

600543

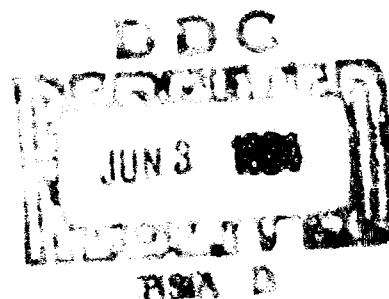
**PREVENTION OF DETERIORATION CENTER
DIVISION OF CHEMISTRY AND CHEMICAL TECHNOLOGY
NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL**

22-p 0.75

**Bibliography
on
VAPOR PHASE CORROSION INHIBITORS
FOR NONFERROUS AND FERROUS METALS**

Compiled by Hans Janecka

November 4, 1963



**3101 Constitution Avenue
Washington, D. C. 20418**

PDC Search No. 63-046

PDL-49679

Prevention of Deterioration Center
Division of Chemistry and Chemical Technology
National Academy of Sciences-National Research Council

Bibliography

on

VAPOR PHASE CORROSION INHIBITORS
FOR NONFERROUS AND FERROUS METALS

Compiled by Hans Janicka

November 4, 1963

2101 Constitution Avenue
Washington 25, D. C.

- A-332 U.S. Naval Gun Factory. Metallurgical and Testing Section
(M.H. Bradford).
PROTECTION OF ORDNANCE INSTRUMENTS BY SILICA-GEL, VAPOR
PHASE INHIBITOR AND BREATHER TUBES.
Its Test Report No. 95-47 (November 1947) 17 p.
- A-387 Baker, Hayward R.
PROPERTIES, NAVAL USES AND EFFECT ON NON-FERROUS METALS OF
VAPOR PHASE INHIBITORS VPI 220 AND 260.
U.S. Naval Research Lab, Report F-3047 (January 1947) 39 p.
- A-576 U.S. Naval Air Material Center, Philadelphia, Pa.
Aeronautical Materials Lab. (P.A. Gelber).
REPORT ON COMPARISON OF PACKAGES FOR THE EVALUATION OF VAPOR
PHASE CORROSION INHIBITORS AS PRESERVATION MATERIALS.
Its Report TED No. NAM 424506 (January 1948) 19 p.
- A-997 U.S. Research and Development Board. Committee on Ordnance.
Panel on Ordnance Materials.
PROCEEDINGS OF PANEL ON ORDNANCE MATERIALS MEETING ON PRESERVATION
OF MATERIAL AND PACKAGING.
December 1950. 125 p.
- A-1005 U.S. Naval Engineering Experiment Station, Annapolis, Md.
(Frank E. Clarke and M.Q. Garner).
EFFECT OF SHELL VAPOR PHASE INHIBITOR ON STEEL AND BEARING
METALS.
Its Report C-1461-B (August 1950) 22 p.
- A-1111(1) U.S. Arsenal, Rock Island, Ill. Laboratory (L.H. Wagner).
THE USE OF VOLATILE CORROSION INHIBITORS AS A PRESERVATIVE
MEDIUM FOR LONG TERM STORAGE OF ORDNANCE MATERIEL.
Its Project TB5-1101C, Report 51-546 (March 1951) 39 p.
- A-1111(3) U.S. Arsenal, Rock Island, Ill. Laboratory (R.E. Johnson),
THE USE OF VOLATILE CORROSION INHIBITORS AS A PRESERVATIVE
MEDIUM FOR LONG TERM STORAGE OF ORDNANCE MATERIEL. ADDENDUM
III. RESULTS AFTER FOUR YEARS OF EXPOSURE.
Project TB5-1101C, Report 53-4921 (December 1953) 31 p.
- A-1111(4) U.S. Arsenal, Rock Island, Ill. Laboratory (R.E. Johnson).
THE USE OF VOLATILE CORROSION INHIBITORS AS A PRESERVATIVE
MEDIUM FOR LONG TERM STORAGE OF ORDNANCE MATERIEL. ADDENDUM
IV. RESULTS AFTER FIVE YEARS OF EXPOSURE.
Project TB5-1101C, Report 55-82 (January 1955) 32 p.

- A-1260 U.S. Wright Air Development Center, Power Plane Lab. (T.F. Davidson),
SERVICE TEST OF SHELL OIL COMPANY'S VAPOR PHASE CORROSION INHIBITOR,
Its Technical Note WCLP 53-91; ... ASTIA Doc. 6262 (March 1953) 10 p.
- A-1303(15) U.S. Wright Air Development Center, Directorate of Research, Materials Lab. (A.A. Mohaupt and R.K. Stern).
PACKAGING REQUIREMENTS FOR BEARINGS. PART 15. THE PERFORMANCE OF VOLATILE CORROSION INHIBITORS FOR PACKAGING ANTIFRICTION BEARINGS.
Its Technical Report 53-38; ... ASTIA Doc. 49627 (July 1954) 28 p.
- A-1322 U.S. Naval Research Laboratory (Hayward R. Baker).
VOLATILE RUST INHIBITORS.
Its Report 4319 (March 1954) 19 p.
- A-1385 U.S. Naval Gun Factory, Engineering Dept. Engineering Research and Evaluation Div. (M.R. Dyer and T. McGee).
FIRST REPORT OF THE VCI PROJECT ReLB-201, INVESTIGATION OF VOLATILE CORROSION INHIBITOR PACKAGING MATERIALS FOR PROTECTING ORDNANCE PARTS AND SUBASSEMBLIES FOR LONG TERM STORAGE. REPORT OF ONE YEAR STORAGE.
Its Test No. NGF-T-21-54, U.S. Bureau of Ordnance NAVORD Report 9918; ... ASTIA Doc. 30487 (May 1954) 27 p.
- A-1386 U.S. Naval Gun Factory, Engineering Dept. Engineering Research and Evaluation Div. (M.R. DKyer and T.M. McGee).
VCI TEST PROJECT ReLB-201. REPORT OF NINETY DAY CYCLIC EXPOSURE TEST FOR INVESTIGATION OF VOLATILE CORROSION INHIBITOR PRESERVATIVES.
Its Test No. NGF-T-21-54, U.S. Bureau of Ordnance NAVORD Report 9911; ... ASTIA Doc. 30484 (April 1954) 22 p.
- A-1452 U.S. Army, Springfield, Mass. Research and Development Div. (F.L. Keleher and J. Szanto).
EFFECTS OF VOLATILE CORROSION INHIBITORS UPON NONFERROUS METALS. (FIRST PARTIAL).
Its Report SA-TR20-2299; U.S. Ordnance Corps Report ORDTX-10; ... ASTIA Doc. 46650 (April 1954) 38 p.

- A-1635 U.S. Naval Gun Factory. Engineering Dept. Engineering Research and Evaluation Div. (A.M. Vogts and T. McGee).
SECOND REPORT OF VCI TEST PROJECT RelB-201, INVESTIGATION OF VOLATILE CORROSION INHIBITOR PACKAGING MATERIALS FOR PROTECTING ORDNANCE PARTS AND SUBASSEMBLIES FOR LONG TERM STORAGE. REPORT OF TWO YEARS STORAGE.
Its Test NGF-T-44-55, U.S. Bureau of Ordnance NAVORD 5093; ... ASTIA Doc. 68858 (1955) 13 p.
- A-1681 LeMar, R.L.
AN ANALYTICAL METHOD FOR UREA AND AN EVALUATION OF VCI MATERIALS CONTAINING UREA.
U.S. Arsenal, Rock Island, Ill. Laboratory Report 54-3372, U.S. Ordnance Corps. Project TB5-1101C, Report 7; ... ASTIA Doc. 48397 (October 1954) 29 p.
- A-1682 Johnson, R.E., and R.L. LeMar.
AN EVALUATION OF ANALYTICAL METHODS FOR VOLATILE CORROSION INHIBITORS.
U.S. Arsenal, Rock Island, Ill. Laboratory Report 53-2670, U.S. Ordnance Corps. Project TB5-1101C, Report 4; ... ASTIA Doc. 21305 (September 1953) 40 p.
- A-1717 Shields, W.J., W.F. McTeague and A. Gallaccio.
EXPERIMENTAL LONG TERM STORAGE PROGRAM, COMPREHENSIVE REPORT FOR PERIOD 1 JANUARY 1948 TO 31 DECEMBER 1954, PROJECT 2/198.
U.S. Frankford Arsenal, Philadelphia, Pa. Report R-1269 (June 1955) 87 p.
- A-1753 Wayne, F.H.
EXPERIMENTAL PACKAGING OF THE CAL. .30 MI CARBINE IN VOLATILE CORROSION INHIBITOR (V.C.I.) MATERIALS.
U.S. Arsenal, Rock Island, Ill. Laboratory Technical Report 56-387, U.S. Ordnance Corps. Project TB5-1101C, Report 12; ... ASTIA Doc. 89636 (February 1956) 25 p.
- A-1781 Johnson, R.E.
THE USE OF VOLATILE CORROSION INHIBITORS AS A PRESERVATIVE MEDIUM FOR LONG TERM STORAGE OF ORDNANCE MATERIEL. ADDENDUM V. RESULTS AFTER SIX YEARS OF EXPOSURE.
U.S. Arsenal, Rock Island, Ill. Laboratory. Report 55-4161, U.S. Ordnance Corps. Project TB5-1101C, Report 10; ... ASTIA Doc. 78467 (November 1955) 24 p.
- B-482 Gt. Brit. Dept. of Scientific and Industrial Research. Chemical Research Laboratory, Teddington.
APPLICATIONS OF SODIUM BENZOATE AS A CORROSION INHIBITOR, DEVELOPED BY CHEMICAL RESEARCH LABORATORY.
June 1949. 4 p.

- B-573 Australia. Dept. of Supply. Defence Standards Labs. (A.E. Cox and E.C. Kuster).
VAPOUR PHASE CORROSION INHIBITORS.
Its Circular 16 (January 1954) 10 p.
- C-1068 Nox-Rust Chemical Corp., Chicago, Ill.
THE NOX-RUST VAPOR WRAPPER "HOW" BOOK.
May 1950. 16 p.
- F-702 Weiler, W.
KORROSIONSSICHERE VERPACKUNG VON WERKZEUGEN, MASCHINENTEILEN
UND MASCHINEN [CORROSIONPROOF PACKING OF TOOLS, MACHINE
PARTS, AND MACHINES (in German)].
Chem. Ztg. 76:402-406 (June 1952) 7 p.
- F-734 Schikorr, Gerhard.
UEBER DIE SCHWITZWASSERBILDUNG AUS DER NATURLICHEN FEUCHTIGKEIT
VON PAPIER AUF VERPACKTEM EISEN ["SWEATING" OF PAPER AND ITS
ENCLOSED IRON GOODS (in German)].
Werkstoffe u. Korrosion 4:81-86 (March 1953) 8 p.
- F-835 Balezin, S.A., and V.P. Baramnik.
[INHIBITORS OF ATMOSPHERIC CORROSION (in Russian)].
Doklady Akad. Nauk S.S.S.R. 95:345-347 (March 1954) 3 p.
- F-942 Fischer, Hellmuth.
INHIBITION UND INHIBITOREN [INHIBITION AND INHIBITORS (in
German)].
Werkstoffe und Korrosion 6:26-32 (January 1955)
- F-1102 Paul, Werner.
SYSTEMATISCHE VERSUCHE ZUR PRUFUNG DER KORROSIONS-VERHINDERNDEN
WIRKUNG VON VPI AUF EINE REIHE VON GEBRAUCHLICHEN METALLEN
[SYSTEMATIC INVESTIGATIONS TO TEST THE ANTICORROSIVE
EFFICACY OF VPI UPON A NUMBER OF COMMON METALS (in German)].
Werkstoffe u. Korrosion 7:189-198 (April 1956)
- F-1211 Kraus, A.
UEBER DAS VERHALTEN VON SHELL V.P.I. 260 GEGENUEBER NITROCELLULOSE-
LACKEN. 2. [INFLUENCE OF SHELL VPI 260 ON NITROCELLULOSE
LACQUERS, 2. (in German)].
Fette Seifen Anstrichmittel 56:676-677 (September 1954)

- G-142(1) Wachter, Aaron.
NOTES ON VAPOR PHASE INHIBITORS OF CORROSION.
Emeryville, Calif., Shell Development Co. (June 1948) 4 p.
- G-3224 Anonymous.
RUST PREVENTION IN PACKAGING.
Patra J. 11(1):18-19 (January 1948) 2 p.
- G-3728 Wachter, Aaron.
VAPOR-PHASE INHIBITORS.
Modern Packaging 22(4):147-148 (December 1948) 2 p.
- G-4361 Anonymous.
WHAT THE ARMED FORCES WANT.
Modern Packaging 22(3):93-97 (November 1948)
- G-5134 LaQue, Frank L.
PREVENTION OF CORROSION BY MEANS OTHER THAN PROTECTIVE
COATINGS.
Corrosion 6:72-78 (February 1950)
- G-5486 Hoover, J.R., and Thomas Arba.
CAUSES AND CONTROL OF WHITE RUSTING ON ZINC COATED SHEETS.
SEPARATE American Iron and Steel Institute, New York, N.Y.
Technical Committee Notivities (1949) p. 243-251
- G-5743 Zusi, Charles J.
NEW DEVELOPMENTS IN PACKAGING MATERIALS AND METHODS.
Speech before the Society of Industrial and Materials Handling
Engineers, Detroit, Mich., Oct. 5, 1949; Also published in
Fibre Containers 34(11):100-104, Nov. 1949 (1949) 18 p.
- G-6073 Fischer, Edward W.
A STARTLING NEW DEVELOPMENT IN INDUSTRIAL PROTECTIVE WRAPPING.
Industry 16(1):17-18, 50, 52, 54, 56 (October 1950) 4 p.
- G-6183 Foster, Gilbert.
VOLATILE CORROSION INHIBITORS; NEW RUST PREVENTATIVES MAY
REVOLUTIONIZE ORDNANCE PACKAGING.
Ordnance 35:158-160 (Sept./Oct. 1950) 4 p.

- G-6739 Anonymous.
METAL PARTS CORROSION-PROOFED IN VAPOR ENVELOPES.
 Steel 128(11):100,103 (March 1951) 2 p.
- G-6908 U.S. Deterioration Prevention Committee. Corrosion Subcommittee.
MINUTES OF THE "SYMPOSIUM ON CORROSION".
 Held at the National Academy of Sciences, Feb. 3 & 4, 1949
 (1951) 207 p.
- G-6952 Anonymous.
VAPOR CORROSION CONTROL.
 Chem. Week 58(24):24 (June 1951) 1 p.
- G-7184 Laker, Hayward R., and William A. Zisman.
LIQUID AND VAPOR CORROSION INHIBITORS.
 U.S. Naval Research Lab. Report 3824; Lubrication Eng. 7:117-122
 (June 1951) 6 p.
- G-7217 Wachter, Aaron, T. Skei and N. Stillman.
**DICYCLOHEXYLAMMONIUM NITRITE, A VOLATILE INHIBITOR FOR CORROSION
 PREVENTIVE PACKAGING.**
 Corrosion 7:284-294 (September 1951) 11 p.
- G-7307 Joy, Kenneth E.
SHROUDS FOR MACHINE TOOLS.
 Modern Plastics 29(2):98-99 (October 1951) 2 p.
- G-7400 Ripich, N.L.
WHAT'S NEW IN MILITARY PACKAGING SPECIFICATIONS?
 Am. Paper Converter 25(11):9,52,54 (November 1951) 3 p.
- G-7416 Reiniger, Scott H.
VPI JOINS FIGHT AGAINST RUST.
 Aviation Week 55(11):48-49 (September 1951) 2 p.
- G-7473 Anonymous.
GREASE COATING FOR RIFLES ELIMINATED.
 Tech. Data Digest 16(12):5-6 (December 1951) 2 p.
- G-7476 Anonymous.
BARRIER MATERIALS SEAL OUT CORROSION.
 Steel 129(11):98 (September 1951) 1 p.

- G-7507 O'Keefe, Philip, Jr.
VOLATILE CRYSTALS PREVENT CORROSION OF PACKAGED STEEL PARTS.
Materials & Methods 34(6):84-86 (December 1951) 3 p.
- G-7527 Anonymous.
BOX TREATMENT TO REDUCE RUSTING.
Fibre Containers 35(5):71 (May 1950) 1 p.
- G-7629 Voce, E.
COPPER AND COPPER ALLOYS; A SURVEY OF TECHNICAL PROGRESS DURING
1951.
Metallurgia 45:16-22 (January 1952) 9 p.
- G-7890 Stroud, E.G., and William H.J. Vernon.
THE PREVENTION OF CORROSION IN PACKAGING. I. THE USE OF SODIUM
BENZOATE AS A CORROSION-INHIBITOR IN WRAPPINGS. II. TEMPORARY
PROTECTIVES FROM RUBBER LATEX AND OTHER AQUEOUS DISPERSIONS.
III. VAPOUR-PHASE INHIBITORS.
J. Applied Chem. (London) 2:166-184 (April 1952) 19 p.
- G-8321 Bennister, H.L.
VAPOUR PHASE INHIBITORS.
Research 5:424-432 (September 1952) 9 p.
- G-8392 Anonymous.
NON-CORROSIVE GREASEPROOF WRAPPING MATERIALS.
Paper Sales 12(5):16-17,55 (May 1952) 3 p.
- G-8946 Lambrecht, R.C.
HALT RUST IN PARTS SHIPMENTS.
Factory Management and Maintenance 111(3):148-149 (March 1953) 2 p.
- G-9125 Black, A.R., and Aaron Wachter.
DEFEATING CORROSION; VAPOR PHASE INHIBITORS PROVIDE EASY MEANS
OF PROTECTING STEEL FROM RUST.
Ordnance 37:1052-1054 (May/June 1953) 3 p.
- G-9514 Anonymous.
NEW USES FOR VCI [VOLATILE CORROSION INHIBITORS].
Modern Packaging 27(2):156-160 (October 1953) 5 p.

- G-9574 Williams, A.E.
IMPREGNATED PAPER AS AN ANTI-CORROSIVE.
World's Paper Trade Rev. 140:262,267-268,270 (July 1953) 4 p.
- G-9776 Wolfe, William R.
PACKAGED CORROSION LOSING TO VPI.
Steel 133(17):132,134-135 (October 1953) 3 p.
- G-10201 Harbron, John D.
HOW VCI HAS COME OF AGE.
Can. Packaging 6(10):85-87,117 (October 1953) 4 p.
- G-10740 Howards and Sons, Ltd., Ilford, Essex, Eng.
CFC. VAPOUR-PHASE CORROSION INHIBITOR.
Machinery (London) 85:630-634 (September 1954) 5 p.
- G-10741 Baker, Hayward R.
VOLATILE RUST INHIBITORS.
Ind. Eng. Chem. 46:2592-2598 (December 1954) 8 p.
- G-10753 Anonymous.
CFC. A NEW VAPOUR PHASE INHIBITOR.
Corrosion Technol. 2:8 (January 1955) 1 p.
- G-11129 National Association of Corrosion Engineers, Houston, Texas.
Technical Unit Committee T 3A on Corrosion Inhibitors.
SOME CORROSION INHIBITORS. A REFERENCE LIST.
Publication 55-3; Corrosion 11(4):65-67 (April 1955) 3 p.
- G-12620 Cox, A.B., and E.C. Kuster.
VOLATILE CORROSION INHIBITORS.
Corrosion Prevention and Control 3(4):89-812,814 (April 1956)
- G-12808 Paine, F.A.
CORROSION OF PACKAGED ARTICLES.
Corrosion Technol. 3:191-193 (June 1956)
- G-13002 Angel, T.E.
CORROSION OF ALUMINIUM IN CONTACT WITH PAPER.
Brit. Paper & Board Makers' Assoc., Tech. Sect., Proc. 36:499-508 (December 1955)

- G-13003 Oldfield, E.A.
CORROSION OF CUTLERY IN CONTACT WITH PACKING MATERIAL.
Brit. Paper & Board Makers' Assoc., Tech. Sect., Proc. 36:509-534 (December 1955)
- P-1160 Stroud, Edward G.
IMPROVEMENTS IN OR RELATING TO PACKAGING.
Gt. Brit. Pat. Spec. 596,160; December 30, 1947. 2 p.
- P-1590 Lieber, Eugene (assignor to Nox-Rust Chemical Corp., Ill.).
CORROSION INHIBITOR FOR METALS.
U.S. Pat. 2,512,949; June 27, 1950. 2 p.
- P-1642 Schwoegler, Edward J., and Clemens A. Hutter (assignors to Nox-Rust Chemical Corp., Ill.).
CORROSION INHIBITING COMPOSITIONS.
U.S. Pat. 2,521,311; September 5, 1950. 4 p.
- P-1828 Hutter, Clemens A. (assignor to Nox-Rust Chemical Co., Ill.).
CARTON HAVING METAL CORROSION INHIBITING CHARACTERISTICS.
U.S. Pat. 2,534,201; December 12, 1950. 4 p.
- P.2112 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., San Francisco, Calif.).
CORROSION INHIBITION WITH A MIXTURE OF INHIBITORS OF DIFFERING VOLATILITY.
U.S. Pat. 2,577,219; December 4, 1951. 6 p.
- P-2236 Moore, Robert J., and Aaron Wachter (assignors to Shell Development Co., San Francisco, Calif.).
VAPOR PHASE CORROSION INHIBITION.
U.S. Pat. 2,592,451; April 8, 1952. 5 p.
- P-2491 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., San Francisco, Calif.).
VAPOR-PHASE CORROSION INHIBITOR.
U.S. Pat. 2,629,649; February 24, 1953. 3 p.
- P-2493 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., San Francisco, Calif.).
VAPOR PHASE INHIBITORS OF CORROSION.
U.S. Pat. 2,630,368; March 3, 1953. 6 p.

- P-2667 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., San Francisco, Calif.).
COMPOSITIONS FOR PROTECTION OF METALS AGAINST CORROSION.
U.S. Pat. 2,643,176; June 23, 1953. 7 p.
- P-2668 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., San Francisco, Calif.).
CORROSION INHIBITION.
U.S. Pat. 2,643,178; June 23, 1953. 8 p.
- P-2672 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., San Francisco, Calif.).
VAPOR PHASE CORROSION INHIBITION OF METALS.
U.S. Pat. 2,643,177; June 23, 1953. 7 p.
- P-2750 Broyles, Alvin C. (assignor to Standard Oil Development Co., New York, N.Y.).
INHIBITING STORAGE TANK CORROSION.
U.S. Pat. 2,639,971; May 26, 1953. 6 p.
- P-2809 Schear, Charles H. (assignor to the Crowell Paper Co., Chicago, Ill.).
CORROSION INHIBITING PACKAGING MATERIAL AND METHOD OF MAKING.
U.S. Pat. 2,653,854; September 29, 1953. 2 p.
- P-2846 N.V. de Bataafsche Petroleum Maatschappij, The Hague, Neth.
WERKWIJZE VOOR HET BESTRIJDEN OF VOORKOMEN VAN CORROSIE VAN METAALOPPERVLAKKEN, WERKWIJZE VOOR HET BEREIDEN VAN HIERTOE DOENDEDE MIDDELEN, ALSMEDE CORROSIEWEREND VERPAKKINGMATERIAAL EN DE DOOR DEZE MIDDELEN BESCHERMEDE METALEN VOORWERPEN [CORROSION INHIBITORS].
Neth. Pat. 71374; December 15, 1952. 9 p.
- P-2899 Newschwander, Wilfrid W. (assignor to Shell Development Co., San Francisco, Calif.).
CORROSION INHIBITION WITH NITROGENALDEHYDES.
U.S. Pat. 2,662,808; December 15, 1953. 3 p.
- P-3419 N.V. de Bataafsche Petroleum Maatschappij, The Hague, Neth.
WERKWIJZE TER VERVAANDIGING VAN MATERIAAL, IN HET BIJZONDER VERPAKKINGMATERIAAL, DAT CORROSIEWERENDE DAMPEN AFGEFT [METHOD FOR PRODUCING A PACKING MATERIAL THAT GIVES OFF CORROSION INHIBITING VAPORS].
Neth. Pat. 73856; January 15, 1954. 2 p.

- P-3465 Marshall, Hary B., and William Russell Bennett (assignors to the Dominion Cellulose Ltd., Toronto, Canada).
PRODUCTION OF ANTITARNISH WRAPPERS.
 U.S. Pat. 2,709,653; May 31, 1955. 3 p.
- P-3564 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., Emeryville, Calif.).
SHEET FOR PROTECTION OF METALS FROM CORROSION AND METHOD OF MAKING.
 U.S. Pat. 2,717,843; September 13, 1955. 7 p.
- P-3587 Wachter, Aaron and Robert J. Moore (assignors to Shell Development Co., San Francisco, Calif.).
SHEET WRAPPING MATERIAL CONTAINING NITROPHENOL COMPOUND.
 U.S. Pat. 2,717,196; September 6, 1955. 4 p.
- P-3688 Wachter, Aaron and Thurston Skei (assignors to Shell Development Co., San Francisco, Calif.).
VAPOR-PHASE CORROSION INHIBITION WITH A MIXTURE OF INHIBITORS.
 U.S. Pat. 2,711,360; June 21, 1955. 3 p.
- P-3804 Kalinowski, Lester W. (assignor to Sinclair Refining Co., New York, N.Y.).
CORROSION INHIBITOR CONTAINING ALKANYOXYACETIC ACID AND METHOD OF USING SAME.
 U.S. Pat. 2,731,324; January 17, 1956. 3 p.
- P-3874 Senkus, Murray (assignor to Daubert Chemical Co., Ill.).
COMPOSITION AND SHEET MATERIAL FOR INHIBITION OF CORROSION OF METALS.
 U.S. Pat. 2,739,872; March 27, 1956. 3 p.
- P-4002 Gray, Daniel (assignor to Oneida Ltd., Oneida, N.Y.).
ANTITARNISH WRAPPERS.
 U.S. Pat. 2,749,210; June 5, 1956. 3 p.
- P-4040 Bleakley, William Y. (assignor to Kaiser Aluminum & Chemical Corp., Oakland, Calif.).
ARTICLES AND METHODS FOR USE WITH METAL SURFACES.
 U.S. Pat. 2,755,167; July 17, 1956. 6 p.

- P-4053 Lothringer, Robert L. (assignor to Sinclair Refining Co., New York, N.Y.).
PROCESS AND SHEET PACKAGING MATERIAL FOR INHIBITING CORROSION.
U.S. Pat. 2,756,120; July 24, 1956. 3 p.
- P-4161 Wachter, Aaron and Nathan Stillman (assignors to Shell Development Co., Emeryville, Calif.).
CORROSION INHIBITION.
U.S. Pat. 2,752,221; June 26, 1956. 5 p.
- PDL-30731 Rhodes, C.A.
CYCLOHEXYLAMINE CARBOATE AS A VOLATILE CORROSION INHIBITOR.
Corrosion Prevention and Control 4(4):37-39 (April 1957)
- PDL-30788 U.S. Naval Civil Engineering Research & Evaluation Lab., Port Hueneme, Calif.
PROCEEDINGS OF SYMPOSIUM ON PRESERVATION FOR MOBILIZATION REQUIREMENTS, 23,24,25 OCTOBER 1956.
[n.d.] 527 p.
- PDL-30959 Turnbull, R.B.
PREVENTION OF CORROSION IN PACKAGING AND STORAGE. SOME METHODS OF TESTING OF PACKAGING MATERIALS.
Chemistry & Industry 15:446-451 (April 1957)
- PDL-30986 Wayne, F.H.
EXPERIMENTAL PACKAGING OF THE CAL. .30 MI CARBINE IN VOLATILE CORROSION INHIBITOR (V.C.I.) MATERIALS.
U.S. Arsenal, Rock Island, Ill. Lab. Technical Report 56-709;
U.S. Ordnance Corps Project TB5-1101C, Report 2 (March 1956)
16 p.
- PDL-31146 Leasport (Carl) Co., Milwaukee, Wis.
VOLATILE RUST INHIBITOR DIBC IS KEY TO NEW PACKAGE FOR METAL PARTS.
Ind. Packaging 3(9):18-19 (September 1957)
- PDL-31220 Rasmel, C.L.
EFFECT OF VOLATILE CORROSION INHIBITORS ON VARIOUS METALS AND FILMED OPTICS.
U.S. Frankford Arsenal, Philadelphia, Pa. Report P-1364; U.S. Ordnance Corps Project TB5-1101; ... ASTIA Doc. 123151 (December 1956) 33 p.

- PDL-31417 Cox, A.B., and E.C. Kuster.
VOLATILE CORROSION INHIBITORS FOR PROTECTIVE PACKAGING.
Australia. Dept. of Supply. Defence Standards Labs. Report 223
(February 1956) 10 p.
- PDL-31559 Petrik, Karl.
VERFAHREN ZUR HERSTELLUNG VON ALS VERPACKUNG VON METALLEN
DIENENDE MATERIALIEN, INSBESONDERE VON PAPIER BZW.
PAPIERÄHNLICHEN FASERSTOFFEN [ANTICORROSIVE WRAPPING MATERIAL].
Austria Pat. 188204; January 10, 1957. 2 p.
- PDL-31674 Al-Con Chemical Co., New Orleans, La.
AL-CON PRODUCTS MADE WITH VPI REDUCES CORROSION LOSSES, INCREASES
PROFITS.
[n.d.] 4 p.
- PDL-32462 Callaway, S., and D. Crichton.
TOXIC EFFECTS OF CYCLOHEXYLAMINE CARBONATE, A VAPOUR PHASE
CORROSION INHIBITOR.
Gt. Brit. Chemical Defence Experimental Establishment, Porton.
Tech. Paper 599; ... ASTIA Doc. 132135 (April 1957) 6 p.
- PDL-32673 Rowden, S.
VAPOUR-PHASE CORROSION INHIBITORS.
Corrosion Technol. 5:117-121,126 (April 1958)
- PDL-32784 Krieg, Abraham (assignor to the Crowell Paper Co., Chicago, Ill.).
VAPOR-PHASE CORROSION INHIBITOR AND WRAPPING MATERIAL CONTAINING
SAME.
U.S. Pat. 2,829,945; April 8, 1958. 2 p.
- PDL-32840 U.S. Naval Gun Factory (H.W. Ritter and S.H. Cole).
CATALYTIC EFFECT OF VAPOR CORROSION INHIBITORS ON THE OXIDATION
STABILITY AND CORROSION BEHAVIOR WITH METALS OF ORDNANCE LUERI-
CAPTS.
Its Technical Report NGF-T-22-57, U.S. Bureau of Ordnance
NAWORD Report 5513; ... ASTIA Doc. 137884 (1956) 18 p.
- PDL-32880 Burke, Evelyn S.
THE COMPATIBILITY OF CERTAIN BARRIER MATERIALS WITH VCI MATERIALS.
U.S. Arsenal, Rock Island, Ill. Lab. Report 57-1298, U.S.
Ordnance Corps. Project TB4-672, Report 2; ... ASTIA Doc.
139524 (June 1957) 35 p.

- PDL-33171 LeMar, Ralph L.
VCI OILS, PROPERTIES AND PROPOSED QUALITY CONTROL TESTS.
 U.S. Arsenal, Rock Island, Ill. Lab. Report 58-1603; U.S.
 Ordnance Corps Project TB5-6010; U.S. Office of Technical
 Services Publ. Board PB151122; ... ASTIA Doc. 211560
 (June 1958) 59 p.
- PDL-33224 Kelleher, R.L.
EFFECT OF VOLATILE CORROSION INHIBITORS ON NON-FERROUS METALS.
SECOND PARTIAL.
 U.S. Armory, Springfield, Mass. Research & Development Div.
 Report SA-Tr-20-2307, U.S. Ordnance Corps. CRDTX-10; ...
 ASTIA Doc. 140956 (June 1957) 15 p.
- PDL-33307 Johnson, Robert E.
THE USE OF VOLATILE CORROSION INHIBITORS AS A PRESERVATIVE
MEDIUM FOR LONG TERM STORAGE OF ORDNANCE MATERIEL; ADDENDUM
VI RESULTS AFTER EIGHT YEARS OF EXPOSURE.
 U.S. Arsenal, Rock Island, Ill. Lab. Report 58-1591; U.S.
 Ordnance Corps. Project TB5-6010 (June 1958) 36 p.
- PDL-33579 Ross, Frank and Charles Mellick (assignors to Dearborn
 Chemical Co., Chicago, Ill.).
VAPOR-PHASE CORROSION INHIBITION.
 U.S. Pat. 2,848,298; August 19, 1958. 6 p.
- PDL-34343 Orchard Paper Co., St. Louis, Mo.
ORCHARD INHIBITOR PAPERS FOR PREVENTION OF CORROSION AND
TANNING ON FERROUS AND NONFERROUS METALS.
 [n.s.] 62 p.
- PDL-34468 Merrens, R.L.
SIX-YEAR STORAGE PROGRAM TESTS, PACKAGED ITEMS.
 U.S. Arsenal, Rock Island, Ill. Lab. Report 59-363; U.S.
 Ordnance Corps. Project TB4-0061, Report 60 (February 1959)
 177 p.
- PDL-34604 LeMar, Ralph L.
VCI BIBLIOGRAPHY AND ABSTRACTS.
 U.S. Arsenal, Rock Island, Ill. Lab. Report 58-2834; U.S.
 Ordnance Corps. Project TB5-6010; ... ASTIA Doc. 211463
 (October 1958) 114 p.
- PDL-34778 LeMar, Ralph L.
INTERACTIONS BETWEEN FOUR VOLATILE CORROSION INHIBITORS.
 U.S. Arsenal, Rock Island, Ill. Lab. Report 57-2887; U.S.
 Ordnance Corps. Project TB5-6010; ... ASTIA Doc. 156085
 (December 1957) 43 p.

- PDL-35013 Fennell, T.R.F.W.
THE EFFECT OF VAPOUR PHASE INHIBITORS ON THE CORROSION OF METALS.
Gt. Brit. Royal Aircraft Establishment, Farnborough. Tech. Note. Chem. 1328 (June 1958) 10 p.
- PDL-35156 Anonymous.
RUSSIAN WORK ON INHIBITORS.
Corrosion Technol. 6:169 (May 1959)
- PDL-35280 Perciantseva, V.P., and I.L. Rozenfel'd.
[LABORATORY METHOD FOR STUDYING VOLATILE INHIBITORS (in Russian)].
Zavodskaya Lab. 24:832-836 (July 1958)
- PDL-35731 Anonymous.
SODIUM BENZOATE: KEY TO NEW GROWTH IN SPECIALTY PAPERS THAT STOP RUST AND MILDEW.
Chem. Week 85(8):12 (August 1959)
- PDL-35758 Monsanto Chemical Co. Organic Chemicals Div., St. Louis, Mo.
SODIUM BENZOATE: FOR PRODUCTION OF CORROSION-INHIBITING WRAPPING PAPER AND FUNGICIDAL PAPERBOARD.
Its Chemical Specialties Data Report CS-11 (April 1959) 9 p.
- PDL-35760 Mustin, Gordon S.
EVALUATION OF VOLATILE CORROSION INHIBITORS FOR PRESERVATION AND PACKAGING. PART 1. LITERATURE SURVEY AND PRELIMINARY INVESTIGATION.
Container Labs., Inc., Chicago, Ill. Report 9927 (January 1958) 83 p.
- PDL-36004 Cavallaro, Leo and Giorgio Martovani.
NEUE UNTERSUCHUNGEN AUF DEM GEBIETE DER DAMPFPHASE-INHIBITOREN [NEW INVESTIGATIONS ON VAPOR PHASE INHIBITORS (in German with English summary)].
Werkstoffe u. Korrosion 10:422-425 (July 1959)
- PDL-36125 Dyer, M.R.
FOURTH REPORT ON THE INVESTIGATION OF VOLATILE CORROSION INHIBITOR (VCI) TREATED PACKAGING MATERIALS FOR PROTECTION ORDNANCE PARTS AND SUBASSEMBLIES FOR LONG TERM STORAGE.
U.S. Naval Weapons Plant. Report NWPW-T-18-57 (NGP-T-57);
U.S. Bureau of Ordnance NAVORD Report 5509 (November 1959) 22 p.

- FDL-36968 Sexton, S.E.
VAPOUR-PHASE INHIBITION OF ATMOSPHERIC CORROSION.
Corrosion Technol. 7:147-150,162 (May 1960)
- FDL-37076 Murray, Wallace J. (assignor to Arthur D. Little, Inc.,
Cambridge, Mass.).
VAPOR PHASE CORROSION INHIBITION.
U.S. Pat. 2,914,424; November 24, 1959. 4 p.
- FDL-37079 Anonymous.
WHAT'S NEW WITH VCI PAPERS?
Ind. Packaging 5(12):36,38 (December 1959)
- FDL-37567 Wachter, Aaron and Rita Wieland (assignors to Shell Oil
Co., New York, N.Y.).
CORROSION- AND FUNGUS-INHIBITING COMPOSITION.
U.S. Pat. 2,943,909; July 5, 1960. 5 p.
- FDL-37691 Fishorski, B.E., and E.M. Il'ina.
[PROTECTIVE ACTION OF VOLATILE INHIBITORS AND ANTICORROSIIVE
COMPOUNDS AT TROPICAL TEMPERATURE AND HIGH HUMIDITY (in
Russian)].
Zhur. Priklad. Khim. 32:138-141 (January 1959)
- FDL-38086 Golyanitskii, O.I.
[VOLATILE INHIBITOR FOR PREVENTING ATMOSPHERIC CORROSION OF
FERROUS AND NONFERROUS METALS (in Russian)].
U.S.S.R. Pat. 124,927; December 29, 1959. 2 p.
- FDL-38222 Göbel, J.
VERTRÄGLICHKEIT VON LACKEN MIT VPI-PAPIER [COMPATIBILITY OF
PAINTS WITH VPI PAPER].
Farbe u. Lack. 65:510-511 (September 1959)
- FDL-38298 Sherk, Kenneth W., and J.E. Roberts.
DEVELOPMENT OF TECHNIQUES FOR EVALUATION OF VCI MATERIALS.
FINAL NARRATIVE REPORT.
U.S. Army, Springfield, Mass. Research & Development Div.
Report DA-OR20-2308; PB 133891; ... ASTIA Doc. 98349
(April 1956) 38 p.
- FDL-38413 Balasin, S.A.
[EXAMINATIONS OF INHIBITORS OF ATMOSPHERIC CORROSION (in Russian)].
Uchebye Zapiski, Moskov. Gosudarst. Pedagog. Inst. im. V.I. Lenina
99(6):99-107 (1957)

- PDL-38605 U.S. Office of Technical Services.
CORROSION (TEN YEAR BIBLIOGRAPHY).
Its Selective Bibliography 401 (December 1959) 39 p.
- PDL-38766 Emis, John L. (assignor to Arthur D. Little, Inc., Cambridge,
Mass.).
CORROSION INHIBITORS.
U.S. Pat. 2,947,599; August 2, 1960. 3 p.
- PDL-39177 Zawadzki, Jerzy.
[EVALUATION OF PROTECTIVE PROPERTIES OF VAPOUR PHASE CORROSION
INHIBITORS (in Polish with English summary)].
Prace Inst. Mech. 8(28):1-13 (1960)
- PDL-39442 Hottenroth, Beatrix.
UEBER DIE VERPACKUNG VON WEISSELECHDOSEN IN VPI-PAPIER [PACKAGING
OF TIN CANS IN VPI-PAPER (in German)].
Verpackungs-Rundschau 11:367-368,370 (May 1960)
- PDL-40739 Mantovani, Giorgio.
RICERCHE SULLE CARATTERISTICHE E CONDIZIONI DI IMPIEGO DEGLI
INHIBITORI IN FASE VAPORE [CHARACTERISTICS AND CONDITIONS OF
USE OF VAPOR-PHASE INHIBITORS].
Gazz. Chim. Ital. 89:1687-1690 (July-August 1959)
- PDL-41069 Raifsnider, Philip J. (assignor to Shell Oil Co., New York, N.Y.).
VAPOR PHASE CORROSION INHIBITION.
U.S. Pat. 2,986,447; May 30, 1961. 2 p.
- PDL-41368 Johnson, Robert E.
THE USE OF VOLATILE CORROSION INHIBITORS AS A PRESERVATIVE
MEDIUM FOR LONG TERM STORAGE OF ORDNANCE MATERIEL. ADDENDUM
VII. RESULTS AFTER TEN YEARS OF EXPOSURE.
U.S. Arsenal, Rock Island, Ill. Lab. Report 61-544; PB 171516
(February 1961) 49 p.
- PDL-42597 Le Bolt, John M., and Stanley W. Drigot (assignors to the Crowell
Paper Co., Ill.).
CORROSION-INHIBITOR PACKAGING MATERIAL.
U.S. Pat. 3,007,767; November 7, 1961. 6 p.

- PDL-42994 Rosenfel'd, I.L., V.P. Persiantseva, P.B. Terent'ev and M.N. Polteva.
[MECHANISM OF CORROSION PROTECTION OF METALS BY VOLATILE INHIBITORS. I. EFFECT OF CHEMICAL COMPOSITION AND STRUCTURE OF ORGANIC COMPOUNDS ON THEIR CAPACITY TO RETARD CORROSION PROCESSES (in Russian)].
Zhur. Priklad. Khim. 34:2047-2056 (1961)
- PDL-43132 Rosenfel'd, I.L., M.N. Polteva and V.P. Persiantseva.
[PHYSICO-CHEMICAL PROPERTIES OF THE VOLATILE CORROSION INHIBITOR DICYCLOHEXYLAMINONITRITE (in Russian with English summary)].
Zhur. Fis. Khim. 35:1474-1477 (July 1961)
- PDL-43592 Rosenfel'd, I.L., M.N. Polteva, V.P. Persiantseva and P.B. Terent'ev.
[MECHANISM OF CORROSION PROTECTION OF METALS BY VOLATILE INHIBITORS. II. VAPOR PRESSURE OF VOLATILE INHIBITORS (in Russian)].
Zhur. Priklad. Khim. 34:2056-2061 (September 1961)
- PDL-43992 Rauschert, Manfred.
TROPENVERSUCHE MIT VPI-MATERIALIEN [TROPICAL EXPERIMENTS WITH VPI-MATERIALS].
Neue Verpackung 15(2):142-147 (February 1962)
- PDL-45112 DeGroot, James.
ENGINE CORROSION STUDY.
U.S. Detroit Arsenal, Center Line, Mich. Ordnance Tank-Automotive Command. Research & Engineering Directorate. Engineering Div. Final Report of Phase I (June 1962) 56 p.
- PDL-45197 Mumm, Howard H., and William S. Grimes.
PROTECTIVE PAPERS FOR CORROSION OF METALS.
Tappi 45(8):129A-131A (August 1962)
- PDL-45361 Anonymous.
VOLATILE CORROSION INHIBITORS: A REPORT.
Packaging 30(8):38-40 (August 1962)
- PDL-46886 Pributsky, G.
INVESTIGATION OF PACKAGING METHODS AND SUBMETHODS WITH VOLATILE-CORROSION-INHIBITOR.
U.S. Armory, Springfield, Mass. Research & Development Div. Report No. SA-TR20-2313 (August 1962) 46 p.

- FDL-47573 Anonymous.
CORROSION-PREVENTIVE PACKAGING.
The Container (London) 88:18-19 (January 1963)
- FDL-48223 Alloyd Electronics Corp., Cambridge, Mass. (Iwan Marinow,
Charles A. Gellar and Robert Bakish).
ALL-PURPOSE PLATING APPARATUS FOR RESEARCH ON VAPOR PHASE
COATINGS.
U.S. Dept. of the Air Force. Aeronautical Systems Div.,
Wright-Patterson Air Force Base, Ohio. Technical Documentary
Report 62-499; ... ASTIA Doc. 288862 (September 1962) 23 p.
- FDL-48997 Johnson, Robert E.
THE USE OF VOLATILE CORROSION INHIBITORS WITH FERROUS AND
NONFERROUS METAL FINISHES.
U.S. Arsenal. Rock Island, Ill. Lab. Report 63-1836 (May 1963)
47 p.
- FDL-49545 Anonymous.
MODERN TRENDS (1). INHIBITORS.
Corrosion Technol. 10:127-129 (May 1963)