

SAFETY DATA SHEET

Date of issue/Date of revision : 3 October 2018 Version : 3



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

1.1 Product identifier

Product name : JOHNSTONE'S PERFORMANCE TC2 Thinner & Cleaner

Product code : 17000DUP046

EC number : 919-446-0

REACH Registration number

Registration number	Legal entity
01-2119458049-33	-

CAS number : Not available.

Other means of identification : Not available.

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

Identified uses
Use in coatings-Consumer Use in coatings- Professional

Product use : Consumer applications, Professional applications.

1.3 Details of the supplier of the safety data sheet

PPG Architectural Coatings UK Ltd
Huddersfield Road
Birstall, West Yorkshire WF179XA
United Kingdom
Tel: +44 (0) 1924 354000
Fax: +44 (0) 1924 354533

e-mail address of person responsible for this SDS : ps.acemea-north@ppg.com

1.4 Emergency telephone number

Supplier

+44 (0) 1924 354000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : UVCB

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

Flam. Liq. 3, H226

STOT SE 3, H336

STOT RE 1, H372

Asp. Tox. 1, H304

Aquatic Chronic 2, H411

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

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SECTION 2: Hazards identification

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

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

2.2 Label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable liquid and vapour.
 May be fatal if swallowed and enters airways.
 May cause drowsiness or dizziness.
 Causes damage to organs through prolonged or repeated exposure.
 Toxic to aquatic life with long lasting effects.

Precautionary statements

General

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

Prevention

: Wear protective gloves. Wear protective clothing. Wear eye or face protection.
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
 No smoking. Do not breathe vapour.

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Storage

: Store in a well-ventilated place. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.
 P102, P101, P280, P210, P260, P304 + P340, P301 + P310, P303 + P361 + P353, P403, P235, P501

Hazardous ingredients

: Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Supplemental label elements

: Repeated exposure may cause skin dryness or cracking.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

: Yes, applicable.

Tactile warning of danger

: Yes, applicable.

2.3 Other hazards

Substance meets the criteria for PBT

: Not available.

Substance meets the criteria for vPvB

: Not available.

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SECTION 2: Hazards identification

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.1 Substances : UVCB

Product/ingredient name	Identifiers	% by weight	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	REACH #: 01-2119458049-33 EC: 919-446-0 CAS: 64742-82-1	100	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 See Section 16 for the full text of the H statements declared above.	-

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

- [*] Substance
- [A] Constituent
- [B] Impurity
- [C] Stabilising additive

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.

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SECTION 4: First aid measures

- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness
- Skin contact** : Adverse symptoms may include the following:
 irritation
 dryness
 cracking
- Ingestion** : Adverse symptoms may include the following:
 nausea or vomiting

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
 carbon oxides

5.3 Advice for firefighters

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of 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. Collect spillage.

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

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SECTION 7: Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities : Store between the following temperatures: 5 to 25°C (41 to 77°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

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.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	DNEL	Long term Inhalation	330 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	44 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	71 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	26 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	26 mg/kg bw/day	Consumers	Systemic

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SECTION 8: Exposure controls/personal protection

PNECs

PNECs - Not available.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Chemical splash goggles. Use eye protection according to EN 166.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Gloves : For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber thickness ≥ 0.55 mm - polyvinyl alcohol (PVA) - Viton®

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

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SECTION 8: Exposure controls/personal protection

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Clear.
- Odour** : Hydrocarbon. [Slight]
- Odour threshold** : Not available.
- pH** : insoluble in water.
- Melting point/freezing point** : May start to solidify at the following temperature: -43.77°C (-46.8°F) This is based on data for the following ingredient: 1,2,4-trimethylbenzene. Weighted average: -63.78°C (-82.8°F)
- Initial boiling point and boiling range** : 150°C
- Flash point** : Closed cup: 40°C
- Evaporation rate** : Highest known value: 0.77 (xylene) Weighted average: 0.44 compared with butyl acetate
- Material supports combustion.** : Yes.
- Flammability (solid, gas)** : liquid
- Upper/lower flammability or explosive limits** : Greatest known range: Lower: 1.4% Upper: 7.6% (Naphtha (petroleum), hydrodesulfurized heavy)
- Vapour pressure** : Highest known value: 0.9 kPa (6.7 mm Hg) (at 20°C) (xylene). Weighted average: 0.48 kPa (3.6 mm Hg) (at 20°C)
- Vapour density** : Highest known value: 4.4 (Air = 1) (nonane). Weighted average: 4.24 (Air = 1)
- Relative density** : 0.77
- Solubility(ies)** : Insoluble in the following materials: cold water.
- Partition coefficient: n-octanol/ water** : Not available.
- Auto-ignition temperature** : Lowest known value: 205°C (401°F) (nonane).
- Decomposition temperature** : Stable under recommended storage and handling conditions (see Section 7).
- Viscosity** : Kinematic (40°C): <0.14 cm²/s
- Explosive properties** : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
- Oxidising properties** : Product does not present an oxidizing hazard.

9.2 Other information

No additional information.

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SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
Refer to protective measures listed in sections 7 and 8.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
- 10.6 Hazardous decomposition products** : Depending on conditions, decomposition products may include the following materials: carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Conclusion/Summary

Skin : Not available.

Eyes : Not available.

Respiratory : Not available.

Sensitisation

Conclusion/Summary

Skin : Not available.

Respiratory : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

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SECTION 11: Toxicological information

Information on likely routes of exposure : Not available.

Potential acute health effects

- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Eye contact** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : Adverse symptoms may include the following:
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness
- Ingestion** : Adverse symptoms may include the following:
 nausea or vomiting
- Skin contact** : Adverse symptoms may include the following:
 irritation
 dryness
 cracking
- Eye contact** : No specific data.

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

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Not available.
- General** : Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : 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.
- Other information** : Not available.

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SECTION 11: Toxicological information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Chronic NOEC 0.097 mg/l Fresh water	Daphnia	21 days

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	OECD 301 F 301F Ready Biodegradability - Manometric Respirometry Test	75 % - Readily - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	-	-	Readily

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not available.

P: Not available. B: Not available. T: Yes.

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SECTION 12: Ecological information

vPvB : Not available.
vP: Not available. vB: Not available.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

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

Type of packaging	European waste catalogue (EWC)
Container	15 01 04 metallic packaging

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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1300	UN1300	UN1300	UN1300
14.2 UN proper shipping name	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

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14. Transport information

Marine pollutant substances	Not applicable.	Not applicable.	(Naphtha (petroleum), hydrodesulfurized heavy, nonane)	Not applicable.
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Additional information

- ADR/RID** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- ADN** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not applicable.

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 : Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c
E2

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

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SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 PBT = Persistent, Bioaccumulative and Toxic
 vPvB = Very Persistent and Very Bioaccumulative
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 IMDG = International Maritime Dangerous Goods
 IATA = International Air Transport Association

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

Classification	Justification
Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H226 H304 H336 H372 (inhalation)	Flammable liquid and vapour. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Aquatic Chronic 2, H411 Asp. Tox. 1, H304 EUH066 Flam. Liq. 3, H226 STOT RE 1, H372 (inhalation)	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 ASPIRATION HAZARD - Category 1 Repeated exposure may cause skin dryness or cracking. FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (inhalation) - Category 1
STOT RE 1, H372	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3

History

Date of issue/ Date of revision : 3 October 2018
 Date of previous issue : 26 September 2018
 Prepared by : EHS
 Version : 3

Disclaimer

Code : 17000DUP046 **Date of issue/Date of revision** : 3 October 2018
JOHNSTONE'S PERFORMANCE TC2 Thinner & Cleaner

SECTION 16: Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition : UVCB
Code : 17000DUP046
Product name : JOHNSTONE'S PERFORMANCE TC2 Thinner & Cleaner

Section 1 - Title

Short title of the exposure scenario : 919-446-0 Use in coatings- Professional
List of use descriptors : **Identified use name:** Use in coatings- Professional
Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC10, PROC13, PROC15, PROC11, PROC19
Substance supplied to that use in form of: As such
Sector of end use: SU22
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC08a, ERC08d
Market sector by type of chemical product: PC09a

Environmental contributing scenarios :

Health Contributing scenarios : **Transfer of substance or mixture (charging and discharging) at non-dedicated facilities**
Transfer of substance or mixture (charging and discharging) at dedicated facilities
Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
Chemical production where opportunity for exposure arises
Mixing or blending in batch processes
Roller application or brushing
Non industrial spraying
Treatment of articles by dipping and pouring
Use as laboratory reagent
Manual activities involving hand contact

Number of the ES	: 1
Industry Association	: CEPE
Processes and activities covered by the exposure scenario	: Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:	
Product characteristics	: Substance is complex UVCB. Predominantly hydrophobic
Amounts used	: Maximum daily site tonnage 2.3 kg/day
Frequency and duration of use	: Continuous release 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	: Release fraction to air from process (initial release prior to RMM): 0.98 Release fraction to wastewater from process (initial release prior to RMM): 0.01 Release fraction to soil from process (initial release prior to RMM): 0.01
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	: Risk from environmental exposure is driven by soil. No wastewater treatment required. Treat on-site wastewater (prior to receiving water discharge) to provide the required removal efficiency of \geq (%): 0 If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of \geq (%): 0
Organisational measures to prevent/limit release from site	: Prevent discharge of undissolved substance to or recover from onsite wastewater. 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 municipal sewage treatment: 93.7 % Total efficiency of removal from wastewater after on-site and off-site (municipal treatment plant) RMMs: 93.7 % Maximum allowable site tonnage (M_{safe}) based on release following total wastewater treatment removal: 1900 Assumed domestic sewage treatment plant flow: 2000 m ³ /d
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.

Contributing scenario controlling worker exposure for 2: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100% (unless stated differently).
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: No specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 3: Transfer of substance or mixture (charging and discharging) at dedicated facilities

Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100% (unless stated differently).
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: No specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 4: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

- Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state** : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
- Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours
- Other conditions affecting workers exposure** : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented
- Product safety-related measures** : Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 5: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

- Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state** : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
- Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours
- Other conditions affecting workers exposure** : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented
- Product safety-related measures** : Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 6: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

- Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state** : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
- Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours
- Other conditions affecting workers exposure** : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented
- Product safety-related measures** : Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 7: Chemical production where opportunity for exposure arises

- Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state** : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
- Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours
- Other conditions affecting workers exposure** : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented
- Product safety-related measures** : No specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 8: Mixing or blending in batch processes

- Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state** : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
- Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours
- Other conditions affecting workers exposure** : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented
- Product safety-related measures** : Film formation - air drying Outdoor-Indoor No specific measures identified.
Preparation of material for application-Outdoor-Indoor No specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 9: Roller application or brushing

- Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state** : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
- Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours
- Other conditions affecting workers exposure** : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented
- Product safety-related measures** : Outdoor-Indoor No specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 10: Non industrial spraying

- Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state** : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
- Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours
- Other conditions affecting workers exposure** : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented
- Product safety-related measures** : Manual Spraying-Indoor
Provide a good standard of controlled ventilation (10 to 15 air changes per hour). or
Wear a respirator conforming to EN140.

Manual Spraying-Outdoor
Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 4 hours. or Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 11: Treatment of articles by dipping and pouring

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

Product safety-related measures : Outdoor-Indoor Avoid manual contact with wet work pieces.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 12: Use as laboratory reagent

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently).

Physical state : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Other conditions affecting workers exposure : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented

Product safety-related measures : No specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 13: Manual activities involving hand contact

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently).

Physical state : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Other conditions affecting workers exposure : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene is implemented

Product safety-related measures : No specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Section 3 - Exposure estimation and reference to its source

Website: : Not applicable.

Exposure estimation and reference to its source - Environment: 1:

Exposure assessment (environment): : Hydrocarbon Block Method (Petrorisk)

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 2: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 3: Transfer of substance or mixture (charging and discharging) at dedicated facilities

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

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 4: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 5: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 6: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 7: Chemical production where opportunity for exposure arises

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 8: Mixing or blending in batch processes

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 9: Roller application or brushing

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 10: Non industrial spraying

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 11: Treatment of articles by dipping and pouring

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 12: Use as laboratory reagent

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 13: Manual activities involving hand contact

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

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. Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).
Health	: Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented. Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Consumer

Identification of the substance or mixture

Product definition : UVCB
Code : 17000DUP046
Product name : JOHNSTONE'S PERFORMANCE TC2 Thinner & Cleaner

Section 1 - Title

Short title of the exposure scenario : 919-446-0 Use in coatings-Consumer
List of use descriptors : **Identified use name:** Use in coatings-Consumer
Substance supplied to that use in form of: As such
Sector of end use: SU21
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC08a, ERC08d
Market sector by type of chemical product: PC09a

Environmental contributing scenarios :

Health Contributing scenarios : **Adhesives, sealants**
Anti-freeze and de-icing products
Biocidal products
Non-metal surface treatment products
Ink and toners
Leather treatment products
Lubricants, greases, release products
Polishes and wax blends
Textile dyes and impregnating products
Coatings and paints, thinners, paint removers
Fillers, putties, plasters, modelling clay
Finger paints

Number of the ES	: 1
Industry Association	: CEPE
Processes and activities covered by the exposure scenario	: Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning. Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:	
Product characteristics	: Substance is complex UVCB. Predominantly hydrophobic
Amounts used	: Maximum daily site tonnage 6 kg/day
Frequency and duration of use	: Continuous release Emission days 365 days per year
Environment factors not influenced by risk management	: Local freshwater dilution factor: 10 Local marine water dilution factor: 100
Other conditions affecting environmental exposure	: Release fraction to air from process (initial release prior to RMM): 0.985 Release fraction to wastewater from process (initial release prior to RMM): 0.01 Release fraction to soil from process (initial release prior to RMM): 0.005
Conditions and measures related to sewage treatment plant	: Estimated substance removal from wastewater via municipal sewage treatment: 93.7% Maximum allowable site tonnage (M_{safe}) based on release following total wastewater treatment removal: 1900 kg/day Assumed domestic sewage treatment plant flow: 2000 m ³ /d

Date of issue/Date of revision : 7/24/2017

23/31

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.

Contributing scenario controlling consumer exposure for 2: Adhesives, sealants

Concentration of substance in mixture or article	: Unless otherwise stated. Covers concentrations up to 30%
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Covers use up to 75g Covers skin contact area up to 35.73 cm ² Glues, hobby use- Covers use up to 9 g Glues DIY-use (carpet glue, tile glue, wood parquet glue)- Covers use up to 6390 g- Covers skin contact area up to 110 cm ² Glue from spray- Covers use up to 85.05 g
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day Covers exposure up to 1 h/event Glues, hobby use- Covers exposure up to 4 h/event Glues DIY-use (carpet glue, tile glue, wood parquet glue)- Covers use up to 1 days per year- Covers exposure up to 6 h/event Glue from spray- Covers use up to 6 days per year- Covers exposure up to 4 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 3: Anti-freeze and de-icing products

Concentration of substance in mixture or article	: Washing car window- Covers concentrations up to 1 % Pouring into radiator- Covers concentrations up to 10 % Lock de-icer- Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Washing car window- Covers use up to 0.5 g Pouring into radiator- Covers use up to 2000 g- Covers skin contact area up to 428 cm ² Lock de-icer- Covers use up to 4 g- Covers skin contact area up to 214.4 cm ²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day Washing car window- Covers exposure up to 0.02 h/event Pouring into radiator- Covers exposure up to 0.17 h/event Lock de-icer- Covers use up to 0.25 h/event
Other given operational conditions affecting consumers exposure	: Covers use in a one car garage (34 m ³) under typical ventilation. Covers use in room size of 34 m ³
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 4: Biocidal products

Concentration of substance in mixture or article	: Laundry and dish-washing products and Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)- Covers concentrations up to 5 % Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)- Covers concentrations up to 15 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Laundry and dish-washing products- Covers use up to 15 g- Covers skin contact area up to 857.5 cm ² Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)- Covers use up to 27 g- Covers skin contact area up to 857.5 cm ² Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)- Covers use up to 35 g- Covers skin contact area up to 428 cm ²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Laundry and dish-washing products- Covers use up to 365 days per year- Covers exposure up to 0.5 h/event Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)- Covers use up to 128 days per year- Covers exposure up to 0.33 h/event Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)- Covers use up to 128 days per year- Covers exposure up to 0.17 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 5: Non-metal surface treatment products

Concentration of substance in mixture or article	: Unless otherwise stated. Waterborne wall paint- Covers concentrations up to 1.5 % High solid paint Waterborne paint- Covers concentrations up to 27.5 % Aerosol spray can and Removers (paint-, glue-, wall paper-, sealant-remover)- Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Waterborne wall paint- Covers use up to 2760 g- Covers skin contact area up to 428.75 cm ² High solid paint Waterborne paint- Covers use up to 744 g- Covers skin contact area up to 428.75 cm ² Aerosol spray can- Covers use up to 215 g Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 491 g- Covers skin contact area up to 857.5 cm ²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Waterborne wall paint- Covers use up to 4 days per year- Covers exposure up to 2.2 h/event High solid paint Waterborne paint- Covers use up to 6 days per year- Covers exposure up to 2.2 h/event Aerosol spray can- Covers use up to 2 days per year- Covers exposure up to 0.33 h/ event Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 3 days per year- Covers exposure up to 2 h/event

Other given operational conditions affecting consumers exposure : Unless otherwise stated, assumes use as ambient temperatures in a 20 m³ room.
Covers use under typical household ventilation.
Aerosol spray can- Covers use in a one car garage (34 m³) under typical ventilation.
Covers use in room size of 34 m³

Conditions and measures related to information and behavioural advice to consumers : No specific risk management measure identified beyond those operational conditions stated.

Conditions and measures related to personal protection and hygiene

Contributing scenario controlling consumer exposure for 6: Ink and toners

Concentration of substance in mixture or article : Unless otherwise stated. Covers concentrations up to 10 %

Physical state : liquid
Vapour pressure 231 Pa

Amounts used : Unless otherwise stated.
Covers use up to 40 g
Covers skin contact area up to 71.4 cm²

Frequency and duration of use/exposure : Unless otherwise stated.
Covers use up to 365 days per year
Covers use up to 1 uses per day
Covers exposure up to 2.2 h/event

Other given operational conditions affecting consumers exposure : Unless otherwise stated, assumes use as ambient temperatures in a 20 m³ room.
Covers use under typical household ventilation.

Conditions and measures related to information and behavioural advice to consumers : No specific risk management measure identified beyond those operational conditions stated.

Conditions and measures related to personal protection and hygiene

Contributing scenario controlling consumer exposure for 7: Leather treatment products

Concentration of substance in mixture or article : Unless otherwise stated. Covers concentrations up to 50 %

Physical state : liquid
Vapour pressure 231 Pa

Amounts used : Unless otherwise stated.
Covers use up to 56 g
Covers skin contact area up to 430 cm²

Frequency and duration of use/exposure : Unless otherwise stated.
Covers use up to 1 uses per day
Polishes, wax/cream (floor, furniture, shoes)- Covers use up to 29 days per year-
Covers exposure up to 1.23 h/event
Polishes, spray (furniture, shoes)- Covers use up to 8 days per year- Covers exposure up to 0.33 h/event

Other given operational conditions affecting consumers exposure : Unless otherwise stated, assumes use as ambient temperatures in a 20 m³ room.
Covers use under typical household ventilation.

Conditions and measures related to information and behavioural advice to consumers : No specific risk management measure identified beyond those operational conditions stated.

Conditions and measures related to personal protection and hygiene

Contributing scenario controlling consumer exposure for 8: Lubricants, greases, release products

Concentration of substance in mixture or article	: Unless otherwise stated. Liquids- Covers concentrations up to 100 % Pastes- Covers concentrations up to 20 % Sprays- Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Liquids- Covers use up to 2200 g- Covers skin contact area up to 468 cm ² Pastes- Covers use up to 34 g- Covers skin contact area up to 468 cm ² Sprays- Covers use up to 73 g- Covers skin contact area up to 428.75 cm ²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Liquids- Covers use up to 4 days per year- Covers exposure up to 0.17 h/event Pastes- Covers use up to 10 days per year- Covers exposure up to 4 h/event Sprays- Covers use up to 6 days per year- Covers exposure up to 0.17 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation. Liquids- Covers use in a one car garage (34 m ³) under typical ventilation. Covers use in room size of 34 m ³
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 9: Polishes and wax blends

Concentration of substance in mixture or article	: Unless otherwise stated. Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Covers skin contact area up to 430 cm ² Polishes, wax/cream (floor, furniture, shoes)- Covers use up to 142 g Polishes, spray (furniture, shoes)- Covers use up to 35 g
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Polishes, wax/cream (floor, furniture, shoes)- Covers use up to 29 days per year- Covers exposure up to 1.23 h/event Polishes, spray (furniture, shoes)- Covers use up to 8 days per year- Covers exposure up to 0.33 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 10: Textile dyes and impregnating products

Concentration of substance in mixture or article	: Unless otherwise stated. Covers concentrations up to 10 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Covers use up to 115 g Covers skin contact area up to 857.5 cm ²

Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day Covers exposure up to 1 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 11: Coatings and paints, thinners, paint removers	
Concentration of substance in mixture or article	: Waterborne wall paint- Covers concentrations up to 1.5 % High solid paint- Covers concentrations up to 27.5 % Aerosol spray can- Covers concentrations up to 50 % Removers (paint-, glue-, wall paper-, sealant-remover)- Covers concentrations up to 100 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Waterborne wall paint- Covers use up to 2760 g- Covers skin contact area up to 428.75 cm ² High solid paint- Covers use up to 744 g- Covers skin contact area up to 428.75 cm ² Aerosol spray can- Covers use up to 215 g Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 491 g- Covers skin contact area up to 857.7 cm ²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Waterborne wall paint- Covers use up to 4 days per year- Covers exposure up to 2.2 h/event High solid paint- Covers use up to 6 days per year- Covers exposure up to 2.2 h/event Aerosol spray can- Covers use up to 2 days per year- Covers exposure up to 0.33 h/ event Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 3 days per year- Covers exposure up to 2 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation. Aerosol spray can- Covers use in a one car garage (34 m ³) under typical ventilation. Covers use in room size of 34 m ³
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 12: Fillers, putties, plasters, modelling clay	
Concentration of substance in mixture or article	: Fillers and putty and Plasters and floor equalisers- Covers concentrations up to 2 % Modelling clay- Covers concentrations up to 1%
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Fillers and putty- Covers use up to 85 g- Covers skin contact area up to 35.73cm ² Plasters and floor equalisers- Covers use up to 13800 g- Covers skin contact area up to 857.5 cm ² Modelling clay- Covers skin contact area up to 254.4 cm ² - For each use event, assumes swallowed amount of 1 g

Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Fillers and putty- Covers use up to 12 days per year- Covers exposure up to 4 h/event Plasters and floor equalisers- Covers use up to 12 days per year- Covers exposure up to 2 h/event Modelling clay- Covers use up to 365 days per year
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures related to personal protection and hygiene	

Contributing scenario controlling consumer exposure for 13: Finger paints

Concentration of substance in mixture or article	: Unless otherwise stated. Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. For each use event, assumes swallowed amount of 1.35 g Covers skin contact area up to 254.4 cm ²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: Avoid using at a product concentration greater than 5 %
Conditions and measures related to personal protection and hygiene	

Section 3 - Exposure estimation and reference to its source

Website:	: Not applicable.
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Exposure estimation and reference to its source - Environment: 1:

Exposure assessment (environment):	: Hydrocarbon Block Method (Petrisk)
Exposure estimation and reference to its source	: Not available.

Exposure estimation and reference to its source - Consumers: 2: Adhesives, sealants

Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.

Exposure estimation and reference to its source - Consumers: 3: Anti-freeze and de-icing products

Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.

Exposure estimation and reference to its source - Consumers: 4: Biocidal products

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 5: Non-metal surface treatment products

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 6: Ink and toners

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 7: Leather treatment products

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 8: Lubricants, greases, release products

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 9: Polishes and wax blends

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 10: Textile dyes and impregnating products

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 11: Coatings and paints, thinners, paint removers

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 12: Fillers, putties, plasters, modelling clay

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Consumers: 13: Finger paints

Exposure assessment (human): : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source : Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

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 (http://cefic.org/en/reach-for-industries-libraries.html).
Health	: Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented. Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.