations during storage (overheating and supercooling).

**7.3. Specific end use(s)**

See Section 1.2 of the SDS
No information on other uses.

## Section 8: Exposure controls/personal protection

**8.1. Control parameters**

**National**

| Substance | TWA (mg/m$^3$) | STEL (mg/m$^3$) |
|---|---|---|
| **Belgium** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | - |
| *Benzene CAS 71-43-2 | 3,25 | - |
| *Carbon dioxide CAS 124-38-9 | 9131 | 54784 |
| **Dennmark** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | - |

| | | |
|---|---|---|
| *Benzene CAS 71-43-2 | 1,6 | 3,2 |
| *Carbon dioxide CAS 124-38-9 | 9000 | 18000 |
| **Sweden** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | 10 |
| *Benzene CAS 71-43-2 | 1,5 | 9 |
| *Carbon dioxide CAS 124-38-9 | 9000 | 18000 |
| **France** | | |
| *Benzene CAS 71-43-2 | 3,25 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Ireland** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | - |
| *Benzene CAS 71-43-2 | 3,25 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | 27000 |
| **Italy** | | |
| *Benzene CAS 71-43-2 | 0,66 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Netherlands** | | |
| *Benzene CAS 71-43-2 | 0,70 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Austria** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | 10 |
| *Benzene CAS 71-43-2 | 3,2 | 12,8 |
| *Carbon dioxide CAS 124-38-9 | 9000 | 18000 |
| **Romania** | | |
| *Benzene CAS 71-43-2 | 3,25 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Hungary** | | |
| Dibenzoyl peroxide (Skin) CAS 94-36-0 | 5 | 5 |
| *Benzene CAS 71-43-2 | 1,65 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Spain** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | - |
| *Benzene CAS 71-43-2 | 3,25 | - |
| *Carbon dioxide CAS 124-38-9 | 9150 | 27400 |
| **Switzerland** | | |
| Dibenzoyl peroxide (inhalable) CAS 94-36-0 | 5 | 5 |
| *Benzene CAS 71-43-2 | 0,70 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Latvia** | | |
| *Benzene CAS 71-43-2 | 3,25 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Germany** | | |
| Dibenzoyl peroxide (respirabile) CAS 94-36-0 (AGS) | 1 | 4 |
| Dibenzoyl peroxide (inhalable) CAS 94-36-0 (DFG) | 5 | 5 |
| *Benzene CAS 71-43-2 (AGS) | 1,9 | 15,2 |
| *Benzene CAS 71-43-2 (DFG) | 0,2 | - |
| *Carbon dioxide CAS 124-38-9 (AGS) | 9100 | 18200 |
| *Carbon dioxide CAS 124-38-9 (DFG) | 9100 | 18200 |
| **Czech Republic** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | 10 |
| **Slovakia** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | - |
| **Finalnd** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | 10 |

| | | |
|---|---|---|
| *Benzene CAS 71-43-2 | 3,25 | - |
| **Norway** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | - |
| *Benzene CAS 71-43-2 | 0,66 | - |
| *Carbon dioxide CAS 124-38-9 | 9000 | - |
| **Slovenia** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | 5 |
| **Estonia** | | |
| Dibenzoyl peroxide CAS 94-36-0 | 5 | - |

*decomposition products

***Legal basis:***

***Belgium:*** *Koninklijk besluit tot wijziging van titel 1 betreffende chemische agentia van boek VI van de codex over het welzijn op het werk, wat de lijst van grenswaarden voor blootstelling aan chemische agentia betreft*
***Denmark:*** *Official publication: Lovtidende A; Number: 291; Publication date: 19/03/2024; Page number: 0001-0045 Arbetsmiljöverkets föreskrifter 2018:1 om hygieniska gränsvärden Official publication: Arbetsmiljöverkets författningssamling (AFS); Number: 2018:1; Publication date: 19/02/2018*
***Sveden****: HTP-VÄRDEN 2020 : Koncentrationer som befunnits skadliga*
***France*** *: Décret n° 2024-307 du 4 avril 2024 fixant des valeurs limites d'exposition professionnelle contraignantes pour certains agents chimiques et complétant la traçabilité de l'exposition des travailleurs aux agents chimiques cancérogènes, mutagènes ou toxiques pour la reproduction (rectificatif)*
*Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984*
***Ireland*** *: 2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)*
***Italy:*** *DECRETO LEGISLATIVO 9 aprile 2008 , n. 81 Attuazione dell'articolo 1 della legge 3 agosto 2007, n. 123, in materia di tutela della salute e della sicurezza nei luoghi di lavoro.*
***Netherlands****: Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 6 december 2006, nr. ARBO/A&V/2006/99971, tot wijziging van de Arbeidsomstandighedenregeling (vergroting verantwoordelijkheid van werkgevers en werknemers voor het arbeidsomstandighedenbeleid en beperking en vereenvoudiging van de regelgeving)*
***Austria:*** *Verordnung des Bundesministers für Arbeit, Soziales und Konsumentenschutz über Grenzwerte für Arbeitsstoffe sowie über krebserzeugende und fortpflanzungsgefährdende (reproduktionstoxische) Arbeitsstoffe (Grenzwerteverordnung 2011 – GKV 2011). StF: BGBl. II Nr. 253/200*
*MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001, as amended*
***Romania****: Anexa nr.1 (înlocuiește Anexa nr.1 din HG nr.1218/2006, cu modificările și completările ulterioare) 5/2020. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)*
***Hungary*** *: Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended (II. 6.) ITM rendelet a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről*
***Spain****: Límites de exposición profesional para agentes químicos 2024*
***Switzerland****: SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte*
***Latvia****: Ministru kabineta noteikumi Nr.325 Rīgā 2007.gada 15.maijā (prot. Nr.29 29.§) Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās*
***Germany*** *: TRGS 900 - Zuletzt geändert und ergänzt: GMBl 2024 S. 411-412 [Nr. 21] (v. 17. Juni 2024)*
***Czech Republic*** *: Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci*
***Slovakia*** *: Nariadenie vlády č. 355/2006 Z. z.Nariadenie vlády Slovenskej republiky o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci*
***Finland****: . HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health*
***Norway:*** *Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents (Regulations concerning Action and Limit values) FOR-2024-04-05-581, Ministry of Labour and Social Inclusion*
***Portugal:*** *MINISTÉRIO DA ECONOMIA E DO EMPREGO Decreto-Lei n.º 24/2012*
***Slovenia:*** *PRAVILNIK o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (neuradno prečiščeno besedilo št. 1)*
***Lithuania:*** *Occupational Exposure Limit Values for Chemical Substances (Hygiene Norm HN 23:2011; Order*

*No. V-824/A1-389), as amended*
***Bulgaria**: Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended Issued by the Minister of Labour and Social Policy and the Minister of Health, promulgated, SG Issue 8 dated 30.01.2004, in force as of 31.01.2005, as amended, Issue 71 dated 1.09.2006, in force as of 2.12.2006, as amended and supplemented, Issue 67 dated 17.08.2007, Issue 2 dated 6.01.2012, Issue 46 dated 23.06.2015.*
***Estonia**: Töökeskkonna keemiliste ohutegurite piirnormid[1] Vastu võetud 18.09.2001 nr 293 RT I 2001, 77, 460*
*jõustumine 29.09.2001*

**EU**

| *Benzene CAS 71-43-2 | |
|---|---|
| OEL TWA | 3,25 mg/m$^3$ |
| OEL STEL | - |
| *Carbon dioxide CAS: 124-38-9 | |
| OEL TWA | 9000 mg/m$^3$ |
| OEL STEL | - |

*decomposition products

*COMMISSION DIRECTIVE of 29 May 1991 on establishing indicative limit values by implementing Council Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work*
*COMMISSION DIRECTIVE 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work*
*COMMISSION DIRECTIVE 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC*
*COMMISSION DIRECTIVE 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC*
*COMMISSION DIRECTIVE (EU) 2017/164 of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU*
*COMMISSION DIRECTIVE (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC*
*DIRECTIVE 2004/37/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens, mutagens or reprotoxic substances at work (Sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC)*

**DNEL and PNEC for the components of the mixture:**
**DNEL values (for the worker)**

| **Dibenzoyl peroxide CAS:94-36-0** | | | |
|---|---|---|---|
| Dermal | Long-term (chronic) | Systemic | 13,3 mg/kg |
| Dermal | Long-term (chronic) | Local | 0,034 mg/kg |
| Inhalation | Long-term (chronic) | Systemic | 39 mg/m$^3$ |
| **2,2'-Ethylenedioxydiethyl dimethacrylate CAS:109-16-0** | | | |
| Dermal | Long Term (Chronic) | Local | 13,9 mg/kg/day |

| | | | |
|---|---|---|---|
| Inhalable | Long Term (Chronic) | Local | 48,5 mg/m$^3$ |
| **Ethane-1,2-diyl dibenzoate CAS:94-49-5** | | | |
| Dermal | Long Term (Chronic) | Systemic | 3 mg/kg |
| Inhalation | Long-term (chronic) | Systemic | 10,63 mg/m$^3$ |

**DNEL values (for user)**

| | | | |
|---|---|---|---|
| **Dibenzoyl peroxide CAS:94-36-0** | | | |
| Oral | Long-term (chronic) | Systemic | 2 mg/kg |
| Inhalation | Long-term (chronic) | Systemic | 3,84 mg/kg |

**PNEC values**

| | | |
|---|---|---|
| **Dibenzoyl peroxide CAS:94-36-0** | | |
| Water | Sediments in marine water | 0,001 mg/kg |
| Water | Freshwater | 0,00002 mg/l |
| Water | Sements in freshwater | 0,0127 mg/kg |
| Soil | - | 0,0025 mg/kg |
| Water | Marine water | 0,000002 mg/l |
| Waste water treatment plant ( STP) | - | 0,35 mg/l |
| **Ethane-1,2-diyl dibenzoate CAS:94-49-5** | | |
| Water | Freshwater | 0,0073mg/l |
| Water | Sements in freshwater | 2,23 mg/kg |
| Soil | - | 0,44 mg/kg |
| Water | Marine water | 0,00073 mg/l |
| Water | Sements in marine water | 0,223 mg/kg |
| Wastewater treatment plant (STP) | - | 128 mg/l |

**8.2. Exposure controls**

**8.2.1 Appropriate engineering controls**

When the concentration of hazardous substances is established and known, the selection of personal protective equipment should take into account the concentration of the substance present at the workplace, the duration of exposure, the activities carried out by the worker and the recommendations given by the manufacturer of the personal protective equipment.
**Use according to professional training. Wash hands after use.**

**8.2.2 Individual protection measures, such as personal protective equipment**

**Respiratory tract:** Under normal conditions, with sufficient ventilation, a mask **is not necessary,** Use in well-ventilated areas
For work in confined spaces / insufficient oxygen content in the air, high uncontrolled emissions, and in all circumstances where mask with absorber does not provide sufficient protection use insulating respiratory protective equipment

**Hands and skin:** Wear protective gloves, e.g. PVC or rubber. Wear protective clothing, made of natural materials or synthetic fibers. For short-term contact, wear protective

gloves with an efficiency level of 2 or more (breakthrough time > 30 minutes). In case of prolonged contact, use protective gloves with an efficiency level of 6 (breakthrough time > 480 min). Wear protective clothing, made of natural materials or synthetic fibers. Please note that the breakthrough time for the glove material may vary from glove manufacturer to glove. The glove manufacturer must be informed about the time it takes for the substance to penetrate through the glove and this time must be respected. The glove manufacturer must be informed about the time it takes for the substance to penetrate through the glove and this time must be respected. It is recommended to change gloves regularly and replace them immediately if there are any signs of wear, damage (tearing, punctures) or changes in appearance (colour, elasticity, shape).

**Eyes:** Wear tight safety goggles such as splash protection goggles.

**Occupational hygiene:** The general provisions of industrial occupational hygiene apply. Remove contaminated clothing after work Wash your hands and face before breaks. Wash the whole body thoroughly after work. Do not eat, drink, smoke while working.

**8.2.3 Environmental exposure controls**

Protect against discharge into the municipal water and sewage system and watercourses. Possible emissions from ventilation systems and process equipment should be checked to determine their compliance with the requirements of environmental legislation.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Appearance: | Capsule<br>Component A: liquid resin<br>Component B: powder |
| Colour: | Component A: straw<br>Component B: white |
| Odour: | Characteristic |
| Melting/ clotting point | No data. |
| Initial boiling point and boiling range: | No data. |
| Flammability: | No data. |
| Upper/lower flammability or explosive limits: | No data. |
| Flash point: | Component A: 103,5°C (PN-EN ISO 3679:2007)<br>Component B: over SADT (SADT=55°C) |
| Auto-ignition temperature: | No data. |
| Decomposition temperature: | Component A: no data<br>Component B: SADT: 55°C |
| pH | Component A: 4-5<br>Component B: no data |
| Dynamic viscosity (23°C; 100 [s-1]): | Component A: 2,3 ± 0,1 [Pa·s] (PN-EN ISO 3219:2000)<br>Component B: no data |
| Solubility: | Component B: at 20° insoluble in water |
| Partition coefficient: n-octanol/water: | No data. |
| Vapour pressure: | No data. |
| Density and/or relative density | Component A : no data<br>Component B: 640 kg/m3 (20°C) |
| Relative vapour density | No data. |
| Particle characteristics | Paste |

**9.2 Other information**

No additional information.

## Section 10: Stability and reactivity

**10.1 Reactivity**

Under normal conditions, the product is stable.

**10.2 Chemical stability**

Under normal conditions, the product is durable.

**10.3 Possibility of hazardous reactions**

Exothermic reaction during curing. Dust from component B may form an explosive mixture in air.

**10.4 Conditions to avoid**

Avoid sources of fire, open flame, excessive heating, sunlight. Protect from frost.

**10.5 Incompatible materials**

Unidentified hydrocarbons, carbon oxides.

**10.6 Hazardous decomposition products**

Carbon oxides, benzene

## Section 11: Toxicological information

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

**Acute toxicity**

| Substance | CAS | Result | Species | Dose |
|---|---|---|---|---|
| 1,1'-(p-Tolylimino)dipropan-2-ol | 38668-48-3 | LD50 Oral | Rat | 25 mg/kg |

**Acute toxicity estimates**

| Product/substance | Oral route (mg/kg) | Skin (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours)( mg/l) | Inhalation (dust and mists) (mg/l) |
|---|---|---|---|---|---|
| R-CAS-V | >2000 | - | - | >20 | - |

**Conclusions/Summary:** No reports of adverse effects or critical hazards.

**Corrosion/Irritation**

**Conclusions /Summary:**

**Skin:** No reports of adverse effects or critical hazards.

**Eyes:** Causes serius eye irritation.

**Respiratory or skin sensitization**

**Conclusions/Summary:**

**Skin:** May cause an allergic skin reaction

**Respiratory tract:** No reports of adverse effects or critical hazards.

**Mutagenicity**

**Conclusions/Summary:** No reports of adverse effects or critical hazards.

**Carcinogenicity of**

**Conclusions/Summary:** No reports of adverse effects or critical hazards.

**Reproductive toxicity**
**Conclusions/Summary:** No reports of adverse effects or critical hazards.

**Specific Target organ toxicity-single exposure**
**Conclusions/Summary:** No reports of adverse effects or critical hazards.

**Target organ toxicity-repeated exposure**
**Conclusions/Summary:** No reports of adverse effects or critical hazards.

**Aspiration toxicity**
**Conclusions/Summary:** No reports of adverse effects or critical hazards.

**Information on likely routes of exposure**
Eyes
Skin

**Physical, chemical, toxicological symptoms**

| | |
|---|---|
| **Skin** | May cause a slight allergic reaction in people who are allergic to any of the ingredients. Irritating to the skin. |
| **Eyes** | In case of contact with the eye, irritation, redness, tearing, pinching |
| **Gastrointestinal system** | Accidental ingestion of undiluted product may cause mild gastrointestinal irritation |
| **Respiratory system** | High concentration of vapour may cause drowsiness, headache, impaired concentration. |

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties:**
The product does not contain ingredients included in the list established in accordance with Article 59(1) as having endocrine disrupting properties or ingredients with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in a concentration of ≥ 0,1% (weight by weight).

**11.2.2 Other information**
No additional data.

## Section 12: Ecological information

**12.1 Toxicity**

| Substance | Result | Species | Exposure |
|---|---|---|---|
| Dibenzoyl peroxide | LC50 0,06 mg/l | Fish *Oncorhynchus mykiss* | 96h |
| | EC50 0,11 mg/l | Daphnia *magna* | 48h |
| | NOEC 0,02 mg/l | Algae *Pseudokirchneriella subcapitata* | 72h |
| | EC50 35 mg/l | Bacteria | - |
| | EC10 0,001 mg/l | Daphnia *magna* | 21 days |
| Ethane-1,2-diyl dibenzoate | LC50>0,434 mg/l | Fish *Danio rerio* | 96h |
| | EC50 >128 mg/l | Bacteria | 3h |
| | NOEC 0,045 mg/l | Algae *Pseudokirchneriella subcapitata* | 72h |
| | ErC50>0,87 mg/l | Algae *Pseudokirchneriella subcapitata* | 72h |

| | | | |
|---|---|---|---|
| | EC50>2,4 mg/l | Daphnia *magna* | 48h |
| | NOEC 2,4 mg/l | Daphnia *magna* | 48h |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | 16,4 mg/l | Fish | 96h |

**Conclusions/Summary:** Very toxic to aquatic life with long-lasting effects. Very toxic to aquatic life.

**12.2 Persistence and degradability**

| Substance | Test | Result |
|---|---|---|
| Dibenzoyl peroxide | - | (71 % 28 days)<br>Readily biodegradable |
| Ethane-1,2-diyl dibenzoate | OECD 301 D | (81 % 28 days)<br>Readily biodegradable. |

**Conclusions/Summary:** No data are available for the mixture.

**12.3 Bioaccumulative potential**

| Substance | logPow |
|---|---|
| Dibenzoyl peroxide | 3,2 |
| Ethane-1,2-diyl dibenzoate | 3,32 |

**Summary:** No data are available on the mixture.

**12.4 Mobility in soil**

**Conclusions/Summary:** No data are available for the mixture.

**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that have been evaluated as PBT or vPvB at a concentration of ≥0,1% (weight by weight).

**12.6 Endocrine disrupting properties**

This product does not contain ingredients included in the list established in accordance with Article 59(1) as having endocrine disrupting properties or ingredients with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration ≥ 0.1% (weight by weight).

**12.7 Other adverse effects**

No adverse effects or critical hazards have been reported.

## Section 13: Disposal considerations

**13.1. Waste treatment methods**

**Product**

| | |
|---|---|
| Disposal methods | Waste generation should be avoided or minimised where possible. The disposal of this product, solutions or derived products should in any case comply with the requirements of environmental protection and legislation related to waste disposal, as well as with the requirements of local authorities. Dispose of excess products and non-recyclable products at a licensed waste disposal company. |
| Hazardous waste | Yes |

**European Waste Catalogue (EWC)**

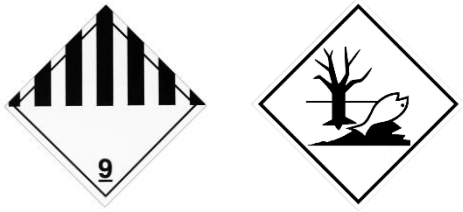
| Waste code | Waste designation |
|---|---|

| | |
|---|---|
| **16 05 08*** | Used organic chemicals containing hazardous substances (e.g. expired chemical reagents). |

**The code of waste should be determined at the place of its generation**

*Legal basis:*
*Directive 2008/98/EC /2014/955/UE*

## Section 14: Transport information




The mixture is subject to the regulations on the transport of dangerous goods contained in ADR (road transport), RID (rail transport), ADN ( inland waterway transport), IMDG (sea transport), ICAO/IATA (air transport). **Provision 375**
ADR These materials carried in single or combined packages, if the individual packages or the inner packages of the combination packages contain not more than **5 liters** in the case of liquids or not more than **5 kg** net weight in the case of solid materials, **are not subject to any other provisions of the ADR**, provided that the packaging complies requirements of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**14.1 UN number or ID number**
ADR/RID/IMDG/IATA: UN3077

**14.2 UN proper shipping name**
ADR/RID/IMDG/IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzoyl peroxide)

**14.3 Transport hazard class (es)**
ADR/RID/IMDG/IATA: 9

**14.4 Packing group**
ADR/RID/IMDG/IATA: III

**14.5 Environmental hazards**
ADR/RID/IMDG/IATA: YES
A derogation applies for environmentally hazardous substances (liquid quantity ≤ 5 litres or net mass of solids ≤ 5 kg). Labelling of environmentally hazardous substances is not required, according to ADR section 5.2.1.8.1
Not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7

**14.6 Special regulations:**

| | |
|---|---|
| **ADR:** | |
| Classification code: | M7 |
| Special provisions: | 375, 274, 335, 601 |
| Limited quantities | 5 kg |
| Packing instructions: | P002, LP02, IBC08, R001 |
| Mixed packing provisions: | MP10 |
| Transport category: | 3 |
| Tunnel restriction code: | [-] |
| EAC Code: | 2Z |
| **IMDG:** | |
| Special provisions: | 274, 335, 966, 967, 969 |
| Limited quantities: | 5 kg |
| Packing instructions: | LP02, P002 |

| | |
|---|---|
| EmS No. (fire): | F-A |
| EmS No. (Spillage): | S-F |
| Stowage category: | A |
| Stowage and handling: | SW23 |
| MFAG-No: | 171 |
| **IATA** | |
| PCA packing instructions: | 956 |
| PCA max. net quantity: | 400 kg |
| CAO packing instructions: | 956 |
| Special provisions: | A97, A158, A179, A197, A215 |
| **RID:** | |
| Special provisions: | 274, 335, 375, 601 |
| Limited quantities: | 5kg |
| Packing instructions: | P002, LP02, IBC08, R001 |

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Inapplicable

## Section 15: Regulatory information

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

| | |
|---|---|
| **Restrictions according to REACH - Annex XVII** | 3; 75 |
| **List of substances subject to authorisation — Annex XIV** | Not applicable |
| **Substances of Very High Concern - SVHC** | Not applicable. |
| **Sevesso Directive 2012/18/EU (Sevesso III)** | E1 Hazardous to the aquatic environment in the acute category: Threshold quantity (tonnes) involving requirements for high-risk establishments 100 t and high-risk establishments 200 t<br>E2 Hazardous to the aquatic environment in the chronic category: Threshold quantity (tonnes) involving requirements for high-risk establishments 200 t and high-risk establishments 500 t |

***Other legislation:***

***1907/2006/EC*** *Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC*

***1272/2008/EC*** *of the Regulation of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures - amending and repealing Directive 67/548/EEC and 1999/45/EC, and Regulation (EC) No 1907/2006.*

***2008/98/EC*** *Directive of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives*

***94/62/EC*** *Commission Directive 2013/2/EU of 7 February 2013;amending Annex I to Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste*

***European*** *Agreement Concerning the International Carriage of Dangerous Goods by Road 2019-2021*

**15.2 Chemical safety assessment**

The supplier has not assessed chemical safety. It is not required for the mixture.

## Section 16: Other information

**Other sources of information:**

IUCLID Data Bank (European Commission – European Chemicals Bureau).
ESIS – European Chemical Substances Information System (European Chemicals Bureau).

**Changes in SDS:**

Section 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

The information above is based on the currently available data concerning the product and the experience and knowledge in this field of the producer.
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Koelner Rawlplug IP Sp. z o.o. shall not be held liable for any damage resulting from handling or from contact with the above product

| Classification according to Regulation 1272/2008 | | |
|---|---|---|
| EyeIrrit. 2 | H319 | Calculation method |
| SkinSens. 1 | H317 | Calculation method |
| AquaticChronic 1 | H410 | Calculation method |
| AquaticAqute 1 | H400 | Calculation method |

**H (hazard) phrases specified in point 2 and 3 hereof:**

| | |
|---|---|
| H319 | Causes serious eye irritation. |
| H317 | May cause an allergic skin reaction. |
| H412 | Harmful to aquatic life with long-lasting effects. |
| H241 | Heating may cause fire or explosion. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long-lasting effects. |
| H411 | Toxic to aquatic life with long-term effects. |

**Explanation of returns**

| | |
|---|---|
| CEN | European Committee for Standardisation |
| C&L | Classification and Labelling |
| CLP | Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008 |
| CAS | Chemical Abstracts Service number |
| COM | European Commission |
| CMR | Carcinogen, Mutagen, or Reproductive Toxicant |
| CSA | Chemical Safety Assessment |
| CSR C | hemical Safety Report |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No Effect Level |
| DPD | Dangerous Preparation Directive 1999/45/EEC |
| DSD | Dangerous Substances Directive 67/548/EEC |
| EC | European Commission |
| $EC_{50}$ | Half maximal effective concentration |
| ECB | European Chemicals Bureau Europejskie |
| ECHA | European Chemicals Agency |
| EC | Number EINECS and ELINCS Number (see also EINECS and ELINCS) |
| EINECS | European Inventory of Existing Commercial Substances |

| | |
|---|---|
| ELINCS | European List of notified Chemical Substances |
| EN | European Standard |
| EU | European Union |
| GHS | Globally Harmonized System |
| $IC_{50}$ | Half maximal inhibitory concentration |
| IUCLID | International Uniform Chemical Information Database |
| IUPAC | International Union for Pure Applied Chemistry |
| $LC_{50}$ | Lethal concentration, 50% |
| $LD_{50}$ | Median Lethal Dose |
| MSDS | Material Safety Data Sheet |
| PBT | Persistent, Bioaccumulative and Toxic substance |
| PEC | PEC Predicted Effect Concentration |
| PNEC(s) | Predicted No Effect Concentration(s) |
| PPE | Personal Protection Equipment |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| SDS | Safety Data Sheet |
| SIEF | Substance Information Exchange Forum |
| STOT | Specific Target Organ Toxicity |
| (STOT) RE | Repeated Exposure |
| (STOT) SE | Single Exposure |
| SVHC | Substances of Very High Concern |
| vPvB | Very Persistent and Very Bioaccumulative |

**Training**

Prior to working with the product you should be familiar with safety rules for handling the chemicals, in particular take proper workplace training.