

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

1.1 Product identifier

Product name	Techniclean S 20
UFI:	UV33-30AT-S00A-0EC1
Product code	466290-FR01
SDS #	466290
Product type	Liquid.

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

Identified uses
Use of lubricants and greases in open systems-Industrial
Use of lubricants and greases in open systems-Professional
Handling and dilution of metal working fluid concentrates-Industrial

Use of the substance/ mixture	Cleaner. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
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1.3 Details of the supplier of the safety data sheet

Supplier	Lubricants UK Limited, Chertsey Road, Sunbury On Thames, Middlesex, TW16 7BP
E-mail address	+44 (0)345 600 8125 MSDSadvice@bp.com

1.4 Emergency telephone number

EMERGENCY TELEPHONE NUMBER	Carechem: +44 (0) 1235 239 670 (24/7)
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	Mixture
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Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Corr. 1B, H314
Eye Dam. 1, H318
STOT SE 3, H335
Aquatic Chronic 3, H412

Additional information CLP: Not classified as hazardous when diluted below 10%.

See Section 16 for the full text of the H statements declared above.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 Label elements

UFI:	UV33-30AT-S00A-0EC1
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Hazard pictograms



Signal word	Danger
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Hazard statements	H314 - Causes severe skin burns and eye damage. H335 - May cause respiratory irritation. H412 - Harmful to aquatic life with long lasting effects.
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SECTION 2: Hazards identification

Precautionary statements

Prevention	P280 - Wear protective gloves, protective clothing and eye or face protection. P273 - Avoid release to the environment. P261 - Avoid breathing vapour.
Response	P304 + P310 - IF INHALED: Immediately call a POISON CENTER or physician. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or physician. P363 - Wash contaminated clothing before reuse. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	<input checked="" type="checkbox"/> -aminoethanol
Supplemental label elements	Not applicable.

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Not applicable.
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Special packaging requirements

Containers to be fitted with child-resistant fastenings	Not applicable.
Tactile warning of danger	Not applicable.

2.3 Other hazards

Results of PBT and vPvB assessment	Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	Defatting to the skin.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product definition Mixture
Alkalis and additives in aqueous solution.

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
<input checked="" type="checkbox"/> -aminoethanol	REACH #: 01-2119486455-28 EC: 205-483-3 CAS: 141-43-5 Index: 603-030-00-8	≥10 - ≤16	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/l STOT SE 3, H335: C ≥ 5%	[1] [2]
neodecanoic acid	REACH #: 01-2119449554-33 EC: 248-093-9 CAS: 26896-20-8	≤8.8	Acute Tox. 4, H302	ATE [Oral] = 500 mg/kg	[1]
Alcohols, C8-10, ethers with	CAS: 68154-99-4	≤3	Acute Tox. 4, H312	ATE [Dermal] = 1100	[1]

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SECTION 3: Composition/information on ingredients

polyethylene-polypropylene glycol monobenzyl ether nitrilotrimethylenetris (phosphonic acid)	REACH #: 01-2119487988-08 EC: 229-146-5 CAS: 6419-19-8	≤3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Met. Corr. 1, H290 Eye Irrit. 2, H319	mg/kg	[1]
sodium 4(or 5)-methyl-1H-benzotriazolide	REACH #: 01-2119980062-42 EC: 265-004-9 CAS: 64665-57-2	<1	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361d Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/kg	[1]
1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane)	REACH #: Polymer CAS: 31075-24-8	<0.25	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg ATE [Inhalation (vapours)] = 11 mg/l M [Acute] = 10 M [Chronic] = 10	[1]

See Section 16 for the full text of the H statements declared above.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician. Get medical attention immediately.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Chemical burns must be treated promptly by a physician. Wash out mouth with water if person is conscious. Get medical attention immediately.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Potential acute health effects

Inhalation	May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. May cause irritation to eyes, nose and throat due to exposure to vapour, mists or fumes.
Ingestion	Causes burns to mouth, throat and stomach.
Skin contact	Causes severe burns.
Eye contact	Causes serious eye damage.

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

Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
Skin contact	Causes severe burns.
Eye contact	Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed

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SECTION 4: First aid measures

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use foam or all-purpose dry chemical to extinguish.

Unsuitable extinguishing media Do not use water jet. The use of a water jet may cause the fire to spread by splashing the burning product.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products Combustion products may include the following:
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)
nitrogen oxides (NO, NO₂ etc.)
phosphorus oxides

5.3 Advice for firefighters

Special precautions for fire-fighters No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Do not breathe vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment.

For emergency responders Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

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SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment. Do not breathe vapour or mist. Do not ingest. Avoid contact of spilt material and runoff with soil and surface waterways. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Empty containers retain product residue and can be hazardous. Do not get in eyes, on skin or on clothing.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 5 to 40°C (41 to 104°F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/containers designed for use with this product. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level

No DNELs/DMELs available.

Predicted No Effect Concentration

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

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SECTION 8: Exposure controls/personal protection

Respiratory protection

Use with adequate ventilation.
 In case of insufficient ventilation, wear suitable respiratory equipment.
 Recommended: half-face mask - inorganic gases/vapor filter (Type B) - particulate filter.
 The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye/face protection

Chemical splash goggles.

Skin protection

Hand protection

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).

Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Recommended: Butyl gloves.

Breakthrough time:

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type. Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained.

If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:

Recommended breakthrough times as above.

It is recognised that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove Thickness:

For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

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SECTION 8: Exposure controls/personal protection

Skin and body

Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Refer to standards:

Respiratory protection: EN 529
 Gloves: EN 420, EN 374
 Eye protection: EN 166
 Filtering half-mask: EN 149
 Filtering half-mask with valve: EN 405
 Half-mask: EN 140 plus filter
 Full-face mask: EN 136 plus filter
 Particulate filters: EN 143
 Gas/combined filters: EN 14387

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Physical state	Liquid.												
Colour	Yellow. [Light]												
Odour	Not available.												
Odour threshold	Not available.												
Melting point/freezing point	Not available.												
Initial boiling point and boiling range	>100°C (>212°F)												
Flammability	Not available.												
Lower and upper explosion limit	Not available.												
Flash point	Closed cup: >100°C (>212°F) [Estimated. Water content interferes with flash point determination.]												
Auto-ignition temperature	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>°C</th> <th>°F</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>aminoethanol</td> <td>410</td> <td>770</td> <td></td> </tr> <tr> <td>neodecanoic acid</td> <td>375</td> <td>707</td> <td>ASTM E 659</td> </tr> </tbody> </table>	Ingredient name	°C	°F	Method	aminoethanol	410	770		neodecanoic acid	375	707	ASTM E 659
Ingredient name	°C	°F	Method										
aminoethanol	410	770											
neodecanoic acid	375	707	ASTM E 659										
Decomposition temperature	Not available.												
pH	9.9 [Conc. (% w/w): 5%]												
Kinematic viscosity	Kinematic: 1.9 mm ² /s (1.9 cSt) at 40°C												
Solubility	<table border="1"> <thead> <tr> <th>Media</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>water</td> <td>Soluble</td> </tr> </tbody> </table>	Media	Result	water	Soluble								
Media	Result												
water	Soluble												

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

Vapour pressure >0.01 kPa

Density and/or Relative density >1000 kg/m³ (>1 g/cm³) at 20°C

Relative vapour density Not available.

Particle characteristics

Median particle size Not applicable.

9.2 Other information

Evaporation rate Not available.

Explosive properties Not available.

Oxidising properties Not available.

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SECTION 9: Physical and chemical properties

Pour point <0 °C

SECTION 10: Stability and reactivity

- 10.1 Reactivity** No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
- 10.2 Chemical stability** The product is stable.
- 10.3 Possibility of hazardous reactions** Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous polymerisation will not occur.
- 10.4 Conditions to avoid** High temperatures
- 10.5 Incompatible materials** Reactive or incompatible with the following materials: oxidising materials.
Slightly reactive or incompatible with the following materials: acids.
- 10.6 Hazardous decomposition products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity

Product/ingredient name	Result / Route	Test authority / Number	Species	Dose	Exposure	Remarks
2-aminoethanol	LC50 Inhalation Vapour	-	Rat	1487 mg/m ³	6 hours	-
	LD50 Dermal	OECD 402	Rat	2504 mg/kg	-	-
	LD50 Oral	OECD 401	Rat	1089 mg/kg	-	-
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	LC50 Dermal	-	Rabbit	2000 mg/kg	-	-
	LC50 Inhalation Vapour	-	Rat	>7.1 mg/l	1 hours	-
	LD50 Oral	-	Rat	2414 mg/kg	-	-
nitrilotrimethylenetris (phosphonic acid)	LC50 Oral	OECD 401	Rat	>2000 mg/kg	-	-
	LD50 Dermal	OECD 434	Rabbit	>5000 mg/kg	-	-
sodium 4(or 5)-methyl-1H-benzotriazolide	LD50 Dermal	OECD 402	Rabbit	>2000 mg/kg	-	-
	LD50 Oral	OECD 401	Rat	735 mg/kg	-	-
1,2-ethanediamine, N,N, N',N'-tetramethyl-, polymer with 1,1'-oxybis (2-chloroethane)	LC50 Inhalation Vapour	-	Rat	2.9 mg/l	4 hours	-
	LD50 Dermal	OECD 402	Rabbit	>2000 mg/kg	-	-
	LD50 Oral	OECD 401	Rat	1951 mg/kg	-	-

Acute toxicity estimates

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SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Techniclean S 20	2696.9	8116.5	N/A	92.0	N/A
2-aminoethanol	500	1100	N/A	11	N/A
neodecanoic acid	500	N/A	N/A	N/A	N/A
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	2500	1100	N/A	N/A	N/A
sodium 4(or 5)-methyl-1H-benzotriazolide	500	N/A	N/A	N/A	N/A
1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane)	500	N/A	N/A	11	N/A

Irritation/Corrosion

Product/ingredient name	Test authority / Test number	Species	Route / Result	Test concentration	Remarks
2-aminoethanol	OECD -	Rabbit	Eyes - Corrosive	-	-
	OECD 404	Rabbit	Skin - Corrosive	-	-
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	-	Rabbit	Eyes - Severe irritant	-	-
	-	Rabbit	Skin - Irritant	-	-
nitrilotrimethylenetris (phosphonic acid)	OECD 405	Rabbit	Eyes - Irritant	-	-
	OECD 404	Rabbit	Skin - Non-irritant to skin.	-	-
sodium 4(or 5)-methyl-1H-benzotriazolide	OECD 404	Rabbit	Skin - Corrosive	-	-
1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane)	-	Unspecified	Eyes - Moderate irritant	-	-
	-	Unspecified	Skin - Slightly irritating to the skin.	-	-

Sensitiser

Product/ingredient name	Route	Test authority / Test number	Species	Result	Remarks
2-aminoethanol	skin	OECD 406	Guinea pig	Not sensitising	-
nitrilotrimethylenetris (phosphonic acid)	skin	OECD 406	Guinea pig	Not sensitising	-
sodium 4(or 5)-methyl-1H-benzotriazolide	skin	OECD 406	Guinea pig	Not sensitising	Based on studies with similar substances.
1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane)	skin	-	Unspecified	Not sensitising	-

GERM CELL MUTAGENICITY

SECTION 11: Toxicological information

Product/ingredient name	Test authority / Test number	Cell	Type	Result	Remarks
2-aminoethanol	OECD 471	-	Experiment: In vitro Subject: Bacteria	Negative	-
	OECD 473	-	Experiment: In vitro Subject: Mammalian-Animal	Negative	-
	OECD 476	-	Experiment: In vitro Subject: Mammalian-Animal	Negative	-
nitrilotrimethylenetris (phosphonic acid)	OECD 471	-	Experiment: In vitro Subject: Bacteria	Negative	-
	OECD 473	-	Experiment: In vitro Subject: Mammalian-Animal	Negative	Based on studies with similar substances.
	OECD 476	-	Experiment: In vitro Subject: Mammalian-Animal	Negative	Based on studies with similar substances.
	OECD 474	-	Experiment: In vivo Subject: Mammalian-Animal	Negative	Based on studies with similar substances.
sodium 4(or 5)-methyl-1H-benzotriazolide	OECD 471	-	Experiment: In vitro Subject: Bacteria	Negative	Based on studies with similar substances.
	OECD 476	-	Experiment: In vitro Subject: Mammalian-Animal	Negative	Based on studies with similar substances.
	OECD 474	-	Experiment: In vivo Subject: Mammalian-Animal	Negative	Based on studies with similar substances.

Carcinogenicity

Product/ingredient name	Test authority / Test number	Species	Route	Exposure	Result	Remarks
nitrilotrimethylenetris (phosphonic acid)	OECD 453	Rat	Oral	24 months	Negative	-

Reproductive toxicity

Product/ingredient name	Test authority / Test number	Species	Route	Exposure	Developmental	Maternal toxicity	Fertility	Remarks
2-aminoethanol	OECD 416	Rat	Oral	-	Negative	Negative	Negative	Based on studies with similar substances.
nitrilotrimethylenetris (phosphonic acid)	-	Rat	Oral	-	Negative	Negative	Negative	-
sodium 4(or 5)-methyl-1H-benzotriazolide	OECD 414	Rat	Oral	-	Positive	Negative	Negative	Based on studies with similar substances.

Aspiration hazard

Product/ingredient name	Result
Not available.	

Conclusion/Summary

Not classified. Based on available data, the classification criteria are not met.

Conclusion/Summary

Not available.

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SECTION 11: Toxicological information

Information on likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

- Inhalation** May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. May cause irritation to eyes, nose and throat due to exposure to vapour, mists or fumes.
- Ingestion** Causes burns to mouth, throat and stomach.
- Skin contact** Causes severe burns.
- Eye contact** Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Ingestion** Adverse symptoms may include the following:
stomach pains
- Skin contact** Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
- Eye contact** Adverse symptoms may include the following:
pain
watering
redness

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

- Inhalation** Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
- Ingestion** Ingestion of large quantities may cause nausea and diarrhoea.
- Skin contact** Causes severe burns.
- Eye contact** Causes severe burns.

Potential chronic health effects

- General** No known significant effects or critical hazards.
- Carcinogenicity** No known significant effects or critical hazards.
- Mutagenicity** No known significant effects or critical hazards.
- Developmental effects** No known significant effects or critical hazards.
- Fertility effects** No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Test authority / Test number	Species	Type / Result	Exposure	Effects	Remarks
<input checked="" type="checkbox"/> aminoethanol	OECD 202	Daphnia	Acute EC50 27.04 mg/l	48 hours	-	-
	OECD 201	Algae	Acute ErC50 2.8 mg/l	72 hours	-	-
	OECD 203	Fish	Acute LC50 >100 mg/l	96 hours	-	-
	-	Algae	Chronic ECr10 0.7 mg/l	72 hours	-	-
	OECD 211	Daphnia	Chronic NOEC 0.85 mg/l	21 days	-	-
	OECD 210	Fish	Chronic NOEC 1.24 mg/l	41 days	-	-
Alcohols, C8-10, ethers with polyethylene-	-	Daphnia	Acute EC50 6.3 mg/l	48 hours	-	-

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SECTION 12: Ecological information

polypropylene glycol monobenzyl ether							
nitrotrimethylenetris (phosphonic acid)	OECD	202	Daphnia	Acute EC50 >100 mg/l	48 hours	-	-
	OECD	201	Algae	Acute ErL50 80 mg/l	72 hours	-	-
	OECD	203	Fish	Acute LC100 >100 mg/l	96 hours	-	-
	OECD	201	Algae	Chronic NOEC 40 mg/l	72 hours	-	-
	OECD	211	Daphnia	Chronic NOEC >25 mg/l	21 days	-	-
sodium 4(or 5)-methyl-1H-benzotriazolide	OECD	201	Algae	Acute EC50 29 mg/l	72 hours	-	Based on studies with similar substances.
	OECD	202	Daphnia	Acute EC50 8.58 mg/l	48 hours	-	Based on studies with similar substances.
	OECD	203	Fish	Acute LC50 180 mg/l	96 hours	-	Based on studies with similar substances.
	OECD	201	Algae	Chronic EC10 1.18 mg/l	72 hours	-	Based on studies with similar substances.
	OECD	211	Daphnia	Chronic EC10 0.97 mg/l	21 days	-	Based on studies with similar substances.
1,2-ethanediamine, N,N, N',N'-tetramethyl-, polymer with 1,1'-oxybis (2-chloroethane)	-	-	Daphnia	Acute EC50 0.37 mg/l	48 hours	-	-
	-	-	Fish	Acute LC50 0.047 mg/l	96 hours	-	-
	-	-	Algae	Acute NOEC 0.0019 mg/l	120 hours	-	-
	-	-	Daphnia	Acute NOEC 0.08 mg/l	48 hours	-	-
	-	-	Fish	Acute NOEL 0.037 mg/l	96 hours	-	-

Environmental hazards Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Expected to be biodegradable.

Product/ingredient name	Test authority / Test number	Result - Exposure	Remarks
2-aminoethanol	OECD 301A	>90 % - Readily - 21 days	-
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	OECD 301F	>60 % - Readily - 28 days	-
nitrotrimethylenetris (phosphonic acid)	OECD 301E	0 % - Not readily - 21 days	-
sodium 4(or 5)-methyl-1H-	OECD 301F	4 % - Not readily - 28 days	-

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benzotriazolide

12.3 Bioaccumulative potential

Not available.

Product/ingredient name	LogP _{ow}	BCF	Potential
2-aminoethanol	-2.3	-	Low
neodecanoic acid	2.1	-	Low
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	3.46	-	Low
nitrilotrimethylenetris (phosphonic acid)	-3.53	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) Not available.
Mobility Liquid. Soluble in water.

12.5 Results of PBT and vPvB assessment

Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

12.6 Endocrine disrupting properties Not available.
12.7 Other adverse effects No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product
Methods of disposal Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.
Hazardous waste Yes.
European waste catalogue (EWC)

Waste code	Waste designation
12 03 01*	aqueous washing liquids

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging





Methods of disposal Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

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

Special precautions This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Empty containers represent a fire hazard as they may contain flammable product residues and vapour. Never weld, solder or braze empty containers. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

References Commission 2014/955/EU
 Directive 2008/98/EC

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN2491	UN2491	UN2491	UN2491
14.2 UN proper shipping name	Ethanolamine solution	Ethanolamine solution	Ethanolamine solution	Ethanolamine solution
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Hazard identification number 80 Tunnel code (E)	-	Emergency schedules F-A, S-B	-

14.6 Special precautions for user Not available.

UK Emergency Action Code: 2X

ADR/RID Classification code: C7

ADN Classification code: C7

14.7 Maritime transport in bulk according to IMO instruments Not available.

SECTION 15: Regulatory information

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

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

[Annex XIV - List of substances subject to authorisation](#)

[Annex XIV](#)

None of the components are listed.

[Substances of very high concern](#)

None of the components are listed.

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

Product/ingredient name	%	Designation [Usage]
Techniclean S 20	95-100	3
ammonium chloride	<0.1	65
formaldehyde	<0.001	72

Labelling Not applicable.

[Other regulations](#)

REACH Status The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

United States inventory (TSCA 8b) All components are active or exempted.

Australia inventory (AIC) All components are listed or exempted.

Canada inventory All components are listed or exempted.

China inventory (IECSC) All components are listed or exempted.

Japan inventory (CSCL) At least one component is not listed.

Korea inventory (KECI) All components are listed or exempted.

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Philippines inventory (PICCS) All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI) All components are listed or exempted.

Explosive precursors Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

EU - Water framework directive - Priority substances

None of the components are listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for one or more of the substances within this mixture. A Chemical Safety Assessment has not been carried out for the mixture itself.

SECTION 16: Other information

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 CSA = Chemical Safety Assessment
 CSR = Chemical Safety Report
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EINECS = European Inventory of Existing Commercial chemical Substances
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SADT = Self-Accelerating Decomposition Temperature
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVCB = Complex hydrocarbon substance
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative
 Varies = may contain one or more of the following 64741-88-4 / RRN 01-2119488706-23, 64741-89-5 / RRN 01-2119487067-30, 64741-95-3 / RRN 01-2119487081-40, 64741-96-4/ RRN

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01-2119483621-38, 64742-01-4 / RRN 01-2119488707-21, 64742-44-5 / RRN 01-2119985177-24, 64742-45-6, 64742-52-5 / RRN 01-2119467170-45, 64742-53-6 / RRN 01-2119480375-34, 64742-54-7 / RRN 01-2119484627-25, 64742-55-8 / RRN 01-2119487077-29, 64742-56-9 / RRN 01-2119480132-48, 64742-57-0 / RRN 01-2119489287-22, 64742-58-1, 64742-62-7 / RRN 01-2119480472-38, 64742-63-8, 64742-65-0 / RRN 01-2119471299-27, 64742-70-7 / RRN 01-2119487080-42, 72623-85-9 / RRN 01-2119555262-43, 72623-86-0 / RRN 01-2119474878-16, 72623-87-1 / RRN 01-2119474889-13

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 1B	CARCINOGENICITY - Category 1B
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Met. Corr. 1	CORROSIVE TO METALS - Category 1
Muta. 2	GERM CELL MUTAGENICITY - Category 2
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

History

Date of issue/ Date of revision 13/08/2024.
Date of previous issue 15/12/2023.
Prepared by Product Stewardship

 **Indicates information that has changed from previously issued version.**

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP

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SECTION 16: Other information

Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

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Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mixture
Code	466290-FR01
Product name	Techniclean S 20

Section 1: Title

Short title of the exposure scenario	Use of lubricants and greases in open systems - Industrial
List of use descriptors	<p>Identified use name: Use of lubricants and greases in open systems-Industrial</p> <p>Process Category: PROC01, PROC02, PROC07, PROC08b, PROC09, PROC10, PROC13</p> <p>Sector of end use: SU03</p> <p>Subsequent service life relevant for that use: No.</p> <p>Environmental Release Category: ERC04</p> <p>Specific Environmental Release Category: ATIEL-ATC SPERC 4.Ci.v1</p>

Processes and activities covered by the exposure scenario	Covers use of lubricants and greases in open systems, including application of lubricant to work pieces or equipment by dipping, brushing or spraying (without exposure to heat), e.g. mould releases, corrosion protection, slideways. Includes associated product storage, material transfers, sampling and maintenance activities.
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Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure < 0.5 kPa
Concentration of substance in product:	Covers use of substance/product up to 100 % (unless stated differently)
Frequency and duration of use:	Covers daily exposures up to 8 hours
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented

Contributing scenarios: Operational conditions and risk management measures

The following information provides minimum risk management measures for the contributing scenarios identified within this lubricant use group. However, more detailed information on control measures e.g. specific glove types may be documented in Section 8 of the main body of this safety data sheet.

Please review Section 8 in conjunction with the information on this Generic Exposure Scenario.

General measures applicable to all activities:

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN 374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop. Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.

Use suitable eye protection. Avoid direct eye contact with product also via contamination on hands.

Material transfers Manual:

Avoid carrying out activities involving exposure for more than 1 hour per day.

Material transfers Automated process with (semi) closed systems:

Ensure material transfers are under containment or extract ventilation.

Roller, spreader, flow application:

Provide extract ventilation to points where emissions occur.

Spraying:

Carry out in a vented booth or extracted enclosure.

Treatment by dipping and pouring:

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Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.

Equipment cleaning and maintenance:

Drain down system prior to equipment break-in or maintenance. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training. Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

Storage:

Store substance within a closed system.

Section 2.2: Control of environmental exposure

Product characteristics:	Applicability domain: product in which the risk determining substance has the following hazard profile: LogKow: Vapour pressure: PNEC Freshwater aquatic range (mg/L):
Amounts used:	
EU tonnage of risk determining substance per year:	3.81E+01 Tonnes/year
Frequency and duration of use:	
Emission days	300
Environment factors not influenced by risk management:	
Local freshwater dilution factor	10
Local marine water dilution factor	100
Other conditions affecting environmental exposure:	Negligible wastewater emissions as process operates without water contact.
Release fraction to air (after typical onsite RMMs)	5.00E-05
Release fraction to soil from process (after typical onsite RMMs)	0
Release fraction to wastewater from process (after typical onsite RMMs and before sewage treatment plan)	No data available yet
Technical conditions and measures at process level (source) to prevent release:	Common practices vary across sites thus conservative process release estimates used.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:	Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant
Organisational measures to prevent/limit release from site:	Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
Conditions and measures related to sewage treatment plant:	
Estimated substance removal from wastewater via on-site sewage treatment	No data available yet
Assumed domestic sewage treatment plant flow rate (m³/d)	2.00E+3
Maximum allowable site tonnage (M_{Safe}) based on release following total wastewater treatment removal	No data available yet
Maximum allowable site tonnage (M_{Safe}) based on release following total wastewater treatment removal as product:	No data available yet
Conditions and measures related to external treatment of waste for disposal:	External treatment and disposal of waste should comply with applicable local and/or national regulations.
Conditions and measures related to external recovery of waste:	External recovery and recycling of waste should comply with applicable local and/or national regulations.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Used ECETOC TRA model (May 2010 release).

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.ATIEL.org/REACH_GES

Health

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition	Mixture
Code	466290-FR01
Product name	Techniclean S 20

Section 1: Title

Short title of the exposure scenario	Use of lubricants and greases in open systems - Professional
List of use descriptors	<p>Identified use name: Use of lubricants and greases in open systems-Professional</p> <p>Process Category: PROC01, PROC02, PROC08a, PROC10, PROC11, PROC13</p> <p>Sector of end use: SU22</p> <p>Subsequent service life relevant for that use: No.</p> <p>Environmental Release Category: ERC08a, ERC08d</p> <p>Specific Environmental Release Category: ATIEL-ATC SPERC 8.Cp.v1</p>

Processes and activities covered by the exposure scenario	Covers use of lubricants and greases in open systems, including application of lubricant to work pieces or equipment by dipping, brushing or spraying (without exposure to heat), e.g. mould releases, corrosion protection, slideways. Includes associated product storage, material transfers, sampling and maintenance activities.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Physical state:	Liquid, vapour pressure < 0.5 kPa
Amounts used:	Covers use of substance/product up to 100 % (unless stated differently)
Frequency and duration of use:	Covers daily exposures up to 8 hours
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented

Contributing scenarios: Operational conditions and risk management measures

General measures applicable to all activities:

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN 374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

Use suitable eye protection. Avoid direct eye contact with product also via contamination on hands.

Material transfers

Manual: Avoid carrying out activities involving exposure for more than 1 hour per day.

Roller, spreader, flow application: Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out activities involving exposure for more than 4 hours per day. Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.

Spraying: Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out activities involving exposure for more than 1 hour per day. Wear a respirator conforming to EN140 with type A/P2 filter or better. Wear suitable coveralls to prevent exposure to the skin. Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.

Treatment by dipping and pouring: Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

Equipment cleaning and maintenance:

Drain down system prior to equipment break-in or maintenance. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out activities involving exposure for more than 4 hours per day. Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

Storage:

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Use of lubricants and greases in open systems - Professional

Store substance within a closed system.

Section 2.2: Control of environmental exposure

Product characteristics:	Applicability domain: product in which the risk determining substance has the following hazard profile: LogKow: Vapour pressure: PNEC Freshwater aquatic range (mg/L):
Amounts used:	2.24E+01 Tonnes/year
Frequency and duration of use:	
Emission days	365
Environment factors not influenced by risk management:	
Local freshwater dilution factor	10
Local marine water dilution factor	100
Other conditions affecting environmental exposure:	Negligible wastewater emissions as process operates without water contact.
Release fraction to air (after typical onsite RMMs)	1.00E-04
Release fraction to soil from process (after typical onsite RMMs)	1E-03
Release fraction to wastewater from process (after typical onsite RMMs and before sewage treatment plan)	No data available yet
Technical conditions and measures at process level (source) to prevent release:	Common practices vary across sites thus conservative process release estimates used.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:	Prevent discharge of undissolved substance to or recover from onsite wastewater.
Organisational measures to prevent/limit release from site:	Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
Conditions and measures related to sewage treatment plant:	
Estimated substance removal from wastewater via on-site sewage treatment	No data available yet
Maximum allowable site tonnage (M_{safe}) based on release following total wastewater treatment removal	No data available yet
Conditions and measures related to external treatment of waste for disposal:	External treatment and disposal of waste should comply with applicable local and/or national regulations.
Conditions and measures related to external recovery of waste:	External recovery and recycling of waste should comply with applicable local and/or national regulations.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Used ECETOC TRA model (May 2010 release).

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.ATIEL.org/REACH_GES

Health

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mixture
Code	466290-FR01
Product name	Techniclean S 20

Section 1: Title

Short title of the exposure scenario	Handling and dilution of metal working fluid concentrates - Industrial
List of use descriptors	<p>Identified use name: Handling and dilution of metal working fluid concentrates-Industrial</p> <p>Process Category: PROC01, PROC02, PROC08b, PROC05</p> <p>Sector of end use: SU03</p> <p>Subsequent service life relevant for that use: No.</p> <p>Environmental Release Category: ERC02</p> <p>Specific Environmental Release Category: ATIEL-ATC SPERC 2.Ei.v1</p>

Processes and activities covered by the exposure scenario	Handling and dilution of metal working fluid concentrates. Includes associated product storage, material transfers, sampling and maintenance activities.
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Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure < 0.5 kPa
Concentration of substance in product:	Covers use of substance/product up to 100 % (unless stated differently)
Frequency and duration of use:	Covers daily exposures up to 8 hours
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented

Contributing scenarios: Operational conditions and risk management measures

General measures applicable to all activities:
Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN 374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop. Use suitable eye protection. Avoid direct eye contact with product also via contamination on hands.

Filling of equipment from drums or containers:
Avoid carrying out activities involving exposure for more than 4 hours per day.

Process sampling:
Avoid carrying out activities involving exposure for more than 4 hours per day.

Equipment cleaning and maintenance:
Drain down system prior to equipment break-in or maintenance. Avoid carrying out activities involving exposure for more than 4 hours per day. Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

Storage:
Store substance within a closed system.

Section 2.2: Control of environmental exposure

Amounts used:	3.02E+02 Tonnes/year
EU tonnage of risk determining substance per year:	3.02E+02 Tonnes/year
Frequency and duration of use:	
Emission days	300
Environment factors not influenced by risk management:	
Local freshwater dilution factor	10
Local marine water dilution factor	100
Other conditions affecting environmental exposure:	Water-based (oil in water emulsion) or straight oil (contains no water) process
Release fraction to air (after typical onsite RMMs)	5.00E-05
Release fraction to soil from process (after typical onsite RMMs)	0
Release fraction to wastewater from process (after typical onsite RMMs and before sewage treatment plan)	No data available
Technical conditions and measures at process level (source) to prevent release:	Common practices vary across sites thus conservative process release estimates used.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:	Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant
Organisational measures to prevent/limit release from site:	Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
Conditions and measures related to sewage treatment plant:	
Estimated substance removal from wastewater via on-site sewage treatment	No data available
Assumed domestic sewage treatment plant flow rate (m³/d)	2.00E+3
Maximum allowable site tonnage (M_{Safe}) based on release following total wastewater treatment removal as product:	No data available
Conditions and measures related to external treatment of waste for disposal:	External treatment and disposal of waste should comply with applicable local and/or national regulations.
Conditions and measures related to external recovery of waste:	External recovery and recycling of waste should comply with applicable local and/or national regulations.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Used ECETOC TRA model (May 2010 release).

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.ATIEL.org/REACH_GES

Health

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.