MSME Tools

User Guide, Error Codes and Solutions, and Release Notes

Version 1.0.0 · 12 November 2026

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Four offline tools: Interest Calculator, Section 43B(h) Checker, Notice Generator, Document Generator. Working aids, not legal or tax advice.

Release Notes - Delayed Payment Interest Calculator

Version 1.0.0 - 12 November 2026

- First release of MSME Tools: Interest Calculator, Section 43B(h) Checker, Delayed Payment Notice Generator and Document Generator (sale-of-goods agreement, MSEFC affidavit, buyer's declaration).
- Fully offline, no server. Data kept in the browser (IndexedDB) with auto save, Save button, JSON backup and restore.
- Integer-paise arithmetic. Interest at three times the RBI Bank Rate with monthly rests; Bank Rate series verified from RBI sources up to 7 October 2026.
- Legal rule register with verification status for every rule. Conventions that the law does not fix are shown and selectable.
- Error code reference with 74 coded messages in 10 categories.
- Automated test suite and independent cross-check against a separate Python decimal implementation.
- Techmin Wealth Partners identity: logo in every header and printed report, a left-hand menu and a new statutory-ledger design with light and dark themes.
- Feedback form in the header (Feedback). It prepares an e-mail to Techmin or saves a text file; nothing is sent automatically.

Known limitations

- The built-in Bank Rate table is verified up to 12 November 2026.
- Section numbers of the Income-tax Act, 2025 and the text of the MSMED Act were read from secondary reproductions; confirm on the official sites.
- Whether traders are covered, how GST is treated in the interest base, and which Bank Rate applies over a long delay are shown as conventions, not settled law.
- The tool does not file anything, e-mail anything or connect to the RBI, Udyam or GST portals.
- Inter font is not bundled; the system font is used so that the tool has no external dependency.

User Guide - Delayed Payment Interest Calculator

Compound interest at three times the RBI Bank Rate with monthly rests, as required by section 16 of the MSMED Act, 2006.

1. Installation guide

MSME Tools needs no installation file and no account.

Option A - open from the web (easiest). Open the address of the tool in Chrome, Edge, Firefox or Safari (a recent version). In Chrome or Edge, click the *Install* icon in the address bar to keep it like an app. After the first visit the tool also works with the internet switched off.

Option B - run from a folder on your computer. 1. Copy the whole `msme-tools` folder to your computer. 2. Open a terminal inside the folder and run `python3 -m http.server 8080` (or any static file server). 3. Open `http://localhost:8080/interest-calculator/` in your browser.

Opening `index.html` directly from the file system (`file://`) also works for entering data, but the browser will not install the offline copy in that mode (code MT-BRW-003).

Offline use. Visit the tool once while online. A service worker stores the files in the browser. From then on it opens without internet. Your data is always local.

Updating. Reload with Ctrl+F5. Your data is not touched by an update.

2. Getting started

1. Press **+ Company** and fill in your business details (see section 3).
2. Open the **Parties** tab and add the buyer who owes you money.
3. Open the **Invoices** tab, press **+ Add invoice** and enter the invoice, the delivery date and any payments received.
4. Open the **Interest** tab, choose the date up to which interest is wanted, and read the table. Click a row to see the day-by-day ledger.
5. Press **Print / PDF report** to get the statement.

Watch the status next to the **SAVE** button. It must say *All changes saved* before you close the page.

3. Company creation guide

Press **+ Company**. Fill in:

Box	What to type
Business name	Full legal name.
In this company I am the	**Supplier** if you sell and are waiting for payment. **Buyer** if you buy from micro or small suppliers.
Address, e-mail, phone	Used on notices and reports.
My Udyam number, registration date, size category, activity	Needed when you are the supplier. Copy them from your Udyam certificate.
Authorised signatory, designation, place	Printed at the end of a notice.

You can keep many companies. Use the box at the top of the page to switch. Each company has its own parties, invoices and notices. **Delete** removes the company and all its data after a confirmation; take a backup first.

4. Data-entry guide

Dates are chosen with the date box (the browser shows it in your computer's regional format, for example DD-MM-YYYY in India); reports always print DD-MM-YYYY. A date that does not exist (for example 31 February) is refused with a code.

Amounts are typed in rupees with at most two decimals, for example `118000` or `1,18,000.50`. The tool stores every amount as whole paise, so there are no rounding drifts.

Invoice boxes.

Box	Meaning
Invoice date	Date printed on the invoice.
Date of contract / purchase order	Optional. Used to test whether the supplier was already registered when the contract was made.
Date of delivery / service rendered	Day of acceptance. The time limit counts from this date.
Written objection (date)	Only if the buyer objected in writing within 15 days of delivery. Then the time limit counts from the day the supplier removed the objection.
Payment period agreed in writing, credit days	Tick only if the written agreement exists. Maximum 45 days; a larger number is cut to 45. Without a written agreement the limit is 15 days.
Invoice total, taxable value	Total including GST, and value before GST.
Amount excluded from interest	Optional. Use it if your adviser excludes GST or another part from the interest base.
Date expense booked, nature of purchase	Used for section 43B(h).
Payments	One line per payment: date, amount and a reference. Add as many as needed.

If you close the page while an invoice is half typed, the tool offers to **recover the unfinished entry** the next time you open it.

Duplicate protection: the tool warns when the same party, invoice number and date already exist.

5. Calculation methodology

1. **Day of acceptance.** The delivery date. If the buyer objected in writing within 15 days, the day the supplier removed the objection.
2. **Last day for payment.** Acceptance date + agreed days (written agreement, maximum 45) or + 15 days (no agreement). Payment on or before this day attracts no interest.
3. **Interest starts** the next day.
4. **Annual rate** = 3 × RBI Bank Rate. Example: Bank Rate 5.75% gives 17.25%.
5. **Daily interest** = interest-bearing amount × annual rate × 1 ÷ 365 for every day, including the day of payment or the calculation date.
6. **Compounding.** At every monthly rest, the interest accrued so far is added to the amount that bears interest. Rests fall on calendar month-ends (default) or on the monthly anniversary of the first interest day (option).
7. **Rate changes.** By default the Bank Rate in force on each day is used. Option: keep the rate in force on the first day of interest.

8. **Part payments** are applied first to interest and then to principal (default) or the other way round (option). Payments on or before the last day for payment reduce the principal without interest.
9. **Rounding.** Interest is rounded to the nearest paise when it is posted (at a monthly rest, a part payment, a Bank Rate change and the calculation date). All money is held in whole paise.

The ledger for every invoice shows each period, the rate, the interest, the payment and the balances, so each figure can be checked by hand.

6. Legal provisions explained

Provision	Plain meaning
MSMED Act, 2006, s.2(b)	The *appointed day* is the day after 15 days from the day of acceptance. A written objection within 15 days moves the day of acceptance to the day the supplier removes the objection.
s.15	The buyer must pay by the date agreed in writing (never more than 45 days after acceptance) or, with no written agreement, within 15 days.
s.16	If the buyer does not pay, it owes compound interest with monthly rests at three times the RBI Bank Rate, whatever the contract says.
s.17	The buyer must pay the price and the interest.
s.18	The supplier or the buyer can refer the dispute to the Micro and Small Enterprises Facilitation Council, which must decide within 90 days.
s.19	To challenge a Council award the buyer must first deposit 75% of the awarded amount.
s.22	A buyer whose accounts are audited must disclose unpaid principal and interest in its annual statement.
s.23	Interest paid or payable under the Act cannot be claimed as a deduction in computing income.
s.24	Sections 15 to 23 override other laws.
Income-tax Act, 1961, s.43B(h)	A sum payable to a micro or small enterprise after the s.15 time limit is deductible only in the year it is actually paid. First year: 2023-24.
Income-tax Act, 2025, s.37(2)(g)	The corresponding rule from tax year 2026-27.
Supreme Court, Gujarat State Civil Supplies v Mahakali Foods (2022)	The supplier must be a registered micro or small enterprise on the date of the contract. Registration made later helps only for later supplies.

Every rule above is stored with an ID, effective dates, the official source, the verification date and a status (*official*, *secondary* or *convention*) in the **Legal source and rule register** (Help tab). The full text of the Act was read from a reproduction of the Gazette text and the RBI rates from RBI pages; the register says which.

7. Report-generation guide

In the **Interest** tab choose the date and press **Print / PDF report**. A new window opens with the summary, the notes and warnings, the conventions and one ledger per invoice. Use your browser's Print and choose *Save as PDF*. If the browser blocks the window (code MT-RPT-001), allow pop-ups for the site or press **Download report (HTML)** and open the file. **Results as CSV** gives one line per invoice for Excel.

If the result says **PROVISIONAL**, a Bank Rate after the verified table or an unverified rate was used. Verify the rate with RBI before relying on the report.

8. JSON backup and restore guide

Your data is stored only inside this browser. Browser resets, clearing site data, deleting the browser profile or a computer failure can erase it. **Take a JSON backup regularly** and keep a copy outside the computer (pen drive or mail

it to yourself).

- **Backup:** Backup tab → *Download JSON backup*. The file holds all companies, parties, invoices, notices and custom rates, with an integrity checksum.
- **Restore:** Backup tab → *Restore from JSON backup*. The tool checks that the file is valid JSON, is a backup of MSME Tools, is not from a newer version and passes the checksum. Nothing is changed if any check fails. Then choose **Merge** (adds records that are missing) or **Replace all** (clears current data first).
- **Undo:** *Undo last restore* returns to the data as it was before the last restore.
- A banner reminds you if the last backup is more than 30 days old.

9. TXT and CSV import / export guide

The Backup tab can export and import the invoices of the current company as **CSV** (opens in Excel) or **TXT** (plain text).

- Press *Download CSV template* for the headings and one example row.
- **TXT** starts with the line `MSMETOOLS-TXT 1`. Each invoice is a block that starts with `[INVOICE]`, followed by `key=value` lines. Dates may be `YYYY-MM-DD` or `DD-MM-YYYY`. Payments are written `date:amount:note` and separated by `|`.
- On import every row is checked. Rows with problems are skipped and listed with codes. Rows that duplicate an existing invoice (same party, invoice number and date) are skipped, so importing the same file twice does not create copies. Missing parties are created automatically.

10. Error code reference

Every message carries a code such as `MT-DAT-005`. Click the code anywhere in the tool to read its explanation, cause and corrective action. The full list, with severity and whether you can continue, is in the Help tab (*Error code reference*) and in `ERROR_CODES.md`.

11. Troubleshooting guide

Problem	What to do
The page shows *MSME Tools cannot start* with MT-DBS-001	Use a normal (not private) browser window, allow site data, update the browser, reload.
Status shows *Save failed* (MT-DBS-003)	Your latest changes are not stored. Press *Download JSON backup* at once, free disk space, then press SAVE.
Another tab needs this database (MT-DBS-006)	Close other tabs of the tool and reload. Use one tab at a time.
Data seems missing after a browser clean-up	Restore your latest JSON backup (Backup tab). Browser clean-up can delete site data.
An invoice shows red codes in the list	Click it (or *Fix*) and correct the field named by the code.
Interest is marked PROVISIONAL	The calculation date is after 12 Nov 2026 or an unverified rate is used. Check the RBI site and add the rate in Rate Master.
Report window does not open	Allow pop-ups, or use *Download report (HTML)*.
Import skipped rows	Read the list of row numbers and codes; correct the file; import again.
Offline copy not working	Open the tool once online from an http(s) address; do not use `file://`.

12. Frequently asked questions

Does my data go to Techmin? No. There is no server. All calculations and storage happen in your browser.

Can I use it without internet? Yes, after the first visit.

Why is the interest rate three times the Bank Rate? Section 16 of the MSMED Act fixes it.

Is the contract rate ignored? Yes. Section 16 applies notwithstanding any agreement, and section 24 gives the Act priority.

What if the supplier registered on Udyam after the contract? The Supreme Court held that supplier status is judged on the date of the contract, so the tool blocks the statutory claim for that invoice (MT-LEG-010).

Why do you ask for the Udyam registration date? To test the point above.

Does section 43B(h) apply to medium enterprises? No.

What about traders? The position is not settled in the sources read. The tool treats them as not covered by default with a warning; you can change the setting.

Why does the tool ask me to choose conventions? Because the Act does not say how to count days, when the monthly rests fall, or how part payments are applied. Your choice is printed on each report.

A new RBI rate was announced after 12 Nov 2026. What do I do? Add it in Rate Master. Results that depend on it are marked PROVISIONAL until you verify it.

Where is the menu? The sections of each tool are listed in the left-hand menu (a scrolling bar at the top on a phone). The links under the app name open Help, Error Codes, Release Notes, Privacy and Feedback.

Can I undo a deletion? Deletions are permanent. Take a backup first.

13. Privacy and data-storage guide

- Everything you type stays in **your browser's IndexedDB** on this computer. Light settings such as colour theme and the last company opened are kept in LocalStorage.
- The tool has **no server, no account, no tracking, no analytics and no third-party scripts**. The page's security policy only allows files from its own folder. No data about you or your invoices is sent to Techmin or anyone else.
- Calculations are done by your own computer. Reports are built on your computer and printed or saved by you.
- Browser storage can be lost through browser resets, clearing site data, deleting the profile or device failure. **Regular JSON backups are essential.**
- Anyone who uses the same browser profile can open the tool and see the data. Use a separate profile or log-out of the computer account if the computer is shared.
- To remove all data: delete the company inside the tool, or clear site data for the address in the browser settings.

14. Sending feedback

Press **Feedback** in the links under the app name. Choose what the message is about, add the error code if you saw one, write your message and press **Send by e-mail**. Your mail program opens with the message ready; press Send there. If no mail program opens, press **Save as file** and attach the text file to an e-mail to info@techmincsc.in.

- Nothing is sent automatically. The tool has no server, and your invoices, parties and company data are never added to the message.

- The message carries the tool name and version, the date and your browser name so that we can reproduce a problem. You can read exactly what will be sent in the saved text file.
- For a wrong legal rule or calculation, say which rule, which invoice dates and amounts you used, and what you expected. Anonymise names before sending.

15. Limitations and professional review. MSME Tools is a working aid. It applies the rules listed in the Legal source and rule register as understood on 12 November 2026. It does not give legal, tax or accounting advice. Several points are not settled by the statute or by the sources read (which Bank Rate applies over a long delay, the order in which part payments are appropriated, whether GST forms part of the interest base, whether suppliers who only trade are covered). The application shows each such point as a *convention*, lets you choose, and prints your choice on every report. Before sending a notice, filing a return, signing an audit report or making a claim before the Facilitation Council, have the result checked by a chartered accountant or an advocate. The built-in RBI Bank Rate table is verified up to 12 November 2026; later changes must be added by you in the Rate Master and are marked provisional until verified.

Error Code Reference

Every message in MSME Tools carries one of these codes. `Continue?` says whether you can carry on working after the message.

Input validation

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-INP-001	Party name missing	Error	No	The buyer or supplier name is empty or too short.	The field was left blank or has fewer than 2 characters.	Type the full legal name of the other party.
MT-INP-002	Invoice number missing	Error	No	Every record needs an invoice or bill number.	The field was left blank.	Enter the invoice number exactly as printed on the invoice.
MT-INP-003	Company name missing	Error	No	A company needs a name of at least 2 characters.	The company name box is empty.	Type the name of your business.
MT-INP-004	Invoice amount invalid	Error	No	The invoice total must be a positive amount in rupees with at most two decimal places.	Letters, a negative number, more than two decimals, or zero was typed.	Enter an amount such as 118000 or 118,000.50.
MT-INP-005	Payment amount invalid	Error	No	Each payment must be a positive amount with at most two decimals.	A payment line is blank, zero, negative or has too many decimals.	Correct or delete the payment line.
MT-INP-006	Credit days invalid	Error	No	Written-agreement credit days must be a whole number of days (0 or more).	The credit days box is blank or contains text.	Enter the number of days agreed in writing, up to 45.
MT-INP-007	Excluded amount invalid	Error	No	The amount excluded from interest cannot be negative or larger than the invoice total.	A wrong figure was typed.	Enter 0 or a figure not above the invoice total.
MT-INP-008	Taxable value invalid	Error	No	Taxable value must be above zero and not more than the invoice total.	Taxable value is blank, zero or larger than the total.	Enter the value before GST, or choose 'Use full invoice value' in settings.
MT-INP-009	Udyam number format looks wrong	Warning	Yes	Udyam numbers look like UDYAM-XX-00-0000000.	A typing mistake or an old Udyog Aadhaar number.	Check the certificate. You may continue, but the notice will print the number as typed.
MT-INP-010	Notice period invalid	Error	No	The payment period in a demand notice must be a whole number of days from 1 to 90.	Blank or out-of-range entry.	Enter a number such as 15.
MT-INP-011	Required document detail missing	Error	No	A detail that the document needs is empty.	A starred (*) box was left blank.	Fill in every box marked with a star.
MT-INP-012	Paragraph, annexure or age entry invalid	Error	No	Paragraph count must be a whole number from 1, annexures must be single capital letters in order (for example A to T) and age must be 18 to 119.	A typing error.	Correct the entry and preview again.

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-INP-013	Goods line not understood	Error	No	Each line must be: Description	Quantity	Unit price. Quantity must be a positive number and unit price a positive amount in rupees.
MT-INP-014	Feedback message is empty	Warning	Yes	Write at least a few words about what you want to tell us before sending the feedback.	The message box was left blank or has fewer than 5 characters.	Describe the problem or suggestion. For a problem, include the error code and what you were doing.

Date validation

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-DAT-001	Date of delivery / acceptance missing or invalid	Error	No	The date of actual delivery of goods or rendering of service is required and must be a real calendar date.	The date is blank, written in the wrong order, or does not exist (for example 31 February).	Pick the date from the date box (shown as DD-MM-YYYY).
MT-DAT-002	Date is not a valid calendar date	Error	No	A date field holds something that is not a real date.	Typing error, impossible day or month.	Re-enter the date using the date picker.
MT-DAT-003	Dates are in the wrong order	Error	No	A later event is dated earlier than an earlier event (for example objection removed before it was made).	Dates were swapped.	Correct the dates so they run in the order the events happened.
MT-DAT-004	Calculation date missing or invalid	Error	No	The 'interest up to' date is blank or not a real date.	The date box was cleared.	Choose the date up to which interest is required.
MT-DAT-005	Payment date invalid	Error	No	A payment line has a date that is blank or not a real date.	The date box in the payment row is empty.	Enter a valid date for every payment.
MT-DAT-006	Expense date invalid	Error	No	The date on which the expense was booked (or invoice date) is not valid.	Blank or wrong date.	Enter the booking date or the invoice date.
MT-DAT-007	Invoice date missing or invalid	Error	No	A valid invoice date is required.	Blank or impossible date.	Enter the date printed on the invoice.
MT-DAT-008	Delivery date is more than a year before the invoice date	Warning	Yes	This is unusual and may be a typing error in the year.	A wrong year was typed.	Check both dates. You may continue.

Legal eligibility

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-LEG-001	Supplier size category not known	Warning	Yes	Whether the supplier is micro, small or medium decides whether the Act and s.43B(h) apply.	Category left as 'Not known'.	Open the supplier's Udyam certificate and select the category.
MT-LEG-002	Medium enterprise - statutory interest not available	Error	No	Sections 15 and 16 protect only micro and small enterprises.	The supplier is a medium enterprise.	Statutory interest cannot be calculated. Check the contract for contractual interest instead.

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-LEG-003	Interest period starts before the Act came into force	Error	No	The MSMED Act payment provisions started on 2 October 2006.	Delivery date is too old.	Check the dates. Claims before that date are outside this application.
MT-LEG-004	Agreed credit period above 45 days reduced to 45	Warning	Yes	The proviso to section 15 does not allow a written credit period above 45 days.	A longer period appears in the contract.	In calculations the application uses 45 days. When drafting an agreement it refuses a longer period. Keep a note of the contract wording.
MT-LEG-005	Calculation conventions apply	Info	Yes	The Act does not fix day count, rest dates or appropriation order. The application has used the conventions shown in the Settings panel.	Normal notice shown with every statutory calculation.	Review the conventions and keep a copy of the report with the settings noted.
MT-LEG-006	Acceptance pending - written objection not yet removed	Warning	Yes	A written objection within 15 days postpones the day of acceptance until the supplier removes it.	An objection date is entered but no removal date.	Enter the date the supplier removed the objection, or leave the objection blank.
MT-LEG-007	Objection after 15 days ignored	Warning	Yes	Only a written objection made within 15 days of delivery postpones acceptance.	Objection is dated more than 15 days after delivery.	No action needed. The delivery date has been used as the day of acceptance.
MT-LEG-008	Supplier Udyam number missing	Warning	Yes	Without the Udyam registration number, coverage cannot be confirmed.	Number not entered.	Enter the number from the supplier's Udyam certificate.
MT-LEG-009	Udyam registration date missing	Warning	Yes	The date of registration is needed to test whether the supplier was registered when the contract was made.	Date not entered.	Enter the date shown on the Udyam certificate.
MT-LEG-010	Supplier registered after the contract / supply date	Error	No	The Supreme Court held that supplier status is judged on the date of the contract; registration made later helps only for later supplies.	The Udyam registration date is later than the contract (or delivery) date.	Statutory interest and s.43B(h) cannot be treated as applicable to this invoice. Take professional advice.
MT-LEG-011	Supplier is a trader - position not settled	Warning	Yes	Whether suppliers engaged only in trade fall within the MSMED Act protection and s.43B(h) is not settled in the sources read.	Supplier activity is set to 'Trading'.	Default: the invoice is treated as not covered. Change the setting if your adviser takes another view.
MT-LEG-012	Expense is before FY 2023-24	Info	Yes	Section 43B(h) applies from assessment year 2024-25 (financial year 2023-24).	Expense date is earlier than 1 April 2023.	No disallowance is computed for this invoice.
MT-LEG-013	Medium enterprise - s.43B(h) does not apply	Info	Yes	Section 43B(h) covers only micro and small enterprises.	Supplier category is medium.	No disallowance is computed.
MT-LEG-014	Capital purchase - professional review needed	Warning	Yes	For capital items the deduction is through depreciation, and the interaction with s.43B(h) needs review.	Nature of purchase is 'Capital'.	Ask your tax adviser how to treat this item.
MT-LEG-015	Unpaid beyond the time limit	Info	Yes	Part of this invoice was not paid within the time limit and has not been paid since.	Payments are missing or late.	The amount stays disallowed until it is paid.

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-LEG-016	No classification limits for this date	Error	No	The helper has limits only from 1 July 2020.	An earlier date was chosen.	Use the Udyam certificate instead.
MT-LEG-017	Seller registered after the agreement date	Warning	Yes	Supplier status is judged on the date of the contract. A seller whose Udyam registration is later than the agreement date may not get the protection of the MSMED Act under this agreement.	The seller's Udyam registration date is after the agreement date.	Check the registration date and the agreement date. Take professional advice before relying on sections 15 and 16.

Calculation

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-CAL-001	Calculation could not be completed	Error	No	An unexpected condition stopped the calculation.	Unusual combination of dates or amounts.	Check the invoice entries and try again. If this persists, export a backup and contact support with this code.
MT-CAL-002	Calculation period too long	Error	No	The interest period is longer than the safety limit of the calculator.	A very old date, or a typing error in the year.	Check the dates. Periods up to about 50 years are supported.
MT-CAL-003	Payments exceed amount due	Warning	Yes	The payments are more than the principal and interest outstanding on that date.	Over-payment or advance payment.	The surplus is ignored in the calculation. Check the payment entries.

RBI rate data

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-RAT-001	No Bank Rate found for the date	Error	No	The rate master has no rate in force on the interest start date.	Date is earlier than the first rate row (03-03-2003).	Check the dates.
MT-RAT-002	Calculation date is after the verified rate data	Warning	Yes	The built-in Bank Rate table was verified up to 12-11-2026. The RBI may have changed the rate since.	You chose a later date, or the rate master is out of date.	Check the RBI site, add any new rate in Rate Master, and re-run. Results are marked PROVISIONAL meanwhile.
MT-RAT-003	Unverified rate used	Warning	Yes	A rate entered by the user (not verified by the application) was used.	A custom rate row is in force during the period.	Verify the rate against the RBI press release and keep the reference. The result is marked PROVISIONAL.
MT-RAT-004	Rate entry invalid	Error	No	A new rate needs a valid effective date and a Bank Rate between 0.01 and 30.00 per cent.	A typing error.	Re-enter using the format 5.75.
MT-RAT-005	Rate already exists for that date	Error	No	A rate with the same effective date is already in the master.	Duplicate entry.	Change the date or delete the older custom entry.

Database

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-DBS-001	Browser storage (IndexedDB) not available	Error	No	This browser cannot store data locally, so work cannot be saved.	Private browsing, blocked site data or an old browser.	Use a normal window of Chrome, Edge or Firefox, allow site data, then reload. Export files to keep work.
MT-DBS-002	Database could not be opened	Error	No	The browser refused to open the local database.	Storage blocked, disk full, or the profile is damaged.	Close other tabs of this tool, free disk space, reload. Restore from a JSON backup if the data is missing.
MT-DBS-003	Save failed	Error	Yes	The database did not confirm the save. Your latest changes are NOT stored.	Disk full, storage quota exceeded, or browser storage cleared.	Download a JSON backup now, free space, then press Save again.
MT-DBS-004	Saved data could not be read	Error	No	The database opened but reading the records failed.	A damaged browser profile or interrupted write.	Reload. If it persists, restore the last JSON backup.
MT-DBS-005	Save was cancelled by the browser	Error	Yes	The save transaction was aborted before it completed.	Another tab changed the database, or storage was reset.	Press Save again. Use only one tab of this tool at a time.
MT-DBS-006	Another tab is blocking an update	Warning	Yes	A newer version of the database cannot be opened while another tab is open.	The tool is open in two tabs or windows.	Close the other tabs and reload.
MT-DBS-007	Record not found	Error	Yes	The record you opened no longer exists.	It was deleted in another tab or by a restore.	Reload the list.

Import / export

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-IMP-001	File is not valid JSON	Error	No	The file could not be read as a backup. Nothing was imported.	The file is damaged, cut short, or is not a backup file.	Pick the original backup file. Do not edit it in a text editor.
MT-IMP-002	Not a backup from this tool	Error	No	The file does not carry the MSME Tools backup marker or belongs to a different tool.	A wrong file was chosen.	Choose a file exported from this tool's Backup tab.
MT-IMP-003	Backup failed its integrity check	Error	No	The checksum stored in the file does not match its contents. Nothing was imported.	The file was changed or damaged after export.	Use another copy of the backup.
MT-IMP-004	Backup is from a newer version	Error	No	The file was made by a newer version of this tool and cannot be read safely.	Version mismatch.	Update the application (reload with Ctrl+F5) and try again.
MT-IMP-005	CSV headings not recognised	Error	No	The first row of the CSV must match the template headings.	A different CSV layout was chosen.	Export a CSV from this tool and use it as the template.
MT-IMP-006	Some rows were skipped	Warning	Yes	One or more rows failed validation and were not imported. The list shows the row numbers and reasons.	Missing or invalid values.	Correct the file and import those rows again.
MT-IMP-	TXT file is not in the expected	Error	No	The text file must begin with the MSMETOOLS-TXT header and	A different text file was chosen or the	Export a TXT file from this tool and

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
007	structure			use [INVOICE] blocks.	structure was edited.	edit only the values.
MT-IMP-008	Duplicate invoices skipped	Info	Yes	Invoices with the same party, invoice number and date already exist and were not added again.	Importing the same file twice.	No action needed.
MT-IMP-009	File too large	Error	No	Files above 20 MB are refused to protect the browser.	Wrong file chosen.	Split the data into several files.
MT-IMP-010	Export could not be created	Error	Yes	The browser could not build the download file.	Out of memory or download blocked.	Allow downloads from this site and try again.

Report generation

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-RPT-001	Report window was blocked	Warning	Yes	The browser blocked the pop-up used for printing.	Pop-ups are blocked.	Allow pop-ups for this site, or use 'Download report (HTML)'.
MT-RPT-002	Nothing to report	Warning	Yes	There are no invoices that can be calculated.	The list is empty or every invoice has errors.	Add invoices or fix the errors listed.
MT-RPT-003	Report could not be generated	Error	Yes	Building the report failed.	An invoice contains data the report cannot show.	Open each invoice, correct red fields, and retry.

Browser compatibility

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-BRW-001	Browser too old	Error	No	This tool needs BigInt and IndexedDB support.	An old browser.	Update Chrome, Edge, Firefox or Safari to a recent version.
MT-BRW-002	Persistent storage not granted	Info	Yes	The browser may clear local data when disk space is low.	Browser policy.	Take a JSON backup regularly.
MT-BRW-003	Offline installation not available	Warning	Yes	The service worker could not be registered, so offline use after install may not work.	File opened from disk (file://) or unsupported browser.	Serve the folder from a local web server or use the hosted copy once online.

Backup recovery

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
MT-BKP-001	Restore failed and was rolled back	Error	Yes	The restore could not be completed. Your existing data was kept.	Damaged file or a database error.	Try another backup copy.
MT-BKP-002	No backup has been taken	Info	Yes	You have not downloaded a JSON backup yet.	First use.	Open the Backup tab and download a backup.
MT-BKP-003	Unfinished entry recovered	Warning	Yes	An entry that was being typed when the page closed has been found.	The page was closed or crashed before saving.	Review the recovered entry and save or discard it.
MT-BKP-	Backup is more than 30 days old	Warning	Yes	Browser data can be lost. A fresh backup is advised.	No recent backup.	Download a JSON backup now.

Code	Title	Severity	Continue?	Explanation	Possible cause	Corrective action
004						

User Guide - Section 43B(h) Applicability Checker

Find which payables to micro and small enterprises are disallowed until actually paid under section 43B(h).

1. Installation guide

MSME Tools needs no installation file and no account.

Option A - open from the web (easiest). Open the address of the tool in Chrome, Edge, Firefox or Safari (a recent version). In Chrome or Edge, click the *Install* icon in the address bar to keep it like an app. After the first visit the tool also works with the internet switched off.

Option B - run from a folder on your computer. 1. Copy the whole `msme-tools` folder to your computer. 2. Open a terminal inside the folder and run `python3 -m http.server 8080` (or any static file server). 3. Open `http://localhost:8080/section-43bh-checker/` in your browser.

Opening `index.html` directly from the file system (`file://`) also works for entering data, but the browser will not install the offline copy in that mode (code MT-BRW-003).

Offline use. Visit the tool once while online. A service worker stores the files in the browser. From then on it opens without internet. Your data is always local.

Updating. Reload with Ctrl+F5. Your data is not touched by an update.

2. Getting started

1. Press **+ Company**, choose **Buyer** as the role and fill in your business details.
2. Open the **Suppliers** tab and add each micro or small supplier with its Udyam number, registration date and size category from the Udyam certificate.
3. Open the **Purchases** tab and enter each purchase: invoice date, delivery date, amounts and every payment made.
4. Open **43B(h) Check**, choose the financial year, and read the figures. Click a row to see the working.
5. Press **Print / PDF report** to get the report for your tax audit file.

Watch the status next to the **SAVE** button. It must say *All changes saved* before you close the page.

3. Company creation guide

Press **+ Company**. Fill in:

Box	What to type
Business name	Full legal name.
In this company I am the	**Supplier** if you sell and are waiting for payment. **Buyer** if you buy from micro or small suppliers.
Address, e-mail, phone	Used on notices and reports.
My Udyam number, registration date, size category, activity	Needed when you are the supplier. Copy them from your Udyam certificate.
Authorised signatory, designation, place	Printed at the end of a notice.

You can keep many companies. Use the box at the top of the page to switch. Each company has its own parties, invoices and notices. **Delete** removes the company and all its data after a confirmation; take a backup first.

4. Data-entry guide

Dates are chosen with the date box (the browser shows it in your computer's regional format, for example DD-MM-YYYY in India); reports always print DD-MM-YYYY. A date that does not exist (for example 31 February) is refused with a code.

Amounts are typed in rupees with at most two decimals, for example `118000` or `1,18,000.50`. The tool stores every amount as whole paise, so there are no rounding drifts.

Invoice boxes.

Box	Meaning
Invoice date	Date printed on the invoice.
Date of contract / purchase order	Optional. Used to test whether the supplier was already registered when the contract was made.
Date of delivery / service rendered	Day of acceptance. The time limit counts from this date.
Written objection (date)	Only if the buyer objected in writing within 15 days of delivery. Then the time limit counts from the day the supplier removed the objection.
Payment period agreed in writing, credit days	Tick only if the written agreement exists. Maximum 45 days; a larger number is cut to 45. Without a written agreement the limit is 15 days.
Invoice total, taxable value	Total including GST, and value before GST.
Amount excluded from interest	Optional. Use it if your adviser excludes GST or another part from the interest base.
Date expense booked, nature of purchase	Used for section 43B(h).
Payments	One line per payment: date, amount and a reference. Add as many as needed.

If you close the page while an invoice is half typed, the tool offers to **recover the unfinished entry** the next time you open it.

Duplicate protection: the tool warns when the same party, invoice number and date already exist.

5. Calculation methodology

1. **Is the supplier covered?** The supplier must be a **micro or small** enterprise (not medium) with an **Udyam number** and a **registration date on or before the supply date**. Suppliers engaged only in trading are treated as *not covered* by default, with a warning, because the position is not settled; you can change this in Settings.
2. **Time limit.** Day of acceptance + agreed days (written agreement, maximum 45) or + 15 days.
3. **Paid in time.** Payments dated on or before the last day for payment, up to the invoice total.
4. **Beyond the limit.** Invoice total − paid in time.
5. **Disallowance in the year of the expense.** The beyond-limit part of the taxable value (or of the full value if you choose that in Settings), worked out in proportion.
6. **Allowed on payment.** Each payment made after the last day is allowed in the financial year in which it is made.
7. **Net effect for a year.** Disallowance of that year's expenses, less the part paid later in the same year, plus the deduction for earlier years' amounts paid this year.

Section 43B(h) applies to expenses of **financial year 2023-24 onwards**. Years up to 2025-26 fall under the Income-tax Act, 1961, section 43B(h). From 2026-27 the Income-tax Act, 2025 applies and the corresponding provision is stated as section 37(2)(g).

6. Legal provisions explained

Provision	Plain meaning
MSMED Act, 2006, s.2(b)	The *appointed day* is the day after 15 days from the day of acceptance. A written objection within 15 days moves the day of acceptance to the day the supplier removes the objection.
s.15	The buyer must pay by the date agreed in writing (never more than 45 days after acceptance) or, with no written agreement, within 15 days.
s.16	If the buyer does not pay, it owes compound interest with monthly rests at three times the RBI Bank Rate, whatever the contract says.
s.17	The buyer must pay the price and the interest.
s.18	The supplier or the buyer can refer the dispute to the Micro and Small Enterprises Facilitation Council, which must decide within 90 days.
s.19	To challenge a Council award the buyer must first deposit 75% of the awarded amount.
s.22	A buyer whose accounts are audited must disclose unpaid principal and interest in its annual statement.
s.23	Interest paid or payable under the Act cannot be claimed as a deduction in computing income.
s.24	Sections 15 to 23 override other laws.
Income-tax Act, 1961, s.43B(h)	A sum payable to a micro or small enterprise after the s.15 time limit is deductible only in the year it is actually paid. First year: 2023-24.
Income-tax Act, 2025, s.37(2)(g)	The corresponding rule from tax year 2026-27.
Supreme Court, Gujarat State Civil Supplies v Mahakali Foods (2022)	The supplier must be a registered micro or small enterprise on the date of the contract. Registration made later helps only for later supplies.

Every rule above is stored with an ID, effective dates, the official source, the verification date and a status (*official*, *secondary* or *convention*) in the **Legal source and rule register** (Help tab). The full text of the Act was read from a reproduction of the Gazette text and the RBI rates from RBI pages; the register says which.

7. Report-generation guide

In the **43B(h) Check** tab choose the financial year and press **Print / PDF report**. The report has the summary, the invoice-wise table, the notes and warnings and the conventions. Use your browser's Print and choose *Save as PDF*. If the browser blocks the window (code MT-RPT-001), allow pop-ups or press **Download report (HTML)**. **Results as CSV** gives one line per invoice for Excel.

8. JSON backup and restore guide

Your data is stored only inside this browser. Browser resets, clearing site data, deleting the browser profile or a computer failure can erase it. **Take a JSON backup regularly** and keep a copy outside the computer (pen drive or mail it to yourself).

- **Backup:** Backup tab → *Download JSON backup*. The file holds all companies, parties, invoices, notices and custom rates, with an integrity checksum.
- **Restore:** Backup tab → *Restore from JSON backup*. The tool checks that the file is valid JSON, is a backup of MSME Tools, is not from a newer version and passes the checksum. Nothing is changed if any check fails. Then choose **Merge** (adds records that are missing) or **Replace all** (clears current data first).

- **Undo:** *Undo last restore* returns to the data as it was before the last restore.
- A banner reminds you if the last backup is more than 30 days old.

9. TXT and CSV import / export guide

The Backup tab can export and import the invoices of the current company as **CSV** (opens in Excel) or **TXT** (plain text).

- Press *Download CSV template* for the headings and one example row.
- **TXT** starts with the line `MSMETOOLS-TXT 1`. Each invoice is a block that starts with `[INVOICE]`, followed by `key=value` lines. Dates may be `YYYY-MM-DD` or `DD-MM-YYYY`. Payments are written `date:amount:note` and separated by `|`.
- On import every row is checked. Rows with problems are skipped and listed with codes. Rows that duplicate an existing invoice (same party, invoice number and date) are skipped, so importing the same file twice does not create copies. Missing parties are created automatically.

10. Error code reference

Every message carries a code such as `MT-DAT-005`. Click the code anywhere in the tool to read its explanation, cause and corrective action. The full list, with severity and whether you can continue, is in the Help tab (*Error code reference*) and in `ERROR_CODES.md`.

11. Troubleshooting guide

Problem	What to do
The page shows *MSME Tools cannot start* with MT-DBS-001	Use a normal (not private) browser window, allow site data, update the browser, reload.
Status shows *Save failed* (MT-DBS-003)	Your latest changes are not stored. Press *Download JSON backup* at once, free disk space, then press SAVE.
Another tab needs this database (MT-DBS-006)	Close other tabs of the tool and reload. Use one tab at a time.
Data seems missing after a browser clean-up	Restore your latest JSON backup (Backup tab). Browser clean-up can delete site data.
An invoice shows red codes in the list	Click it (or *Fix*) and correct the field named by the code.
Interest is marked PROVISIONAL	The calculation date is after 12 Nov 2026 or an unverified rate is used. Check the RBI site and add the rate in Rate Master.
Report window does not open	Allow pop-ups, or use *Download report (HTML)*.
Import skipped rows	Read the list of row numbers and codes; correct the file; import again.
Offline copy not working	Open the tool once online from an http(s) address; do not use `file://`.

12. Frequently asked questions

Does my data go to Techmin? No. There is no server. All calculations and storage happen in your browser.

Can I use it without internet? Yes, after the first visit.

Why is the interest rate three times the Bank Rate? Section 16 of the MSMED Act fixes it.

Is the contract rate ignored? Yes. Section 16 applies notwithstanding any agreement, and section 24 gives the Act priority.

What if the supplier registered on Udyam after the contract? The Supreme Court held that supplier status is judged on the date of the contract, so the tool blocks the statutory claim for that invoice (MT-LEG-010).

Why do you ask for the Udyam registration date? To test the point above.

Does section 43B(h) apply to medium enterprises? No.

What about traders? The position is not settled in the sources read. The tool treats them as not covered by default with a warning; you can change the setting.

Why does the tool ask me to choose conventions? Because the Act does not say how to count days, when the monthly rests fall, or how part payments are applied. Your choice is printed on each report.

A new RBI rate was announced after 12 Nov 2026. What do I do? Add it in Rate Master. Results that depend on it are marked PROVISIONAL until you verify it.

Where is the menu? The sections of each tool are listed in the left-hand menu (a scrolling bar at the top on a phone). The links under the app name open Help, Error Codes, Release Notes, Privacy and Feedback.

Can I undo a deletion? Deletions are permanent. Take a backup first.

13. Privacy and data-storage guide

- Everything you type stays in **your browser's IndexedDB** on this computer. Light settings such as colour theme and the last company opened are kept in LocalStorage.
- The tool has **no server, no account, no tracking, no analytics and no third-party scripts**. The page's security policy only allows files from its own folder. No data about you or your invoices is sent to Techmin or anyone else.
- Calculations are done by your own computer. Reports are built on your computer and printed or saved by you.
- Browser storage can be lost through browser resets, clearing site data, deleting the profile or device failure. **Regular JSON backups are essential.**
- Anyone who uses the same browser profile can open the tool and see the data. Use a separate profile or log-out of the computer account if the computer is shared.
- To remove all data: delete the company inside the tool, or clear site data for the address in the browser settings.

14. Sending feedback

Press **Feedback** in the links under the app name. Choose what the message is about, add the error code if you saw one, write your message and press **Send by e-mail**. Your mail program opens with the message ready; press Send there. If no mail program opens, press **Save as file** and attach the text file to an e-mail to info@techmincsc.in.

- Nothing is sent automatically. The tool has no server, and your invoices, parties and company data are never added to the message.
- The message carries the tool name and version, the date and your browser name so that we can reproduce a problem. You can read exactly what will be sent in the saved text file.
- For a wrong legal rule or calculation, say which rule, which invoice dates and amounts you used, and what you expected. Anonymise names before sending.

15. Limitations and professional review. MSME Tools is a working aid. It applies the rules listed in the Legal source and rule register as understood on 12 November 2026. It

does not give legal, tax or accounting advice. Several points are not settled by the statute or by the sources read (which Bank Rate applies over a long delay, the order in which part payments are appropriated, whether GST forms part of the interest base, whether suppliers who only trade are covered). The application shows each such point as a *convention*, lets you choose, and prints your choice on every report. Before sending a notice, filing a return, signing an audit report or making a claim before the Facilitation Council, have the result checked by a chartered accountant or an advocate. The built-in RBI Bank Rate table is verified up to 12 November 2026; later changes must be added by you in the Rate Master and are marked provisional until verified.

User Guide - Delayed Payment Notice Generator

Prepare a demand notice for overdue MSME dues, with the interest working attached.

1. Installation guide

MSME Tools needs no installation file and no account.

Option A - open from the web (easiest). Open the address of the tool in Chrome, Edge, Firefox or Safari (a recent version). In Chrome or Edge, click the *Install* icon in the address bar to keep it like an app. After the first visit the tool also works with the internet switched off.

Option B - run from a folder on your computer. 1. Copy the whole `msme-tools` folder to your computer. 2. Open a terminal inside the folder and run `python3 -m http.server 8080` (or any static file server). 3. Open `http://localhost:8080/notice-generator/` in your browser.

Opening `index.html` directly from the file system (`file://`) also works for entering data, but the browser will not install the offline copy in that mode (code MT-BRW-003).

Offline use. Visit the tool once while online. A service worker stores the files in the browser. From then on it opens without internet. Your data is always local.

Updating. Reload with Ctrl+F5. Your data is not touched by an update.

2. Getting started

1. Press **+ Company**, choose **Supplier** as the role and fill in your business details, your Udyam number and registration date and your signatory.
2. Open the **Buyers** tab and add the buyer with the full postal address.
3. Open the **Invoices** tab and enter the unpaid invoices and any part payments.
4. Open **Create Notice**, choose the buyer and the notice date, tick the invoices, and press **Preview notice**.
5. Print the notice, or download it as a Word file and put it on your letterhead. Save it to the **Notice Register**.

Watch the status next to the **SAVE** button. It must say *All changes saved* before you close the page.

3. Company creation guide

Press **+ Company**. Fill in:

Box	What to type
Business name	Full legal name.
In this company I am the	**Supplier** if you sell and are waiting for payment. **Buyer** if you buy from micro or small suppliers.
Address, e-mail, phone	Used on notices and reports.
My Udyam number, registration date, size category, activity	Needed when you are the supplier. Copy them from your Udyam certificate.
Authorised signatory, designation, place	Printed at the end of a notice.

You can keep many companies. Use the box at the top of the page to switch. Each company has its own parties, invoices and notices. **Delete** removes the company and all its data after a confirmation; take a backup first.

4. Data-entry guide

Dates are chosen with the date box (the browser shows it in your computer's regional format, for example DD-MM-YYYY in India); reports always print DD-MM-YYYY. A date that does not exist (for example 31 February) is refused with a code.

Amounts are typed in rupees with at most two decimals, for example `118000` or `1,18,000.50`. The tool stores every amount as whole paise, so there are no rounding drifts.

Invoice boxes.

Box	Meaning
Invoice date	Date printed on the invoice.
Date of contract / purchase order	Optional. Used to test whether the supplier was already registered when the contract was made.
Date of delivery / service rendered	Day of acceptance. The time limit counts from this date.
Written objection (date)	Only if the buyer objected in writing within 15 days of delivery. Then the time limit counts from the day the supplier removed the objection.
Payment period agreed in writing, credit days	Tick only if the written agreement exists. Maximum 45 days; a larger number is cut to 45. Without a written agreement the limit is 15 days.
Invoice total, taxable value	Total including GST, and value before GST.
Amount excluded from interest	Optional. Use it if your adviser excludes GST or another part from the interest base.
Date expense booked, nature of purchase	Used for section 43B(h).
Payments	One line per payment: date, amount and a reference. Add as many as needed.

If you close the page while an invoice is half typed, the tool offers to **recover the unfinished entry** the next time you open it.

Duplicate protection: the tool warns when the same party, invoice number and date already exist.

5. Calculation methodology

The notice uses the same interest engine as the Interest Calculator:

1. Day of acceptance and last day for payment as in the MSMED Act, section 15 (15 days, or the written agreement up to 45 days).
2. Interest from the next day at **3 × RBI Bank Rate** with monthly rests, up to and including the notice date.
3. Part payments are applied to interest first (default) or principal first (option).
4. The notice demands principal and interest up to the notice date, with further interest until payment, within the number of days you choose (default 15).

An annexure with the day-by-day working is attached to every notice. The conventions used are printed under the working.

6. Legal provisions explained

Provision	Plain meaning
MSMED Act, 2006, s.2(b)	The *appointed day* is the day after 15 days from the day of acceptance. A written objection within 15 days moves the day of acceptance to the day the supplier removes the objection.
s.15	The buyer must pay by the date agreed in writing (never more than 45 days after acceptance) or, with no written agreement, within 15 days.
s.16	If the buyer does not pay, it owes compound interest with monthly rests at three times the RBI Bank Rate, whatever the contract says.
s.17	The buyer must pay the price and the interest.
s.18	The supplier or the buyer can refer the dispute to the Micro and Small Enterprises Facilitation Council, which must decide within 90 days.
s.19	To challenge a Council award the buyer must first deposit 75% of the awarded amount.
s.22	A buyer whose accounts are audited must disclose unpaid principal and interest in its annual statement.
s.23	Interest paid or payable under the Act cannot be claimed as a deduction in computing income.
s.24	Sections 15 to 23 override other laws.
Income-tax Act, 1961, s.43B(h)	A sum payable to a micro or small enterprise after the s.15 time limit is deductible only in the year it is actually paid. First year: 2023-24.
Income-tax Act, 2025, s.37(2)(g)	The corresponding rule from tax year 2026-27.
Supreme Court, Gujarat State Civil Supplies v Mahakali Foods (2022)	The supplier must be a registered micro or small enterprise on the date of the contract. Registration made later helps only for later supplies.

Every rule above is stored with an ID, effective dates, the official source, the verification date and a status (*official*, *secondary* or *convention*) in the **Legal source and rule register** (Help tab). The full text of the Act was read from a reproduction of the Gazette text and the RBI rates from RBI pages; the register says which.

7. Report-generation guide

In **Create Notice** pick the buyer, the date and the invoices and press **Preview notice**. From the preview you can **Print / PDF**, **Download Word (.doc)** (open it in Word and place it on your letterhead), **Download text (.txt)** and **Save to register**. The Notice Register keeps number, date, buyer, invoices and amount, and can re-open a notice for the same figures. If the browser blocks the print window (code MT-RPT-001), allow pop-ups.

8. JSON backup and restore guide

Your data is stored only inside this browser. Browser resets, clearing site data, deleting the browser profile or a computer failure can erase it. **Take a JSON backup regularly** and keep a copy outside the computer (pen drive or mail it to yourself).

- **Backup:** Backup tab → *Download JSON backup*. The file holds all companies, parties, invoices, notices and custom rates, with an integrity checksum.
- **Restore:** Backup tab → *Restore from JSON backup*. The tool checks that the file is valid JSON, is a backup of MSME Tools, is not from a newer version and passes the checksum. Nothing is changed if any check fails. Then choose **Merge** (adds records that are missing) or **Replace all** (clears current data first).
- **Undo:** *Undo last restore* returns to the data as it was before the last restore.
- A banner reminds you if the last backup is more than 30 days old.

9. TXT and CSV import / export guide

The Backup tab can export and import the invoices of the current company as **CSV** (opens in Excel) or **TXT** (plain text).

- Press *Download CSV template* for the headings and one example row.
- **TXT** starts with the line `MSMETOOLS-TXT 1`. Each invoice is a block that starts with `[INVOICE]`, followed by `key=value` lines. Dates may be `YYYY-MM-DD` or `DD-MM-YYYY`. Payments are written `date:amount:note` and separated by `|`.
- On import every row is checked. Rows with problems are skipped and listed with codes. Rows that duplicate an existing invoice (same party, invoice number and date) are skipped, so importing the same file twice does not create copies. Missing parties are created automatically.

10. Error code reference

Every message carries a code such as `MT-DAT-005`. Click the code anywhere in the tool to read its explanation, cause and corrective action. The full list, with severity and whether you can continue, is in the Help tab (*Error code reference*) and in `ERROR_CODES.md`.

11. Troubleshooting guide

Problem	What to do
The page shows *MSME Tools cannot start* with MT-DBS-001	Use a normal (not private) browser window, allow site data, update the browser, reload.
Status shows *Save failed* (MT-DBS-003)	Your latest changes are not stored. Press *Download JSON backup* at once, free disk space, then press SAVE.
Another tab needs this database (MT-DBS-006)	Close other tabs of the tool and reload. Use one tab at a time.
Data seems missing after a browser clean-up	Restore your latest JSON backup (Backup tab). Browser clean-up can delete site data.
An invoice shows red codes in the list	Click it (or *Fix*) and correct the field named by the code.
Interest is marked PROVISIONAL	The calculation date is after 12 Nov 2026 or an unverified rate is used. Check the RBI site and add the rate in Rate Master.
Report window does not open	Allow pop-ups, or use *Download report (HTML)*.
Import skipped rows	Read the list of row numbers and codes; correct the file; import again.
Offline copy not working	Open the tool once online from an http(s) address; do not use `file://`.

12. Frequently asked questions

Does my data go to Techmin? No. There is no server. All calculations and storage happen in your browser.

Can I use it without internet? Yes, after the first visit.

Why is the interest rate three times the Bank Rate? Section 16 of the MSMED Act fixes it.

Is the contract rate ignored? Yes. Section 16 applies notwithstanding any agreement, and section 24 gives the Act priority.

What if the supplier registered on Udyam after the contract? The Supreme Court held that supplier status is judged on the date of the contract, so the tool blocks the statutory claim for that invoice (MT-LEG-010).

Why do you ask for the Udyam registration date? To test the point above.

Does section 43B(h) apply to medium enterprises? No.

What about traders? The position is not settled in the sources read. The tool treats them as not covered by default with a warning; you can change the setting.

Why does the tool ask me to choose conventions? Because the Act does not say how to count days, when the monthly rests fall, or how part payments are applied. Your choice is printed on each report.

A new RBI rate was announced after 12 Nov 2026. What do I do? Add it in Rate Master. Results that depend on it are marked PROVISIONAL until you verify it.

Where is the menu? The sections of each tool are listed in the left-hand menu (a scrolling bar at the top on a phone). The links under the app name open Help, Error Codes, Release Notes, Privacy and Feedback.

Can I undo a deletion? Deletions are permanent. Take a backup first.

13. Privacy and data-storage guide

- Everything you type stays in **your browser's IndexedDB** on this computer. Light settings such as colour theme and the last company opened are kept in LocalStorage.
- The tool has **no server, no account, no tracking, no analytics and no third-party scripts**. The page's security policy only allows files from its own folder. No data about you or your invoices is sent to Techmin or anyone else.
- Calculations are done by your own computer. Reports are built on your computer and printed or saved by you.
- Browser storage can be lost through browser resets, clearing site data, deleting the profile or device failure. **Regular JSON backups are essential.**
- Anyone who uses the same browser profile can open the tool and see the data. Use a separate profile or log-out of the computer account if the computer is shared.
- To remove all data: delete the company inside the tool, or clear site data for the address in the browser settings.

14. Sending feedback

Press **Feedback** in the links under the app name. Choose what the message is about, add the error code if you saw one, write your message and press **Send by e-mail**. Your mail program opens with the message ready; press Send there. If no mail program opens, press **Save as file** and attach the text file to an e-mail to info@techmincsc.in.

- Nothing is sent automatically. The tool has no server, and your invoices, parties and company data are never added to the message.
- The message carries the tool name and version, the date and your browser name so that we can reproduce a problem. You can read exactly what will be sent in the saved text file.
- For a wrong legal rule or calculation, say which rule, which invoice dates and amounts you used, and what you expected. Anonymise names before sending.

15. Limitations and professional review. MSME Tools is a working aid. It applies the rules listed in the Legal source and rule register as understood on 12 November 2026. It does not give legal, tax or accounting advice. Several points are not settled by the statute or by the sources read (which Bank Rate applies over a long delay, the order in which part payments are appropriated, whether GST forms part of the interest base,

whether suppliers who only trade are covered). The application shows each such point as a *convention*, lets you choose, and prints your choice on every report. Before sending a notice, filing a return, signing an audit report or making a claim before the Facilitation Council, have the result checked by a chartered accountant or an advocate. The built-in RBI Bank Rate table is verified up to 12 November 2026; later changes must be added by you in the Rate Master and are marked provisional until verified.

User Guide - MSME Document Generator

Prepare the sale-of-goods agreement, the claimant affidavit before the Facilitation Council and the buyer's declaration for a section 18 claim.

1. Installation guide

MSME Tools needs no installation file and no account.

Option A - open from the web (easiest). Open the address of the tool in Chrome, Edge, Firefox or Safari (a recent version). In Chrome or Edge, click the *Install* icon in the address bar to keep it like an app. After the first visit the tool also works with the internet switched off.

Option B - run from a folder on your computer. 1. Copy the whole `msme-tools` folder to your computer. 2. Open a terminal inside the folder and run `python3 -m http.server 8080` (or any static file server). 3. Open `http://localhost:8080/document-generator/` in your browser.

Opening `index.html` directly from the file system (`file://`) also works for entering data, but the browser will not install the offline copy in that mode (code MT-BRW-003).

Offline use. Visit the tool once while online. A service worker stores the files in the browser. From then on it opens without internet. Your data is always local.

Updating. Reload with Ctrl+F5. Your data is not touched by an update.

2. Getting started

1. Press **+ Company** and fill in your business details, including your Udyam number and registration date.
2. Open the **Parties** tab and add the other party with its full address.
3. Open **Create Document**, choose the document (agreement, affidavit or declaration) and the other party, fill in the boxes marked with a star, and press **Preview document**.
4. Print it, or download it as a Word file to place on your letterhead. Press **Save to register** to keep the entries so that the document can be re-opened and edited later.

Watch the status next to the **SAVE** button. It must say *All changes saved* before you close the page.

3. Company creation guide

Press **+ Company**. Fill in:

Box	What to type
Business name	Full legal name.
In this company I am the	**Supplier** if you sell and are waiting for payment. **Buyer** if you buy from micro or small suppliers.
Address, e-mail, phone	Used on notices and reports.
My Udyam number, registration date, size category, activity	Needed when you are the supplier. Copy them from your Udyam certificate.
Authorised signatory, designation, place	Printed at the end of a notice.

You can keep many companies. Use the box at the top of the page to switch. Each company has its own parties, invoices and notices. **Delete** removes the company and all its data after a confirmation; take a backup first.

4. Data-entry guide

Dates are chosen with the date box (the browser shows it in your computer's regional format, for example DD-MM-YYYY in India); reports always print DD-MM-YYYY. A date that does not exist (for example 31 February) is refused with a code.

Amounts are typed in rupees with at most two decimals, for example `118000` or `1,18,000.50`. The tool stores every amount as whole paise, so there are no rounding drifts.

Invoice boxes.

Box	Meaning
Invoice date	Date printed on the invoice.
Date of contract / purchase order	Optional. Used to test whether the supplier was already registered when the contract was made.
Date of delivery / service rendered	Day of acceptance. The time limit counts from this date.
Written objection (date)	Only if the buyer objected in writing within 15 days of delivery. Then the time limit counts from the day the supplier removed the objection.
Payment period agreed in writing, credit days	Tick only if the written agreement exists. Maximum 45 days; a larger number is cut to 45. Without a written agreement the limit is 15 days.
Invoice total, taxable value	Total including GST, and value before GST.
Amount excluded from interest	Optional. Use it if your adviser excludes GST or another part from the interest base.
Date expense booked, nature of purchase	Used for section 43B(h).
Payments	One line per payment: date, amount and a reference. Add as many as needed.

If you close the page while an invoice is half typed, the tool offers to **recover the unfinished entry** the next time you open it.

Duplicate protection: the tool warns when the same party, invoice number and date already exist.

5. Calculation methodology

This tool drafts documents; it calculates only what a document needs.

- **Sale-of-goods agreement.** Each goods line is *quantity* × *unit price* in whole paise (quantity up to three decimals, rounded to the nearest paisa). The total price is the sum of the lines. The payment article states the credit period you choose (0 to 45 days, a larger number is refused) from the day of acceptance, the 15-day rule for objections, interest at three times the RBI Bank Rate with monthly rests (section 16) and the reference to the Facilitation Council (section 18).
- **Seller's registration test.** If the seller's Udyam registration date is after the agreement date the tool warns (MT-LEG-017), because supplier status is judged on the date of the contract.
- **Affidavit and declaration.** Text is filled from your entries; paragraph numbers, annexure letters and age are checked.

The three documents follow the layout of the model forms supplied (Model Declaration Form, ODR Affidavit, Draft contract template). Where the model contained a typing slip (for example *do very* in the verification) the corrected

wording is used.

6. Legal provisions explained

Provision	Plain meaning
MSMED Act, 2006, s.2(b)	The *appointed day* is the day after 15 days from the day of acceptance. A written objection within 15 days moves the day of acceptance to the day the supplier removes the objection.
s.15	The buyer must pay by the date agreed in writing (never more than 45 days after acceptance) or, with no written agreement, within 15 days.
s.16	If the buyer does not pay, it owes compound interest with monthly rests at three times the RBI Bank Rate, whatever the contract says.
s.17	The buyer must pay the price and the interest.
s.18	The supplier or the buyer can refer the dispute to the Micro and Small Enterprises Facilitation Council, which must decide within 90 days.
s.19	To challenge a Council award the buyer must first deposit 75% of the awarded amount.
s.22	A buyer whose accounts are audited must disclose unpaid principal and interest in its annual statement.
s.23	Interest paid or payable under the Act cannot be claimed as a deduction in computing income.
s.24	Sections 15 to 23 override other laws.
Income-tax Act, 1961, s.43B(h)	A sum payable to a micro or small enterprise after the s.15 time limit is deductible only in the year it is actually paid. First year: 2023-24.
Income-tax Act, 2025, s.37(2)(g)	The corresponding rule from tax year 2026-27.
Supreme Court, Gujarat State Civil Supplies v Mahakali Foods (2022)	The supplier must be a registered micro or small enterprise on the date of the contract. Registration made later helps only for later supplies.

Every rule above is stored with an ID, effective dates, the official source, the verification date and a status (*official*, *secondary* or *convention*) in the **Legal source and rule register** (Help tab). The full text of the Act was read from a reproduction of the Gazette text and the RBI rates from RBI pages; the register says which.

7. Report-generation guide

After **Preview document** you can **Print / PDF**, **Download Word (.doc)** (open in Word, add your letterhead, adjust the wording) and **Save to register**. The register keeps every entry you typed so you can **Re-open** and edit. If the browser blocks the print window (code MT-RPT-001), allow pop-ups.

Every document is a **draft for review by an advocate** before it is signed, sworn or filed. Affidavits must be sworn before a Notary Public or Oath Commissioner as the Council requires.

8. JSON backup and restore guide

Your data is stored only inside this browser. Browser resets, clearing site data, deleting the browser profile or a computer failure can erase it. **Take a JSON backup regularly** and keep a copy outside the computer (pen drive or mail it to yourself).

- **Backup:** Backup tab → *Download JSON backup*. The file holds all companies, parties, invoices, notices and custom rates, with an integrity checksum.
- **Restore:** Backup tab → *Restore from JSON backup*. The tool checks that the file is valid JSON, is a backup of MSME Tools, is not from a newer version and passes the checksum. Nothing is changed if any check fails. Then choose **Merge** (adds records that are missing) or **Replace all** (clears current data first).

- **Undo:** *Undo last restore* returns to the data as it was before the last restore.
- A banner reminds you if the last backup is more than 30 days old.

9. TXT and CSV import / export guide

The Backup tab can export and import the invoices of the current company as **CSV** (opens in Excel) or **TXT** (plain text).

- Press *Download CSV template* for the headings and one example row.
- **TXT** starts with the line `MSMETOOLS-TXT 1`. Each invoice is a block that starts with `[INVOICE]`, followed by `key=value` lines. Dates may be `YYYY-MM-DD` or `DD-MM-YYYY`. Payments are written `date:amount:note` and separated by `|`.
- On import every row is checked. Rows with problems are skipped and listed with codes. Rows that duplicate an existing invoice (same party, invoice number and date) are skipped, so importing the same file twice does not create copies. Missing parties are created automatically.

10. Error code reference

Every message carries a code such as `MT-DAT-005`. Click the code anywhere in the tool to read its explanation, cause and corrective action. The full list, with severity and whether you can continue, is in the Help tab (*Error code reference*) and in `ERROR_CODES.md`.

11. Troubleshooting guide

Problem	What to do
The page shows *MSME Tools cannot start* with MT-DBS-001	Use a normal (not private) browser window, allow site data, update the browser, reload.
Status shows *Save failed* (MT-DBS-003)	Your latest changes are not stored. Press *Download JSON backup* at once, free disk space, then press SAVE.
Another tab needs this database (MT-DBS-006)	Close other tabs of the tool and reload. Use one tab at a time.
Data seems missing after a browser clean-up	Restore your latest JSON backup (Backup tab). Browser clean-up can delete site data.
An invoice shows red codes in the list	Click it (or *Fix*) and correct the field named by the code.
Interest is marked PROVISIONAL	The calculation date is after 12 Nov 2026 or an unverified rate is used. Check the RBI site and add the rate in Rate Master.
Report window does not open	Allow pop-ups, or use *Download report (HTML)*.
Import skipped rows	Read the list of row numbers and codes; correct the file; import again.
Offline copy not working	Open the tool once online from an http(s) address; do not use `file://`.

12. Frequently asked questions

Does my data go to Techmin? No. There is no server. All calculations and storage happen in your browser.

Can I use it without internet? Yes, after the first visit.

Why is the interest rate three times the Bank Rate? Section 16 of the MSMED Act fixes it.

Is the contract rate ignored? Yes. Section 16 applies notwithstanding any agreement, and section 24 gives the Act priority.

What if the supplier registered on Udyam after the contract? The Supreme Court held that supplier status is judged on the date of the contract, so the tool blocks the statutory claim for that invoice (MT-LEG-010).

Why do you ask for the Udyam registration date? To test the point above.

Does section 43B(h) apply to medium enterprises? No.

What about traders? The position is not settled in the sources read. The tool treats them as not covered by default with a warning; you can change the setting.

Why does the tool ask me to choose conventions? Because the Act does not say how to count days, when the monthly rests fall, or how part payments are applied. Your choice is printed on each report.

A new RBI rate was announced after 12 Nov 2026. What do I do? Add it in Rate Master. Results that depend on it are marked PROVISIONAL until you verify it.

Where is the menu? The sections of each tool are listed in the left-hand menu (a scrolling bar at the top on a phone). The links under the app name open Help, Error Codes, Release Notes, Privacy and Feedback.

Can I undo a deletion? Deletions are permanent. Take a backup first.

13. Privacy and data-storage guide

- Everything you type stays in **your browser's IndexedDB** on this computer. Light settings such as colour theme and the last company opened are kept in LocalStorage.
- The tool has **no server, no account, no tracking, no analytics and no third-party scripts**. The page's security policy only allows files from its own folder. No data about you or your invoices is sent to Techmin or anyone else.
- Calculations are done by your own computer. Reports are built on your computer and printed or saved by you.
- Browser storage can be lost through browser resets, clearing site data, deleting the profile or device failure. **Regular JSON backups are essential.**
- Anyone who uses the same browser profile can open the tool and see the data. Use a separate profile or log-out of the computer account if the computer is shared.
- To remove all data: delete the company inside the tool, or clear site data for the address in the browser settings.

14. Sending feedback

Press **Feedback** in the links under the app name. Choose what the message is about, add the error code if you saw one, write your message and press **Send by e-mail**. Your mail program opens with the message ready; press Send there. If no mail program opens, press **Save as file** and attach the text file to an e-mail to info@techmincsc.in.

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