



SAFETY DATA SHEET

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

1.1. Product identifier

| | |
|--|-------------------|
| Trade name or designation of the mixture | LPS® 3 (Aerosol) |
| Registration number | - |
| Synonyms | None. |
| Part Number | 00316, M00316 |
| Issue date | 15-September-2015 |
| Version number | 04 |
| Revision date | 31-March-2017 |
| Supersedes date | 16-June-2016 |

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

| | |
|----------------------|---|
| Identified uses | A specialized soft-film spray coating designed to prevent rust and corrosion on steel, aluminum and other metals. |
| Uses advised against | None known. |

1.3. Details of the supplier of the safety data sheet

| | |
|----------------------|--|
| Supplier | Alsco Ltd |
| Company name | Unit 13 Hillmead Industrial Estate |
| Address | Marshall Road Swindon, Wiltshire United Kingdom SN5 5FZ |
| Telephone | +44 1793 733 900 |
| In Case of Emergency | +001 703-527-3887 |
| Manufacturer | |
| Company name | ITW Pro Brands |
| Address | 4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.) |
| Website | http://www.lpslabs.com |
| e-mail | lpssds@itwprobrands.com |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification F+;R12, Xi;R36/38, R67

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

| | | |
|----------|------------|---|
| Aerosols | Category 1 | H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated. |
|----------|------------|---|

Health hazards

| | | |
|--|-----------------------------|---|
| Skin corrosion/irritation | Category 2 | H315 - Causes skin irritation. |
| Serious eye damage/eye irritation | Category 2 | H319 - Causes serious eye irritation. |
| Specific target organ toxicity - single exposure | Category 3 narcotic effects | H336 - May cause drowsiness or dizziness. |

Hazard summary

| | |
|------------------|--|
| Physical hazards | Extremely flammable. |
| Health hazards | Irritating to eyes and skin. Vapours may cause drowsiness and dizziness. Occupational exposure to the substance or mixture may cause adverse health effects. |

| | |
|------------------------------|--|
| Environmental hazards | Not classified for hazards to the environment. |
| Specific hazards | Extremely flammable. Heating may cause an explosion. Do not breathe vapours, aerosols. Irritating to eyes and skin. |
| Main symptoms | Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea. |

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 1-butoxy-2-propanol, Acetone, Carbon dioxide, Distillates Petroleum Hydrotreated Heavy, Distillates Petroleum Hydrotreated Light

Hazard pictograms



Signal word

Danger

Hazard statements

| | |
|------|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurized container: May burst if heated. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |

Precautionary statements

Prevention

| | |
|------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P261 | Avoid breathing gas. |
| P280 | Wear eye protection/face protection. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. - 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 thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves. |

Response

| | |
|--------------------|--|
| P330 | Rinse mouth. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| 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. |
| P302 + P352 | IF ON SKIN: Wash with plenty of water. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |

Storage

| | |
|-------------|--|
| P233 | Keep container tightly closed. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. |

Disposal

| | |
|------|---|
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
|------|---|

Supplemental label information None known.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | INDEX No. | Notes |
|--|-----------|---|------------------------|--------------|-------|
| Distillates Petroleum Hydrotreated Light | 50 - < 60 | 64742-47-8 265-149-8 | - | 649-422-00-2 | |
| Classification: | | DSD: Xn;R65 | | | |
| | | CLP: Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336 | | | |

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | INDEX No. | Notes |
|--|--------|---|------------------------|--------------|--------|
| 1-butoxy-2-propanol | 1 - 10 | 5131-66-8 225-878-4 | - | 603-052-00-8 | |
| Classification: | | DSD: Xi;R36/38 CLP: Acute Tox. 4;H312, Skin Irrit. 2;H315, Eye Irrit. 2;H319 | | | |
| Acetone | 1 - 10 | 67-64-1 200-662-2 | - | 606-001-00-8 | # |
| Classification: | | DSD: F;R11, Xi;R36, R66-67 CLP: Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336 | | | |
| Distillates Petroleum Hydrotreated Heavy | 1 - 10 | 64742-54-7 265-157-1 | - | 649-467-00-8 | |
| Classification: | | DSD: - CLP: Carc. 1B;H350 | | | L L |
| Carbon dioxide | 1 - 5 | 124-38-9 204-696-9 | - | - | # |
| Classification: | | DSD: - CLP: - | | | |

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

Note L: This component has been tested by Supplier. According to Supplier, the component complies with the criteria of Note L in Annex I of 67/548/EEC, and is exempt from a classification of T; R45. (Contains less than 3% DMSO) All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists.

Eye contact Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Rash. Symptoms of overexposure can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and are reversible if exposure is stopped.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Extremely flammable aerosol.

5.1. Extinguishing media

Suitable extinguishing media Powder. Alcohol resistant foam. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

| | |
|---|---|
| 5.2. Special hazards arising from the substance or mixture | Contents under pressure. Pressurised container may explode when exposed to heat or flame. |
| 5.3. Advice for firefighters | |
| Special protective equipment for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| Special fire fighting procedures | Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Water runoff can cause environmental damage. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes. |

SECTION 6: Accidental release measures

| | |
|---|---|
| 6.1. Personal precautions, protective equipment and emergency procedures | |
| For non-emergency personnel | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Do not touch or walk through spilled material. Avoid breathing gas. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS. |
| For emergency responders | Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS. |
| 6.2. Environmental precautions | |
| | Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. |
| 6.3. Methods and material for containment and cleaning up | |
| | Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. The product is immiscible with water and will spread on the water surface. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Collect spillage. Use water spray to reduce vapours or divert vapour cloud drift. Prevent product from entering drains. Following product recovery, flush area with water. |
| 6.4. Reference to other sections | |
| | Use personal protection recommended in Section 8 of the SDS. For waste disposal, see section 13. |

SECTION 7: Handling and storage

| | |
|--|--|
| 7.1. Precautions for safe handling | Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not breathe gas. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains. |
| 7.2. Conditions for safe storage, including any incompatibilities | Level 3 Aerosol. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store locked up. Store in a well-ventilated place. |
| 7.3. Specific end use(s) | Not available. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

| Components | Type | Value |
|-------------------------------|---------|------------------------------------|
| Acetone (CAS 67-64-1) | MAK | 1200 mg/m ³ 500 ppm |
| | STEL | 4800 mg/m ³ 2000 ppm |
| | Ceiling | 18000 mg/m ³ |
| Carbon dioxide (CAS 124-38-9) | | 10000 ppm |
| | MAK | 9000 mg/m ³ 5000 ppm |
| | | |

Belgium. Exposure Limit Values.

| Components | Type | Value |
|-------------------------------|------|--------------------------|
| Acetone (CAS 67-64-1) | STEL | 2420 mg/m3 1000 ppm |
| | TWA | 1210 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | STEL | 54784 mg/m3 30000 ppm |
| | TWA | 9131 mg/m3 5000 ppm |

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | STEL | 1400 mg/m3 |
| | TWA | 600 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 5000 ppm |

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | MAC | 1210 mg/m3 500 ppm |
| | STEL | 3620 mg/m3 1500 ppm |
| Carbon dioxide (CAS 124-38-9) | MAC | 9000 mg/m3 5000 ppm |

Czech Republic. OELs. Government Decree 361

| Components | Type | Value |
|-------------------------------------|---------|-------------|
| 1-butoxy-2-propanol (CAS 5131-66-8) | Ceiling | 550 mg/m3 |
| | TWA | 270 mg/m3 |
| Acetone (CAS 67-64-1) | Ceiling | 1500 mg/m3 |
| | TWA | 800 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | Ceiling | 45000 mg/m3 |
| | TWA | 9000 mg/m3 |

Denmark. Exposure Limit Values

| Components | Type | Value |
|-----------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TLV | 600 mg/m3 250 ppm |
| | TLV | 9000 mg/m3 5000 ppm |

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

| Components | Type | Value |
|-----------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 500 ppm |
| | TWA | 9000 mg/m3 5000 ppm |

Finland. Workplace Exposure Limits

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | STEL | 1500 mg/m3 630 ppm |
| | TWA | 1200 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9100 mg/m3 5000 ppm |

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | VLE | 2420 mg/m3 1000 ppm |
| | VME | 1210 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | VME | 9000 mg/m3 5000 ppm |

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

| Components | Type | Value | Form |
|---|------|------------------------|-----------------------------|
| Acetone (CAS 67-64-1) | TWA | 1200 mg/m3 500 ppm | |
| Carbon dioxide (CAS 124-38-9) | TWA | 9100 mg/m3 5000 ppm | |
| Distillates Petroleum Hydrotreated Light (CAS 64742-47-8) | TWA | 5 mg/m3 | Respirable aerosol fraction |
| | | 350 mg/m3 50 ppm | Vapor. Vapor. |

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | AGW | 1200 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | AGW | 9100 mg/m3 5000 ppm |

Greece. OELs (Decree No. 90/1999, as amended)

| Components | Type | Value |
|-------------------------------|------|------------------------------------|
| Acetone (CAS 67-64-1) | STEL | 3560 mg/m3 |
| | TWA | 1780 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | STEL | 54000 mg/m3 |
| | TWA | 5000 ppm 9000 mg/m3 5000 ppm |

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

| Components | Type | Value |
|-------------------------------|------|------------|
| Acetone (CAS 67-64-1) | STEL | 2420 mg/m3 |
| | TWA | 1210 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 |

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

| Components | Type | Value |
|-------------------------------|------|----------------------|
| Acetone (CAS 67-64-1) | TWA | 600 mg/m3 250 ppm |
| | | 9000 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | TWA | 5000 ppm |

Ireland. Occupational Exposure Limits

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 500 ppm |
| | | 27000 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | STEL | 15000 ppm |
| | TWA | 9000 mg/m3 5000 ppm |

Italy. Occupational Exposure Limits

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 5000 ppm |

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 5000 ppm |

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | STEL | 2420 mg/m3 1000 ppm |
| | TWA | 1210 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 5000 ppm |

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 5000 ppm |

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 5000 ppm |

Netherlands. OELs (binding)

| Components | Type | Value |
|-------------------------------|------|------------|
| Acetone (CAS 67-64-1) | STEL | 2420 mg/m3 |
| | TWA | 1210 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 |

Norway. Administrative Norms for Contaminants in the Workplace

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TLV | 295 mg/m3 125 ppm |
| Carbon dioxide (CAS 124-38-9) | TLV | 9000 mg/m3 5000 ppm |

Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1

| Components | Type | Value |
|-------------------------------|------|-------------|
| Acetone (CAS 67-64-1) | STEL | 1800 mg/m3 |
| | TWA | 600 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | STEL | 27000 mg/m3 |
| | TWA | 9000 mg/m3 |

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

| Components | Type | Value |
|-------------------------------|------|------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 |
| | | 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 |
| | | 5000 ppm |

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

| Components | Type | Value |
|-------------------------------|------|-----------|
| Acetone (CAS 67-64-1) | STEL | 750 ppm |
| | TWA | 500 ppm |
| Carbon dioxide (CAS 124-38-9) | STEL | 30000 ppm |
| | TWA | 5000 ppm |

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

| Components | Type | Value |
|-------------------------------|------|------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 |
| | | 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 |
| | | 5000 ppm |

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

| Components | Type | Value |
|-------------------------------|------|------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 |
| | | 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 |
| | | 5000 ppm |

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

| Components | Type | Value |
|-------------------------------|------|------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 |
| | | 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m3 |
| | | 5000 ppm |

Spain. Occupational Exposure Limits

| Components | Type | Value |
|-------------------------------|------|------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m3 |
| | | 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9150 mg/m3 |
| | | 5000 ppm |

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

| Components | Type | Value |
|-------------------------------|------|-------------|
| Acetone (CAS 67-64-1) | STEL | 1200 mg/m3 |
| | TWA | 500 ppm |
| | | 600 mg/m3 |
| Carbon dioxide (CAS 124-38-9) | STEL | 250 ppm |
| | TWA | 18000 mg/m3 |
| | | 10000 ppm |
| | | 9000 mg/m3 |
| | | 5000 ppm |

Switzerland. SUVA Grenzwerte am Arbeitsplatz

| Components | Type | Value |
|-----------------------|------|------------|
| Acetone (CAS 67-64-1) | STEL | 2400 mg/m3 |
| | | 1000 ppm |
| | TWA | 1200 mg/m3 |
| | | 500 ppm |

Switzerland. SUVA Grenzwerte am Arbeitsplatz

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m ³ |
| | | 5000 ppm |

UK. EH40 Workplace Exposure Limits (WELs)

| Components | Type | Value |
|-------------------------------|------|-------------------------|
| Acetone (CAS 67-64-1) | STEL | 3620 mg/m ³ |
| | | 1500 ppm |
| | TWA | 1210 mg/m ³ |
| Carbon dioxide (CAS 124-38-9) | | 500 ppm |
| | STEL | 27400 mg/m ³ |
| | | 15000 ppm |
| | TWA | 9150 mg/m ³ |
| | | 5000 ppm |

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

| Components | Type | Value |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1) | TWA | 1210 mg/m ³ |
| | | 500 ppm |
| Carbon dioxide (CAS 124-38-9) | TWA | 9000 mg/m ³ |
| | | 5000 ppm |

Biological limit values**Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)**

| Components | Value | Determinant | Specimen | Sampling time |
|-----------------------|----------------|-------------|---------------------|---------------|
| Acetone (CAS 67-64-1) | 20 mg/g | Acetone | Creatinine in urine | * |
| | 20 mg/l | Acetone | Blood | * |
| | 0,34 mmol/l | Acetone | Blood | * |
| | 38,95 mmol/mol | Acetone | Creatinine in urine | * |

* - For sampling details, please see the source document.

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)

| Components | Value | Determinant | Specimen | Sampling time |
|-----------------------|----------|-------------|----------|---------------|
| Acetone (CAS 67-64-1) | 100 mg/l | Acétone | Urine | * |

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

| Components | Value | Determinant | Specimen | Sampling time |
|-----------------------|---------|-------------|----------|---------------|
| Acetone (CAS 67-64-1) | 80 mg/l | Aceton | Urine | * |

* - For sampling details, please see the source document.

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

| Components | Value | Determinant | Specimen | Sampling time |
|-----------------------|------------|-------------|---------------------|---------------|
| Acetone (CAS 67-64-1) | 53,36 mg/g | Acetone | Creatinine in urine | * |
| | 80 mg/l | Acetone | Urine | * |

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

| Components | Value | Determinant | Specimen | Sampling time |
|-----------------------|---------|-------------|----------|---------------|
| Acetone (CAS 67-64-1) | 50 mg/l | Acetona | Urine | * |

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

| Components | Value | Determinant | Specimen | Sampling time |
|-----------------------|---------|-------------|----------|---------------|
| Acetone (CAS 67-64-1) | 80 mg/l | Aceton | Urine | * |

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

| | |
|--|---|
| Derived no effect levels (DNELs) | Not available. |
| Predicted no effect concentrations (PNECs) | Not available. |
| 8.2. Exposure controls | |
| Appropriate engineering controls | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| Individual protection measures, such as personal protective equipment | |
| General information | Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Use personal protective equipment as required. |
| Eye/face protection | Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended. |
| Skin protection | |
| - Hand protection | Chemical resistant gloves are recommended. |
| - Other | Avoid contact with clothing. Wear suitable protective clothing. Chemical resistant gloves. |
| Respiratory protection | No personal respiratory protective equipment normally required. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. |
| Thermal hazards | Not applicable. |
| Hygiene measures | When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |
| Environmental exposure controls | Contain spills and prevent releases and observe national regulations on emissions. Environmental manager must be informed of all major releases. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|----------------------------------|
| Appearance | Cloudy. Liquid. |
| Physical state | Gas. |
| Form | Aerosol |
| Colour | Brown. |
| Odour | Mild. Cherry. |
| Odour threshold | Not available. |
| pH | Not applicable |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | 18,0 °C (64,4 °F) Tag closed cup |
| Evaporation rate | 151 (Ethyl Ether) |
| Flammability (solid, gas) | Flammable gas. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | 0,6 % |
| Flammability limit - upper (%) | 6 % |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | 230 °C (446 °F) |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

| | |
|-------------------------------|--|
| Explosive properties | Not available. |
| Oxidising properties | Not available. |
| 9.2. Other information | |
| Density | 7,28 lb/gal |
| Percent volatile | 63 - 82 % |
| Specific gravity | 0,87 |
| VOC | 62,8 % per U.S State and Federal Consumer Product Regulations. |

SECTION 10: Stability and reactivity

| | |
|---|---|
| 10.1. Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| 10.2. Chemical stability | Material is stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| 10.4. Conditions to avoid | Avoid temperatures exceeding the flash point. |
| 10.5. Incompatible materials | Strong oxidising agents. |
| 10.6. Hazardous decomposition products | Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion. |

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

| | |
|---------------------|---|
| Inhalation | May cause drowsiness and dizziness. |
| Skin contact | Causes skin irritation. |
| Eye contact | Causes serious eye irritation. |
| Ingestion | May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. |

Symptoms Irritating to eyes, respiratory system and skin. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

11.1. Information on toxicological effects

Acute toxicity Not known.

| Components | Species | Test results |
|-------------------|----------------|---------------------|
|-------------------|----------------|---------------------|

1-butoxy-2-propanol (CAS 5131-66-8)

Acute

Dermal

| | | |
|------|--------|----------------------|
| LD50 | Rabbit | 1400 mg/kg, 24 Hours |
|------|--------|----------------------|

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)

Acute

Inhalation

| | | |
|------|-----|---------------------|
| LC50 | Rat | > 3,9 mg/l, 4 Hours |
|------|-----|---------------------|

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation This product is not expected to cause skin sensitisation.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

ACGIH Carcinogens

Acetone (CAS 67-64-1) Not classifiable as a human carcinogen. A4

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Narcotic effects.

Specific target organ toxicity - repeated exposure Not classified.

| | |
|---|---|
| Aspiration hazard | Not likely, due to the form of the product. |
| Mixture versus substance information | Not available. |
| Other information | Not available. |

SECTION 12: Ecological information

12.1. Toxicity Not expected to be harmful to aquatic organisms.

| Components | Species | Test results | |
|---|---------|---|------------------------------|
| Acetone (CAS 67-64-1) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 10294 - 17704 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours |
| Distillates Petroleum Hydrotreated Light (CAS 64742-47-8) | | | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2,9 mg/l, 96 hours |

12.2. Persistence and degradability Not inherently biodegradable.

12.3. Bioaccumulative potential No data available for this product.

Partition coefficient n-octanol/water (log Kow)

Acetone -0,24

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

ADR

| | |
|---|---------------------|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| Hazard No. (ADR) | Not available. |
| Tunnel restriction code | Not available. |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Not available. |

RID

| | |
|---|---------------------|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Not available. |

ADN

| | |
|---|---------------------|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Not available. |

IATA

| | |
|---|----------------------------|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Not available. |
| Other information | |
| Passenger and cargo aircraft | Allowed with restrictions. |
| Cargo aircraft only | Allowed with restrictions. |

IMDG

| | |
|---|---------------------|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | |
| Marine pollutant | No |
| EmS | Not available. |
| 14.6. Special precautions for user | Not available. |
| 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code | Not available. |



SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Acetone (CAS 67-64-1)

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Acetone (CAS 67-64-1)

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R11 Highly flammable.
R12 Extremely flammable.
R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H350 May cause cancer.

Revision information

SECTION 2: Hazards identification: Hazard statements
SECTION 2: Hazards identification: Prevention
SECTION 2: Hazards identification: Response
SECTION 2: Hazards identification: Supplemental label information
Physical & Chemical Properties: Multiple Properties
SECTION 11: Toxicological information: Acute toxicity
GHS: Qualifiers

Training information

Follow training instructions when handling this material.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.