

CANADA / JUDGMENT

Metcalfe v. Thermofluid Technologies Inc.

2025 BCSC 2680

COURT

Supreme Court of British Columbia

DECIDED

18 December 2025

Source: bccourts.ca · Research copy typeset by Esheria. Not court-issued or certified.

2025 BCSC 2680 Metcalfe v. Thermofluid Technologies Inc.

IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation:

Metcalfe v. Thermofluid Technologies Inc.,

2025 BCSC 2680

Date: 20251218

Docket: S158977

Registry: Vancouver

Between:

Marte Norman Metcalfe

Plaintiff

And:

Thermofluid Technologies Inc.

and Canadian Tire Corporation Limited

Defendants

Before: The Honourable Justice Gibson

Oral Reasons for Judgment

In Chambers

Counsel for the Plaintiff:

F. Balandari

T. Bautista

Counsel for the Defendants:

M.J. Percival

Place and Date of Hearing:

Vancouver, B.C.

December 15, 2025

Place and Date of Judgment:

Vancouver, B.C.

December 18, 2025

- [1] THE COURT: Good morning. As counsel knows, I am going to render oral reasons for judgment this morning. The Court reserves the right to edit these reasons if a written version is requested. Those edits will not change the grounds for the decision, nor the result.

Introduction

- [2] This case is about the plaintiff's use of an automotive air conditioner refrigerant recharging kit. In November 2013, while he was disassembling the kit, its contents leaked into part of his garage and ignited "with the open flame of a gas furnace" causing an explosion. The plaintiff was injured and claims damages for those injuries and some property damage.
- [3] The defendants submit the plaintiff failed to read and follow the adequate instructions and warnings on the kit and was therefore the cause of his own injuries. The defendants here seek a summary determination of liability and damages under Supreme Court Rule 9-7.

Background

- [4] Briefly, the undisputed facts are as follows. The defendant Thermofluid Technologies Inc. ("Thermofluid") sells Red Tek 12a and automotive air conditioner refrigerant recharging kit (the "Product"). Thermofluid is the manufacturer of the Product.
- [5] In July 2012, the plaintiff purchased the Product from a Canadian Tire store located in Nanaimo, British Columbia. The defendant Canadian Tire Corporation Limited ("Canadian Tire") was not the owner or operator of the store but agrees it was the Product's distributor.

- [6] The Product consisted of two cans containing refrigerant (a blend of hydrocarbon gases), a hose, a connector, and a gauge, all packaged together with labelling on the cans and packaging. The tops of the cans were flat and required the user to pierce the top with the provided gauge and connector hose, attaching a cap valve or tap can that would prevent gas from flowing out of the can during normal use.
- [7] In late summer/early fall 2012, the plaintiff read the warnings and instructions on the Product and used it to charge a car's air conditioning unit, without incident. At that time, he understood the contents of the cans were flammable and potentially explosive.
- [8] The parties agree the Product was labelled with warnings and instructions, including:
- a) On the front of the can, "extreme danger", "very flammable", and "contents under pressure". The front of the can also bore symbols that the plaintiff agreed meant that its contents were flammable and explosive.
 - b) On the back of the can:

DANGER, HIGH PRESSURE. FLAMMABLE GAS CAN FORM EXPLOSIVE MIXTURES WITH AIR. CONTACT WITH LIQUID CAUSES FROSTBITE. DO NOT INCINERATE! PRECAUTIONS: KEEP AWAY FROM HEAT, SPARKS, AND FLAME. CONTAINER TEMPERATURE SHOULD NOT EXCEED 120 DEGREES FAHRENHEIT. DO NOT DROP. STORE UNDER WELL VENTILATED CONDITIONS. WEAR PROTECTIVE EQUIPMENT DURING HANDLING. AVOID SKIN OR EYE CONTACT. DO NOT CONNECT TO HIGH-PRESSURE SIDE. CAN MAY BURST CAUSING BODILY INJURY. ALL LABELLED HAZARD PRECAUTIONS MUST BE OBSERVED.

- c) The back of the plastic packaging bore an instruction reading:

DO NOT REMOVE CAN TAP FROM CAN IF THERE IS REMAINING RED TEK 12A INSIDE CAN. STORE UNUSED RED TEK 12A REFRIGERANT IN A WELL-VENTILATED PLACE AWAY FROM OPEN FLAMES.

- [9] The back of the Product packaging included the address for Thermofluid's company website and toll-free number. None of the information on the Product packaging indicated that the cans had self-sealing valves.
- [10] After using the Product, the plaintiff left the can tap on the partially used can, which he agreed on discovery was still quite full, replaced it into its packaging bearing the instructions, and stored it on a shelf in his garage about 16 to 18 feet from his home's natural gas furnace. At discovery, the plaintiff agreed he most likely did not take the tap can off at that time because he understood it could cause discharge of the refrigerant if he did so.
- [11] On about November 3, 2013, the plaintiff took the Product off the shelf and moved it to a work bench about two metres away from the natural gas furnace. He says he was not using the Product but wanted to disassemble it.

- [12] In November 2013, the plaintiff did not reread the instructions or warnings on the Product's packaging and did not remember what he read from the warning and instructions the year before.
- [13] The plaintiff knew that the furnace pilot light was on, and the garage door was closed. The plaintiff did not put on any protective equipment. He removed the can tap from the partially used can, contrary to the instruction that he should not.
- [14] The plaintiff assumed that the Product had a self-sealing valve that would prevent the refrigerant from leaking out, but at the same time he acknowledged on discovery that the Product packaging did not indicate that there was a self-sealing valve and he had never seen a product with a flat lid and no manufactured access hole that nonetheless included a self-sealing valve.
- [15] The plaintiff did not look at the top of the can prior to removing the can tap in 2013 but agreed that he would have looked and that the unused can had a flat top with no manufactured hole. By removing the can tap, the plaintiff caused the can's remaining contents to come out, interacting with the open flame of the furnace pilot light, causing an explosion.
- [16] The plaintiff suffered burn injuries, including to his arms and torso, and his garage door was damaged. On discovery, the plaintiff agreed that, had he followed the instructions not to remove the can tap from the can if there was remaining Red Tek 12a inside, there would have been no fire.

Suitability for Summary Trial

- [17] The first issue is whether this case is suitable for summary trial determination under Rule 9-7. As I will explain in more detail below, I find that this dispute is suitable for summary trial determination because the legal and factual issues are not overly complex, and a summary trial will permit the dispute to be resolved in a fair, timely, and efficient manner.
- [18] The plaintiff bears the onus of proving that a determination of liability is unsuitable for summary trial. Summary trial should be used where possible in appropriate cases to promote timely effective resolution of the proceedings: *Inspiration Mgmt. Ltd. v. McDermid St. Lawrence Ltd.*, 1989 CanLII 229 (BC CA), 36 BCLR (2d) 202.
- [19] A party cannot frustrate the summary trial process by failing to take every reasonable step to put themselves in the best position possible: *Everest Canadian Properties Ltd. v. Mallmann*, 2008 BCCA 275 at para. 34 as noted in *Gichuru v. Pallai*, 2013 BCCA 60 at para. 32:

All parties to an action must come to a summary trial hearing prepared to prove their claim, or defence, as judgment may be granted in favour of any party, regardless of which party has brought the application, unless the judge concludes that he or she is unable to find the facts necessary to decide the issues or is of the view that it would be unjust to decide the issues in this manner.

- [20] If there is sufficient evidence to find the facts necessary to give judgment, then the summary trial can proceed: *Ferguson v. Shan*, 2019 BCSC 740 at para. 7. To put that differently, the question is whether there is sufficient evidence to find the facts necessary to give judgment. I conclude there is sufficient evidence.
- [21] The plaintiff submits that liability and damages issues here are not suitable for summary determination because the matter is complex, the plaintiff was self-represented at examination for discovery, damages may be significant, the timing of this application perhaps precludes the plaintiff from obtaining further expert opinion about his burns, specifically from a "cosmetic surgeon" and because he might want to cross-examine a witness, though he had not requested or sought that cross-examination.
- [22] The plaintiff also says that a determination of liability alone would lead to "litigating in slices": *Dahl v. Royal Bank of Canada*, 2005 BCSC 1263 at para. 12, *aff'd* 2006 BCCA 369.
- [23] The defendants say the affidavit evidence before the Court, the portions of the plaintiff's discovery transcript, Mr. Milne's expert opinion, and the cross-examination of Mr. Milne suffice to determine liability and damages in this matter. They point out that the case is not complex, and damages in their submissions are modest.
- [24] I find the issues are not overly complex, either on liability or damages. The facts were proven mainly through the plaintiff's own examination for discovery evidence. There is one expert opinion from materials engineer Mr. Milne, and no objections were raised to admission of his report. Mr. Milne was cross-examined by defendant's counsel prior to summary trial. The examination for discovery of Thermofluid president, Floyd Brewer, was also before the Court. Credibility is not an issue.
- [25] The plaintiff started his claim over ten years ago, giving him ample opportunity to obtain expert opinion, including from a cosmetic surgeon, or to collect evidence on any issue, had he wished.
- [26] In 2021, the defendants put the plaintiff on notice of their intention to proceed by summary trial. While the plaintiff was self-represented at times, he also had several different lawyers; current counsel came onto the case more than one year prior to the summary trial.
- [27] While the plaintiff's injuries are regrettable and there is no doubt they caused him pain and suffering, they do not found a complex damage claim that itself requires a full trial. Given my decision below to dismiss this case on liability, the well-founded admonition against litigating in slices is not a barrier to proceeding by summary trial.

Liability

- [28] Manufacturers, and here that is the defendant Thermofluid, have a duty of care to warn consumers of dangers inherent in the use of a product where the manufacturer has or ought to have knowledge of those dangers: *Hollis v. Dow Corning Corp.*, 1995 CanLII 55 (SCC), [1995] 4 SCR 634 at para. 20.
- [29] Where significant dangers are entailed by ordinary use of a product, manufacturers' warnings must be sufficiently detailed to give the ordinary consumer a full indication of each specific danger arising from the use of a product: *Lambert v. Lastoplex Chemicals*, 1971 CanLII 27 (SCC), [1972] SCR 569 at p. 574.
- [30] If a product is safe when used in accordance with sufficient instructions and warnings that bring home to a reasonable user the extent of the risk and required precautions but is dangerous if misused contrary to those warnings and instructions, a consumer who misuses the product in disregard of the instructions causing the warned-of danger to materialize will have their claim dismissed: *Ho Lem v. Barotto Sports Ltd.*, 1976, 69 DLR (3d) 276 (AB CA); *Stiles v. Honda Canada Inc.*, 1996 CanLII 1555 (BC CA), 17 BCLR (3d) 144 (BC CA).
- [31] I find it was reasonable for Canadian Tire as distributor to rely on the manufacturer's warnings and instructions provided with the Product in these circumstances.
- [32] The plaintiff had two central liability submissions. First, that the warnings and instructions on the Product and its packaging were not adequate; and second, that the Product should have been equipped with some form of shut-off valve to prevent remaining gas from leaving the can if the can tap was removed.
- [33] Below I review the expert opinion of Mr. Milne and then discuss the adequacy of warnings, the ordinary reasonable consumer, and then the issue of a self-sealing valve.

Robert Milne, Materials Engineer

- [34] Robert Milne, a professional engineer, provided a report dated July 18, 2024. Mr. Milne has expertise in materials engineering and evaluating damage caused by manufacturing errors. There was no objection to admission of his expert report. In his report, Mr. Milne opined that if a product can is punctured or damaged, the release of refrigerant becomes a fire and explosion hazard. He described the warning labels on the Product without answering a question put to him about whether those warnings were "obvious and easy to find".
- [35] He offered his view that the warnings on the can hose and assembly together were "not adequate to prevent a person from releasing propane into the atmosphere" but crucially, Mr. Milne was not told about or asked about instructions on the packaging that cautioned a user not to remove the tap can while refrigerant remained in the can.

- [36] Mr. Milne was cross-examined on his report on October 21, 2024. The cross-examination revealed that Mr. Milne was given incomplete factual assumptions upon which to base his opinion. Mr. Milne was not given photographs of the actual cans and packaging involved in the 2013 incident. These were shown to him on cross-examination. He had not seen the warnings and information on the back of the Product packaging prior to providing his report. As noted above, this information included the caution not to remove the can tap if refrigerant remained in the can.
- [37] Mr. Milne explained he had not been made aware that the plaintiff failed to read the Product instructions prior to the 2013 incident, which included the caution not to remove the tap can. He was also not told that the plaintiff had forgotten those instructions between 2012 and 2013, nor that the plaintiff had removed the can tap in his enclosed garage close to the activated pilot light on the furnace.
- [38] On cross-examination, Mr. Milne agreed that a reasonable consumer would have read the instructions and complied with them when interacting with the Product and could call the manufacturer or look at their website if they had any questions. Based on cross-examination and the report together, I find Mr. Milne's opinion only proves the pressurized gas in the cans could be dangerous when used contrary to the instructions or when the can was damaged. This is essentially a reiteration of the warnings that appear on the Product. I find Mr. Milne's opinion did not prove that the defendants fell below a reasonable standard in their instructions and warnings about the Product.

Adequacy of Warning and Ordinary Consumer

- [39] The plaintiff urged the Court to apply Lambert to find liability. Mr. Lambert applied flammable lacquer sealer inside but there was a source of ignition in a separate room, causing an explosion. The product labelling in Lambert lacked some degree of express warning to use the product only away from all sources of ignition, even those in another room. The product labelling cautioned only against the use of the product with a source of ignition "in or near the working area".
- [40] Here, to distinguish this case from Lambert, I find the Product included a direct instruction provided in upper case letters not to remove the can tap from the condition if Red Tek 12a remained inside. It is undisputed that the plaintiff did not read those instructions or warnings in 2013 when he went to disassemble the Product and had forgotten them since reading them in 2012 and so disregarded them.
- [41] Unlike Mr. Lambert, the plaintiff was not using the Product as contemplated by its instructions at all when the explosion occurred. He was disassembling it in a direct contradiction of the instruction not to remove the tap can.

- [42] Mr. Lambert read the warnings on the lacquer product he was using for the first time and then did not contemplate there would be a problem with a pilot light located in another room. Mr. Lambert turned down his home thermostat in an effort to ensure a pilot light would not come on. By contrast, the plaintiff here failed to remember or read the instructions and warnings at all in 2013 and then took off the tap can in the same closed room as and within two metres of a lit pilot light.
- [43] While I find the Product warnings and instructions taken together were adequate to warn an ordinary consumer of the risk that materialized here, unfortunately the plaintiff failed to read them or remember them and acted contrary to them. He made a choice to disassemble a product he knew to be flammable close to a lit pilot light.
- [44] I find the plaintiff's claim here is more like that of Mr. Ho Lem than Mr. Lambert. Mr. Ho Lem suffered damage by his own fault where he failed to follow instructions and note warnings about the proper use of a shot shell re-loader. Mr. Ho Lem prepared a shot with a double load of powder, no wad, and a double load of shot. In other words, he prepared a shot contrary to the instructions.
- [45] When he fired the shot in his shotgun, the chamber burst and injured Mr. Ho Lem. A manufacturer cannot be "called upon to anticipate and warn against all combinations and permutations or possible acts and omissions and negligence": Ho Lem at para. 25. To do so would move from an area of reasonable foreseeability to putting the manufacturer in the position of an insurer.
- [46] The plaintiff contended that the instructions on the Product were inadequate because they did not provide steps for how to disassemble a can of the Product that still contained Red Tek 12a. I disagree.. There were clear instructions not to disassemble the Product while it still contained Red Tek 12a:
- DO NOT REMOVE CAN TAP FROM CAN IF THERE IS REMAINING RED TEK 12A INSIDE CAN.
- [47] Therefore, there was no need to provide instructions for how to remove the can tap. The can tap should not have been removed at all while contents remained in the can.
- [48] For these reasons, I find it was not specific foreseeable harm that a capable adult ordinarily consumer would fail to read the Product instructions and warnings and then manipulate the Product contrary to several of those instructions by removing the tap can in a closed space near a source of ignition knowing there was still refrigerant in the can, and without wearing protective equipment during handling. Mr. Milne and the plaintiff himself gave evidence that following those warnings and instructions would have avoided the explosion.

Automatic Shutoff or Self-Sealing Valve

- [49] The plaintiff argued there should have been some form of automatic shutoff or self-sealing valve on the Product. Mr. Milne's evidence does not support a requirement for a self-sealing valve on the Product in Canada in 2012 or 2013. The cans at that time used a simple sealing plate that was to be pierced by a screw-in valve.
- [50] While the plaintiff assumed there was a self-sealing valve on the can, he agreed that he did not refer to the instructions or warnings or contact Thermofluid to ask whether there was a self-sealing valve before disassembling the Product. Mr. Brewer gave evidence that Thermofluid started using a self-sealing valve on the Product in 2018 after the U.S. Environmental Protection Agency mandated a self-sealing valve for refrigerant cans for environmental reasons.
- [51] While Mr. Milne opined that a self-sealing valve was a safer design, he did not go so far as to offer an opinion that Thermofluid failed in its duty to the consumer by using the flat-cap design with warnings and instructions that were available for the plaintiff to read and follow. On the evidence, I find that the plaintiff failed to prove that Thermofluid fell below the standard of care to a reasonable ordinary consumer by not having a self-sealing valve on the Product.

Conclusion

- [52] I dismiss this claim in the unique circumstances where the plaintiff did not read the instructions or warnings in 2013 and then acted contrary to them when handling the Product. Unfortunately, the plaintiff suffered injuries in the resulting explosion, but I find those injuries were caused by his own fault. I find that if the plaintiff had read and followed the warnings and instructions, an ordinary consumer in his position would not have removed the tap can and the explosion would have been avoided. The plaintiff has failed to prove on a balance of probabilities that the defendants are liable for his damages and injuries caused by the explosion.
- [53] Given my conclusion on liability, it is unnecessary to determine damages. The plaintiff's claim is dismissed, with costs to the defendants.

"Gibson, J."

Source & reproduction note

Judgment wording, source notices and original paragraph numbers are retained. Esheria supplies the layout and this PDF's page numbers; these are not the source pagination. This is a research copy, not an official or certified court document. Check quotations, citations and publication restrictions against the original source before relying on it.

ORIGINAL SOURCE <https://www.bccourts.ca/jdb-txt/sc/25/26/2025BCSC2680.htm>

CASE PAGE <https://chat.esheria.ai/case-law/canada/metcalfe-v-thermofluid-technologies-inc-2025>

Prepared on 24 October 2026 · Esheria