

# CHEMLIST® (Regulated Chemicals Listing) HCHEMLIST (Regulated Chemicals Listing)

The two files differ only in pricing metrics.



<b>Subject Coverage</b>	<ul style="list-style-type: none"><li>• Substance inventories</li><li>• Regulatory lists</li><li>• Dangerous chemicals</li></ul>																														
<b>File Type</b>	Directory, Substance, Inventory																														
<b>Features</b>	<table><tr><td>Thesaurus</td><td>Not available</td><td></td><td></td><td></td><td></td></tr><tr><td>Alerts (SDIs)</td><td>Weekly</td><td></td><td></td><td></td><td></td></tr><tr><td><a href="#">CAS Registry Numbers®</a></td><td><input checked="" type="checkbox"/></td><td>Page Images</td><td><input type="checkbox"/></td><td>STN AnaVist</td><td><input type="checkbox"/></td></tr><tr><td><a href="#">Keep &amp; Share</a></td><td><input checked="" type="checkbox"/></td><td><a href="#">SLART</a></td><td><input checked="" type="checkbox"/></td><td><a href="#">STN Easy</a></td><td><input checked="" type="checkbox"/></td></tr><tr><td>Learning Database</td><td><input type="checkbox"/></td><td>Structures</td><td><input type="checkbox"/></td><td>STN Viewer</td><td><input type="checkbox"/></td></tr></table>	Thesaurus	Not available					Alerts (SDIs)	Weekly					<a href="#">CAS Registry Numbers®</a>	<input checked="" type="checkbox"/>	Page Images	<input type="checkbox"/>	STN AnaVist	<input type="checkbox"/>	<a href="#">Keep &amp; Share</a>	<input checked="" type="checkbox"/>	<a href="#">SLART</a>	<input checked="" type="checkbox"/>	<a href="#">STN Easy</a>	<input checked="" type="checkbox"/>	Learning Database	<input type="checkbox"/>	Structures	<input type="checkbox"/>	STN Viewer	<input type="checkbox"/>
Thesaurus	Not available																														
Alerts (SDIs)	Weekly																														
<a href="#">CAS Registry Numbers®</a>	<input checked="" type="checkbox"/>	Page Images	<input type="checkbox"/>	STN AnaVist	<input type="checkbox"/>																										
<a href="#">Keep &amp; Share</a>	<input checked="" type="checkbox"/>	<a href="#">SLART</a>	<input checked="" type="checkbox"/>	<a href="#">STN Easy</a>	<input checked="" type="checkbox"/>																										
Learning Database	<input type="checkbox"/>	Structures	<input type="checkbox"/>	STN Viewer	<input type="checkbox"/>																										
<b>Record Content</b>	<ul style="list-style-type: none"><li>• Substance identity information, inventory status, source of information, and summaries of regulatory activity, reports, and other compliance information</li><li>• CHEMLIST offers the convenience of identifying—in one place—the regulatory requirements for a specific substance from many of the world's most significant regulated substances lists</li></ul>																														
<b>File Size</b>	More than 284,000 records (1/12)																														
<b>Coverage</b>	Inventories and regulatory listings, 1979-present																														
<b>Updates</b>	<ul style="list-style-type: none"><li>• Updated weekly with more than 50 additions to existing records or new substances</li><li>• PMN/NOC information appears in CHEMLIST within a week of when it is published in the Federal Register</li></ul>																														
<b>Language</b>	English																														
<b>Database Producer</b>	Chemical Abstracts Service 2540 Olentangy River Road P.O. Box 3012 Columbus, Ohio 43210-0012 USA Phone: 800-753-4227 (North America) Phone: 614-447-3700 (worldwide) Fax: 614-447-3751 E-mail: <a href="mailto:help@cas.org">help@cas.org</a> Copyright Holder																														

**CHEMLIST/HCHEMLIST**

---

**Sources**

- CHEMLIST was originally built from data in the 1985 TSCA Inventory and supplements, and updates from the U.S. Government Federal Register. Over time more than 100 additional collections of data have been added. Sources of the data include web sites, official government lists, gazettes, newsletters, bulletins, and electronic data feeds.
  - For a complete list of the inventories and regulatory lists covered by CHEMLIST, visit: [www.cas.org/expertise/cascontent/regulated/substance.html](http://www.cas.org/expertise/cascontent/regulated/substance.html)
- 

**User Aids**

- Online Helps (HELP DIRECTORY lists all help messages available)
  - STNGUIDE
- 

**Clusters**

- CASRNS
- GOVREGS
- HEALTH
- SAFETY
- TOXICOLOGY

Only CHEMLIST is in the clusters  
[STN Database Clusters](#) information (PDF).

---

**Pricing**

See the [STN Price List](#) or enter HELP COST at an arrow prompt (=>).

---

## SEARCH and DISPLAY Field Codes

The field that allows left truncation (/BI) is marked with an asterisk (\*).

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index * (contains CAS Registry Numbers, single words from the CN, CFR, INV, INVT, SC, and UVC fields, EPA numbers, and summary text of each section of the law) <b>(1)</b>	None (or /BI)	S ?BROMO? AND INHAL? S 77-47-4 or S ECOTOXIC? S P 79-11	All fields except AN, CBI, DEF, FA, FS
Accession Number	/AN	S 33063/AN	AN
ACGIH Threshold Limit Values	/TLV	S BENZENE/TLV	TLV
California Proposition 65 List	/PROP65	S REPROD? TOXIC? /PROP65	PROP65
Canadian Legislation Affecting Chemicals	/CANL	S IMPORT?/CANL	CANL
CAS Registry Number	/RN	S 77-47-4/RN	RN
CERCLA Hazardous Substances	/CERHS	S RQ/CERHS	CERHS
CFR Section	/SC	S 29 CFR 1910.119/SC	SC
CFR Title <b>(2)</b>	/CFR	S 40 CFR PART 116/CFR	CFR
Chemical Hazard Information Profile	/CHP	S CARCIN?/CHP	CHP
Chemical Name	/CN	S M-CRESOL/CN	CN
Chemical/Physical Properties	/PROP	S SOLUBILITY/PROP	PROP
Citizens' Petition - TSCA Section 21	/PET	S PCB/PET	PET
Clean Air Act 1990 Amendments Hazardous Air Pollutants	/HAP	S ACETALDEHYDE/HAP	HAP
Clean Air Act National Ambient Air Quality Standards	/AAQS	S AEROSOL/AAQS	AASQ
Clean Air Act Ozone Depleting Compounds	/ODC	S METHYL BROMIDE/ODC	ODC
Clean Air Act Section 111 Volatile Organic Compounds	/VOC	S EMISSION STANDARDS/VOC	VOC
Clean Water Act Sections 301, 307, and 311	/CWA	S POLLUTANT/CWA	CWA
Confidentiality Status	/CBI	S PUBLIC/CBI	CBI
Cross-Reference Registry Number	/XRN	S 9000-78-6/XRN	XRN
Definition for UVCB Substances	/DEF	S FATTY ACID#/DEF	DEF
DOT Coast Guard Bulk Hazardous Materials	/CGB	S BUTYROLACTONE/CGB	CGB
DOT Coast Guard Noxious Liquids	/CGN	S BUTYRIC ACID/CGN	CGN
DOT Hazardous Materials Table	/HAZT	S FORBIDDEN/HAZT	HAZT
Drug Enforcement Administration Precursor and Essential Chemicals	/DEA	S DESOMORPHINE/DEA	DEA
EEC Classification, Packaging, and Labeling of Dangerous Substances	/EECDS	S R 45/EECDS S ASBESTOS/EECDS	ECDS
Entry Date <b>(3)</b>	/ED	S ED>= 20110804	Not displayed
EPA Number	/EPN	S 1-1018/EPN	RLN
EPA Pesticide Active Ingredients	/PAI	S SODIUM FUMARIN/PAI	PAI
EPA Pesticide Inert Ingredients	/PII	S LARD/PII	PII
EPA Significant New Alternatives Program for CFCs and Halon	/SNAP	S LIMITS/SNAP	SNAP
European Community Legislation	/EECL	S EXPOSURE/EECL	EECL
Exemption from PMN	/5H (or /EXM)	S INK?/5H	5H
FDA	/FDA	S ALCOHOL/FDA	FDA
FDA Food Substances Generally Recognized as Safe	/FGRAS	S RUE/FGRAS	FGRAS
FDA Priority-Based Assessment of Food Additives	/PAFA	S PARSLEY/PAFA	PAFA
Field Availability	/FA	S 4A/FA or S EHS/FA	FA
File Segment	/FS	S TSCA/FS;S ENCS/FS	FS
German Water Hazard Class Substance List	/WGK	S (HAZARD CLASSIFICATION/WGK	WGK
Harmonized Tariff Code	/HTC	S 290339/HTC	HTC
Hazard, Toxicology, and Use Information	/HTU	S MUTATION/HTU	HTU
Health Advisory	/HA	S WORKER#/HA	HA
Health Hazards	/HHAZ	S INHALATION RISK/HHAZ	HHAZ
High Production Volume Chemicals	/HPV	S UNITED STATES/HPV	HPV
Import - Export Regulation	/IER	S TEST RULE/IER	IER
Insufficient Data Order	/5E (or /INS)	S NEURO?/5E	5E
Interagency Testing Committee	/4E (ITC)	S CARCIN?/4E	ITC
Interagency Testing Committee Candidate	/ICC	S REVIEW#/ICC	ICC
International Agency for Research on Cancer	/IARC	S GROUP 1/IARC	IARC
Inventory Status	/INV	S (YES AND TSCA)/INV	INV

## SEARCH and DISPLAY Field Codes (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Inventory Status Text	/INVT	S CANADA GAZETTE/INVT	INV
Inventory Update Rule	/IUR	S 1998/IUR	IUR
Massachusetts Toxic and Hazardous Substance List	/MASS	S CAMPHOR OIL/MASS	MASS
Michigan Critical Materials Register	/SMI	S PARATHION/SMI	SMI
Minnesota Right-to-Know	/SMN	S CYCASIN/SMN	SMN
Miscellaneous Regulation (4)	/MISC	S DIOXIN#/MISC	MISC
National Toxicology Program Carcinogen List	/NTPC	S PHENYTOIN/NTPC	NTPC
National Toxicology Program Technical Reports List	/TRNTP	S PHENOL/TRNTP	TRNTP
New York Hazardous Substances Release and Bulk Storage	/SNY	S CALCIUM/SNY	SNY
NIOSH Recommended Exposure Limits	/NREL	S HYDROGEN PEROXIDE/NREL	NREL
OECD Screening Information Data Set Project	/SIDS	S BASE LEVEL/SIDS	SIDS
OSHA Highly Hazardous Chemicals	/HHC	S ALLEGATION#/HHC	HHC
OSHA Permissible Exposure Levels	/PEL	S PHOSGENE/PEL	PEL
Pennsylvania Right-to-Know	/SPA	S HAZARD/SPA	SPA
Premanufacture Notice	/5A1 (or /PMN)	S (AMES TEST)/PMN	PMN
Premanufacture Notice Number	/5A1N (or /PMNN)	S Y 89-75/PMNN	PMN
RCRA Halogenated Organic Compounds	/HOC	S PCBS/HOC	HOC
RCRA Land Disposal Restrictions	/LDR	S STANDARD/LDR	LDR
RCRA Waste Specific Prohibitions	/WSP	S BIOACCUMULATIVE/WSP	WSP
Regulatory List Number	/RLN	S P 92-150/RLN	RLN
Report on Volume, Exposure, Etc.	/8A (or /REP)	S CAIR/8A	8A
Restricted Chemical Lists	/RSTR	S SINGAPORE/RSTR	RSTR
Risk May Be Unreasonable	/4F (or /RIS)	S CANCER/4F	4F
Safe Drinking Water Act Maximum Contaminant Level Goal	/MCLG	S L1 AND PRIMAY/MCLG	MCLG
Safe Drinking Water Act Maximum Contaminant Levels	/MCL	S L1 AND MAXIMUM/MCL	MCL
SARA Title III/EPCRA Extremely Hazardous Substances	/EHS	S EMERGENCY PLAN?/EHS	EHS
Section Update Date (3)	/SUP	S 20110822-20110826/SUP	Not displayed
Significant New Use Rule	/5A2 (or /RSNU)	S CHLORINATED/RSNU	RSNU
State of Illinois Right to Know Toxic Substances List	/SIL	S TEMEPHOS/SIL	SIL
State of Louisiana Right-to-Know	/SLA	S SARIN/SLA	SLA
State of New Jersey Right-to-Know	/SNJ	S MUTAGEN/SNJ	SNJ
State of New York Right-to-Know	/SNY	S AIR/SNY	SNY
State of Rhode Island Right-to-Know	/SRI	S CYCLOPROPANE/SRI S	SRI
Storage/Handling/Environment	/STOR	S SPILLAGE DISPOSAL/STOR	STOR
Studies on Toxicity/Exposure	/STY	S DAPHN?/STY or S DU PONT/STY	STY
Substantial Risk Report	/8E (or /SRR)	S TERATO?/8E	8E
Superfund Amendment Reauthorization Act Section 110	/S110	S PRIORITY LIST?/S110	S110
Superfund Amendment Reauthorization Act Section 313	/S313	S COPPER/S313	S313
Supplemental Data from the Japanese ENCS	/JDATA	S ACCUMULATED/JDATA	JDATA
Test Rule - TSCA Section 4a	/4A (or /TES)	S FINAL RULE/4A	4A
Transportation/Packaging/Labeling	/TRANS	S UNBREAKABLE/TRANS	TRANS
TSCA Section 4 Master Testing List	/MTL	S (FIRST LISTED 1990) MTL	MTL
Unpublished Report of Health/Safety Studies	/8D (or /UNP)	S MORTALITY/8D	8D
Unreasonable Risk - TSCA Section 6	/UNR	S METALWORK?/UNR	UNR
Update Date (3)	/UP	S UP>=20110801	Not displayed
UVC Subset Heading	/UVC	S ALGAE/UVC	UVC
UVCB Chemical Category	/UVCB	S PHENOLS/UVCB	UVCB
Violations to Miscellaneous Regulations or Advisory Lists	/VIO	S PCB/VIO	VIO
WHMIS Ingredient List (Canada)	/WHMIS	S BENZENE/WHMIS	WHMIS

(1) At least four characters need to be used for the length of the stem for left truncation.

(2) Search with implied (S) proximity is available in this field.

(3) Numeric search field that may be searched with numeric operators or ranges. When a date is searched use the format of YYYYMMDD. For more information view HELP SNUMERIC.

(4) Contains TSCA Section 8(c) submissions to EPA.

## DISPLAY and PRINT Formats

Any combination of formats may be used to DISPLAY or PRINT answers. Multiple codes must be separated by spaces or commas, e.g., D RN FA. The fields are displayed in the order requested.

Hit-term highlighting is available in all fields except AN and FA. Highlighting must be ON in order to use the HIT, KWIC, and OCC formats

Format	Content	Examples
4A (TES)	Test Rule - TSCA Section 4A	D 1-5 4A
4E (ITC)	Interagency Testing Committee	D 4E 5-15 L41
4F (RIS)	Risk May Be Unreasonable	D L2 4F 1-3,5 9
5A1 (PMN)	Premanufacture Notice	D 1-5 5A1
5A2 (RSNU)	Significant New Use Rule	D 5A2 L7
5E (INS)	Insufficient Data Order	D L1 5 5E
5H (EXM)	Exemption from PMN	D 5H 3 L7
8A (REP)	Report on Volume, Exposure, Etc.	D 8, 11, 15 8A
8D (UNP)	Rule Calling for Unpublished Health/Safety Studies	D UNP
8E (SRR)	Substantial Risk Report	D 8E 4A
AAQS	Clean Air Act National Ambient Air Quality Standards	D AAQS
AN (1)	Accession Number	D 1-10 AN
CANL	Canadian Legislation Affecting Chemicals	D CANL
CBI	Confidentiality Status	D CBI 2-3
CERHS	CERCLA Hazardous Substances	D CERHS
CFR	CFR Title	D CFR 5-10
CGB	DOT Coast Guard Bulk Hazardous Materials	D CGB
CGN	DOT Coast Guard Noxious Liquids	D CGN
CHP	Chemical Hazard Information Profile	D L4 2-6 CHP
CN (2)	Chemical Name	D 1-7 L2 CN
CWA	Clean Water Act Sections 301, 307, and 311	D CWA
DEA	Drug Enforcement Administration Precursor	D DEA
DEF	Definition for UVCB Substances	D DEF
EECDs	EEC Classification, Packaging, and Labeling of Dangerous Substances	D EECDs
EECL	European Community Legislation	D EECL
EHS	SARA Title III/EPCRA Extremely Hazardous Substances	D EHS
FA (1)	Field Availability	D FA 1-5
FCN (3)	Full Chemical Name	D FCN 1-3
FDA	Federal Drug Administration Regulations	D FDA
FGRAS	FDA Food Substances Generally Recognized	D FGRAS
FS	File Segment	D FS L5 1-2
HA	Health Advisory	D L9 HA
HAP	Clean Air Act 1990 Amendments Hazardous Air Pollutants	D HAP
HAZT	DOT Hazardous Materials Table	D HAZT
HHAZ	Health Hazards	D HHAZ
HHC	OSHA Highly Hazardous Chemicals	D HHC
HOC	RCRA Halogenated Organic Compounds	D HOC
HPV	High Production Volume Chemicals	D HPV
HTC	Harmonized Tariff Code	D HTC
HTU	Hazard, Toxicology, and Use Information	D HTU
IARC	International Agency for Research on Cancer	D IARC
ICC	Interagency Testing Committee Candidate	D ICC INV
IER	Import - Export Regulation	D IER
INV	Inventory Status	D INV
ITC	Interagency Testing Committee	D ITC 5-15 L41
IUR	Inventory Update Rule	D IUR
JDATA	Supplemental Data from the Japanese ENCS	D JDATA
LDR	RCRA Land Disposal Restrictions	D LDR
MASS	Massachusetts Toxic and Hazardous Substance List	D MASS
MCL	Safe Drinking Water Act Maximum Contaminant Levels	D MCL
MCLG	Safe Drinking Water Act Maximum Contaminant Level Goals	D MCLG
MISC	Miscellaneous Regulations	D MISC
MTL	TSCA Section 4 Master Testing List	D MTL
NREL	NIOSH Recommended Exposure Limits	D NREL
NTPC	National Toxicology Program Carcinogen List	D NTPC
ODC	Clean Air Act Ozone Depleting Compounds	D ODC
PAFA	FDA Priority-Based Assessment of Food Additives	D PAFA
PAI	EPA Pesticide Active Ingredients	D PAI

## DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
PEL PET PII PROP PROP65 RLN RN RSNU RSTR S110 S313 SC SIDS SIL SLA SMI SMN SNAP SNJ SNY SPA SRI STOR STY TLV TRANS TRNTP UNR UVCB (UVC) VIO VOC WGK WHMIS WSP XRN	OSHA Permissible Exposure Levels Citizens' Petition - TSCA Section 21 EPA Pesticide Inert Ingredients Chemical/Physical Properties California Proposition 65 List Regulatory List Number CAS Registry Number Significant New Use Rule Restricted Chemical Lists Superfund Amendment Reauthorization Act Section 110 Superfund Amendment Reauthorization Act Section 313 CFR Section OECD Screening Information Data Set Project State of Illinois Right-to-Know Toxic Substances List State of Louisiana Right-to-Know Michigan Critical Materials Register Minnesota Right-to-Know EPA Significant New Alternatives Program for CFCs and Halon State of New Jersey Right-to-Know New York Hazardous Substances Release and Bulk Storage Pennsylvania Right-to-Know State of Rhode Island Right-to-Know Storage/Handling/Environment Unpublished Reports on Toxicity/Exposure Studies ACGIH Threshold Limit Values Transportation/Packaging/Labeling National Toxicology Program Technical Reports List Unreasonable Risk - TSCA Section 6 UVCB Subset Heading Violations to Miscellaneous Regulations or Advisory Lists Clean Air Act Section 111 Volatile Organic Compounds German Water Hazard Class Substance List WHMIS Ingredient List (Canada) RCRA Waste Specific Prohibitions Cross-Reference Registry Number	D PEL D PET 1-3 D PII D PROP D PROP65 D RLN D 1, 4, 8 RN D RSNU D RSTR D S110 D S313 D SC L1 4 D SIDS D SIL D SLA D SMI D SMN D SNAP D SNJ D SNY D SPA D SRI D STOR D 1-3 STY D TLV D TRANS D TRNTP D UNR D UVCB or D UVC D VIO 2-6 L3 D VOC D WGK D WHMIS D WSP D XRN
ALL  FIDE IDE QRD	AN, RN, CN, DEF, FS, UVCB, CBI, XRN, CFR, SC, RLN, HTC, INV, RSTR, FA, PMN, 4A, 4F, 5E, 5H, 8A, 8D, 8E, CHP, HA, ICC, IER, ITC, MTL, PET, RSNU, STY, IUR, UNR, AAQS, HAP, ODC, VOC, CERHS, CWA, PAI, PII, HOC, LDR, EHS, S110, S313, MCL, CGB, CGN, HAZT, FGRAS, PAFA, FDA, NREL, HHC, PEL, CANL, WHMIS, EECDS, EECL, WGK, JDATA, STOR, DEA, TRANS, HTU, IARC, HHAZ, HPV, PROP, SIDS, NTPC, TLV, TRNTP, VIO, MISC, PROP65, SIL, SLA, MASS, SMI, SMN, SNJ, SNY, SPA, SRI All substance identification, including all names, and legal status (AN, RN, CN, DEF, FS, CBI, UVCB, CFR, XRN, SC, RLN, HTC, INV, FA) Substance identification (up to 50 names) and legal status (AN, RN, CN, DEF, FS, CBI, UVCB, CFR, XRN, SC, RLN, HTC, INV, RSTR, FA) Query related data (IDE plus HIT) (default)	D ALL  D FIDE D 1-10 IDE D
HIT KWIC OCC (1)	Fields containing hit terms Hit terms plus 20 words on either side (Key-Word-In-Context) Number of occurrences of hit terms and fields in which they occur	D AN HIT D 3 L5 KWIC DIS 1-10 OCC

(1) No online display fee for this format.

(2) CN format displays the first 50 names, plus any hit names.

(3) FCN format displays all available chemical names.

## SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers or an L-number containing terms from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
CAS Registry Number	RN	Y	Y
CFR Section	SC	Y	Y
CFR Title	CFR	Y(default) (2)	Y
Chemical Name	CN	Y (3)	Y
	FCN	Y	Y
	NAME	Y (4)	N
Chemical Names and CAS Registry Numbers	CHEM	Y (4)	N
Confidentiality Status	CBI	N (4)	Y
Cross-Reference Registry Number	XRN	Y	N
Definition	DEF	Y	N
File Segment	FS	N	Y
Harmonized Tariff Code	HTC	N	Y
Inventory Status	INV	N	Y
Occurrence Count of Hit Terms	OCC	N	Y
Premanufacture Notice Number	PMNN	Y	Y
Regulatory List Number	RLM	Y	Y

(1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g.,  
SEL HIT PMNN.

(2) Up to 50 available names are extracted.

(3) All available chemical names are extracted.

(4) Appends /BI to the terms created by SELECT.

## CHEMLIST/HCHEMLIST

## Sample Record

## DISPLAY ALL

(Display the FA (Field Availability) field before requesting the ALL format to determine the amount and type of information in the record. NOTE the difference between these two records.)

AN 319767 CHEMLIST  
RN 860691-91-4  
CN 2-Benzofuranbutanenitrile,  $\gamma$ -oxo-  
2-Benzofuranbutyronitrile,  $\gamma$ -oxo-  
(benzofuranne-2-ylcarbonyl)acetonitrile (French)  
2-cyanoacetylbenzofuranne (French)  
(Benzofuran-2-ylcarbonyl)acetonitril (German, Danish, Dutch)  
2-Cyanacetylbenzofuran (German)  
(benzofuran-2-ilcarbonyl)acetonitrilo (Spanish, Portuguese)  
2-cianoacetilbenzofurano (Spanish, Italian, Portuguese)  
(benzofuran-2-ilcarbonyl)acetonitrile (Italian)  
2-cyanoacetylbenzofuran (Danish)  
2-cyaanacetylbenzofuran (Dutch)  
(bentsofuran-2-yylikarbonyyli)asetonitriili (Finnish)  
2-syanoasetyylibentsofuraani (Finnish)  
(bensofuran-2-ylkarbonyl)acetonitril (Swedish)  
2-cyanoacetylbensofuran (Swedish)  
FS Harmonized Tariff Code: HTC  
CBI Public  
HTC Harmonized Tariff Code: 293299  
EU Customs Code CN: 29329900  
FA RN CAS Registry Number  
HTC Harmonized Tariff Code

AN 8156 CHEMLIST  
RN 1338-23-4  
CN 2-Butanone, peroxide (TSCA, DSL, REACH, EINECS, ENCS, AICS, SWISS, PICCS,  
ASIA-PAC, NZIoC)  
Peroxyde de butan-2-one (French) (DSL)  
butanone-2, peroxyde (French) (EINECS)  
2-Butanon, Peroxid (German) (EINECS)  
2-butanona, peroxido (Spanish) (EINECS)  
2-Butanone peroxide (ECL)  
2-BUTANON-PEROXID (German) (SWISS)  
BUTAN-2-ONE PEROXIDE (PICCS)  
METHYL ETHYL KETONE PEROXIDE (PICCS)  
Andonox CHM 50  
Andonox KP 9  
Andonox MCP 75  
Andonox MEC  
Andonox Pulcat Super  
Benox B 50  
Butanox 50  
Butanox LA  
Butanox LPT  
Butanox M 105  
Butanox M 50  
Butanox M 60  
Cat-M  
Chaloxyd MEKP-HA 1  
Chaloxyd MEKP-LA 1  
DDM 9  
Delta X 9  
Diprometil LA 50R  
EPerox P  
Ethyl methyl ketone peroxide  
FR 222  
Hi-Point 180  
Hi-Point 90  
Kayamek A

Kayamek M  
 Ketonox  
 Lucidol DDM 9  
 Lucidol Delta X  
 Luperox K 1  
 Luperox K 12  
 Luperox K 18  
 Lupersol DDA 30  
 Lupersol DDM  
 Lupersol DDM 9  
 Lupersol Delta X  
 Lupersol Delta X 9  
 Lupersol DHD 9  
 Lupersol DNF  
 Lupersol DSW  
 ME 50L  
 MEK peroxide  
 MEKP 9  
 MEKP-M 60  
 MEKP-NA 1  
 MEKP-WA 50  
 MEKPO  
 Mepox  
 Mepox 55  
 Methyl ethyl ketone hydroperoxide  
 Norox 925H  
 Norox MEKP 925  
 Norox MEKP 925H  
 Norpol Peroxide 11  
 Permek G  
 Permek H  
 Permek N  
 Peroximon 41  
 Peroximon K 4  
 Superox 46-710  
 Superox 46-747

FS ASIA-PACIFIC: ASIA-PAC; AUSTRALIA: AICS; CANADA: DSL, WHMIS; EEC:  
 EINECS; EU: REACH; JAPAN: ENCS; KOREA: ECL; NEW ZEALAND: NZIoC;  
 PHILIPPINES: PICCS; Restricted Chemical Lists: RSTR; SWITZERLAND:  
 SWISS; USA: ACGIH, CERCLA, DOT, NIOSH, NTP, OSHA, RCRA, SARA, STATE,  
 TSCA

CBI Public  
 UVCB Peroxides  
 CFR 29 CFR Part 1910; 40 CFR Part 261; 40 CFR Part 302; 40 CFR Part 355  
 SC 29 CFR 1910.119; 40 CFR 261.5  
 RLN EPA No.: HW(RCRA) U160  
 EC No.: 215-661-2  
 EINECS No.: 215-661-2  
 ENCS No.: 5-667X  
 ECL Serial No.: KE-03883  
 SWISS No.: G-2430  
 SINGAPORE PCDMEP111  
 PAKISTAN 150  
 INDIA 385

INV On TSCA Inventory  
 June 2011 TSCA Inventory.  
 On DSL  
 Supplement to Canada Gazette, Part I, January 26, 1991.  
 On REACH  
 List of Pre-Registered Substances, March 2009.  
 Registration Date: 30-NOV-2010.  
 On EINECS  
 Annex to Official Journal of the European Communities, 15 June 1990.  
 On ENCS  
 Unlisted chemical name. For ENCS chemical class or category name,  
 refer to ENCS No. 5-667.  
 On AICS

**CHEMLIST/HCHEMLIST**

Australian Inventory of Chemical Substances, June 1996 Ed.

On ECL

Korean Existing Chemicals List, January 1997.

On SWISS

Giftliste 1 (List of Toxic Substances 1), 31 May 1999.

Toxic Category 2.

On PICCS

Philippines Inventory of Chemicals and Chemical Substances, 2000.

On ASIA-PAC

On NZIoC

New Zealand Inventory of Chemicals, 2006.

This substance has HSNO approval.

RSTR SINGAPORE: List of Controlled Hazardous Substances, 2008

In solutions of total wt. < 50 kg.

HONG KONG: Hazardous Chemicals Control Ordinance-Dangerous Goods List, 2007

Category: 10; Exempt Quantity: NIL; Label: B2 and G.

PAKISTAN: List of Prescribed Hazardous Chemicals, 2003

INDIA: List of Hazardous Chemicals, 2000

Conc. 60%.

FA RN CAS Registry Number  
 RLN Regulatory List Number  
 INV Inventory Status  
 RSTR Restricted Chemical Lists  
 8A Report On Volume, Exposure, Etc.  
 8E Substantial Risk Report  
 MTL TSCA Section 4 Master Testing List  
 PET Citizens' Petition - TSCA Section 21  
 IUR Inventory Update Rule  
 CERHS CERCLA Hazardous Substances  
 LDR RCRA Land Disposal Restrictions  
 EHS SARA Title III/EPCRA Extremely Hazardous Substances  
 HAZT DOT Hazardous Materials Table  
 NREL NIOSH Recommended Exposure Limits  
 HHC OSHA Highly Hazardous Chemicals (OSHA)  
 WHMIS WHMIS Ingredient List (Canada)  
 EECL European Community Legislation  
 WGK German Water Hazard Class Substance List  
 STOR Storage/Handling/Environment  
 TRANS Transportation/Packaging/Labeling  
 HTU Hazard, Toxicology, and Use Information (RTECS)  
 HHAZ Health Hazards  
 HPV High Production Volume Chemicals  
 PROP Chemical/Physical Properties  
 SIDS OECD Screening Information Data Set Project  
 TLV ACGIH Threshold Limit Values  
 TRNTP National Toxicology Program Technical Reports (NTP)  
 MISC Miscellaneous Regulations  
 SIL State of Illinois Right-to-Know  
 MASS Massachusetts Right-to-Know  
 SMN Minnesota Right-to-Know  
 SNJ New Jersey Right-to-Know  
 SNY New York Hazardous Substances Release and Bulk Storage  
 SPA Pennsylvania Right-to-Know  
 SRI State of Rhode Island Right-to-Know

==== U.S. EPA Regulations - TSCA ====

8A Report On Volume, Exposure, Etc.

Fed. Regist. 45 #42:13646 (29 Feb 1980).

Proposal to require manufacturers (including miners and importers) and certain processors of this substance to report production and exposure-related data, which will be used for ranking substances for investigation and for preliminary risk assessments.

8E Substantial Risk Report

Pesticide Toxic Chem. News 21 #24:23 (14 Apr 1993).  
 Results from preliminary mortality study; Society of the Plastics Industry (SPI); statistically significant increases in deaths from certain type of cancers; lung cancer; kidney cancer; prostate cancer; cancer of cervix uteri; cancer of the other female genital organs; hypertensive heart disease; certain nonmalignant respiratory disease; motor vehicle accidents; study done on 15,878 male and female employees who worked at least six months between 1948 and 1977 in reinforced plastics and composites industry; no increase in mortality from lymphatic and hematopoietic cancers; no increase in leukemia

- MTL TSCA Section 4 Master Testing List  
 Master Testing List. URL: [www.epa.gov/opptintr/chemtest](http://www.epa.gov/opptintr/chemtest) (23 Jan 2007).  
 This substance is on the Master Testing List (MTL).  
 First listed: 1996.
- PET Citizens' Petition - TSCA Section 21  
 Fed. Regist. 57 #174:41020 (08 Sep 1992).  
 EPA is not proposing to add this chemical to the list of toxic substances subject to reporting under Section 313 of EPCRA because the available data do not indicate that this chemical meets the criteria of EPCRA 313(d)(2). This action is in response to petitions from the Governor of New York and the Natural Resources Defense Council.
- IUR Inventory Update Rule  
 Internet: [epa.gov/oppt/iur/index.htm](http://epa.gov/oppt/iur/index.htm) (2009).  
 This chemical was reported under the TSCA Inventory Update Rule for the 2006 reporting period.
- IUR Inventory Update Rule  
<http://www.epa.gov/oppt/iur/index.htm> (2004).  
 This chemical was reported under the TSCA Inventory Update Rule for the 2002 reporting period.
- IUR Inventory Update Rule  
<http://www.epa.gov/oppt/iur/index.htm> (01 Jan 2003).  
 This chemical was reported under the TSCA Inventory Update Rule for the following reporting period(s): 1986, 1990, 1994, 1998.
- ==== U.S. EPA Regulations - CERCLA ====
- CERHS CERCLA Hazardous Substances  
 Code of Federal Regulations 40CFR302 v. 24 Table 302.4 (01 July 2004).  
 This substance is on the CERCLA List of Hazardous Substances. Releases exceeding the Final Reportable Quantity (RQ) are subject to reporting. The RQ for this substance is 10 lbs./4.54 kg.  
 Listed Name(s): Methyl ethyl ketone peroxide; 2-Butanone, peroxide
- ==== U.S. EPA Regulations - CERCLA ====
- CERHS CERCLA Hazardous Substances  
 Code of Federal Regulations (CFR) v.40 Part 302 Table 302.4 (01 Jul 1997).  
 This substance is on the CERCLA List of Hazardous Substances. Releases exceeding the Final Reportable Quantity (RQ) are subject to reporting. The RQ for this substance is 10 lbs./4.54 kg.
- ==== U.S. EPA Regulations - RCRA ====
- LDR RCRA Land Disposal Restrictions  
 40 CFR 261- Solid Wastes: Identification and Listing of Hazardous Waste (Nov 1 2010).  
 This substance is classified as a toxic waste and is subject to the small quantity exclusion defined in 40 CFR 261.
- LDR RCRA Land Disposal Restrictions  
 40 CFR 261- Solid Wastes: Identification and Listing of Hazardous Waste (Jul 11 2005).  
 This substance is classified as a toxic waste and is subject to the small quantity exclusion defined in 40 CFR 261.5. The primary hazardous properties of this substance are reactivity and toxicity. EPA HW No. U160.
- ==== U.S. EPA Regulations - SARA ====
- EHS SARA Title III/EPCRA Extremely Hazardous Substances  
 Code of Federal Regulations (CFR) 40CFR355 (2010).  
 ==== U.S. DOT Regulations =====
- HAZT DOT Hazardous Materials Table  
 Office of Hazardous Materials Safety URL:<http://www.myregs.com/dotrspa/>  
 (30 Jul 2003).

**CHEMLIST/HCHEMLIST**

This substance is listed on the Department of Transportation (DOT) Hazardous Materials Table.

Listed Name(s): Methyl ethyl ketone peroxide, in solution with more than 9 percent by mass active oxygen

Hazard Class or Division: Forbidden.

HAZT DOT Hazardous Materials Table

Fed. Regist. 59 #249:67395 (29 Dec 94)

Listed Name(s): Methyl ethyl ketone peroxide, in solution with >9% by mass active oxygen [Forbidden].

==== U.S. NIOSH Regulations ====

NREL NIOSH Recommended Exposure Limits

DHHS (NIOSH) Publication No. 92-100

Listed Name(s): MEKP

Methyl ethyl ketone peroxide

REL: 0.2 ppm (1.5 mg/m<sup>3</sup>) ceiling

Health Effects: Eye and skin irritation; lung, liver, and kidney damage.

==== U.S. OSHA Regulations ====

HHC Highly Hazardous Chemicals

Code of Federal Regulations (CFR) v.29 Part 1910, Section 1910.119, July 1, 1997.

Highly Hazardous Chemicals (HHCs). Final rule that establishes standards associated with processes using highly hazardous chemicals (HHCs) to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Facilities covered by the rule process one or more HHC in quantities equal to or greater than a designated Threshold Quantity (TQ). Process is defined as any activity involving a HHC including any use, storage, manufacturing, handling, or the on-site movement of such chemicals, or combination of these activities. The TQ for concentrations of this substance > 60% is 5,000 lbs.

==== U.S. OSHA Regulations ====

HHC Highly Hazardous Chemicals

Fed. Regist. 57 #36:6356 (24 Feb 1992); Code of Federal Regulations (CFR) v.29 Part 1910, Section 1910.119, July 1, 1992. Effective date: 26 MAY 1992.

Highly Hazardous Chemicals (HHCs). Final rule that establishes standards associated with processes using highly hazardous chemicals (HHCs) to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Facilities covered by the rule process one or more HHC in quantities equal to or greater than a designated Threshold Quantity (TQ). Process is defined as any activity involving a HHC including any use, storage, manufacturing, handling, or the on-site movement of such chemicals, or combination of these activities. The TQ for concentrations of this substance > 60% is 5,000 lbs.

==== Canadian Regulations ====

WHMIS WHMIS Ingredient List (Canada)

Workplace Hazardous Material Information System (WHMIS). Canada Gazette, Part II, 122(2) (01 Jan 88)

Listed Name(s): Methyl ethyl ketone peroxide.

==== European Community Regulations ====

EECL European Community Legislation

Official Journal of the European Union, No L 291 #53:47 (09 Nov 2010). Commission Decision of 08 November 2010 concerning the non-inclusion of certain substances in Annex I, IA or IB to Council Directive 98/8/EC of the European Parliament and of the Council concerning the placing of biocidal products on the market. This substance is not to be included in Annexes I, IA or IB to Directive 98/8/EC with regard to certain product types.

EECL European Community Legislation

Official Journal of the European Union, No L 325 (11 Dec 2007).

Publication of Council Directive 98/8/EC Article 16(2) concerning the placing of biocidal products on the market. This substance is included in Annex I; classified as an existing active substance in biocidal products in accordance with the requirements of Article 3(1) or 5(2) of Regulation (EC) No 1896/2000.

WGK German Water Hazard Class Substance List

German Water Hazard Class Substances List, 27 Nov 2006.

This substance has been assigned a Water Hazard Classification under the June 1999 Administrative Regulation on Substances Hazardous to Waters (Verwaltungsvorschrift wassergefährdende Stoffe) in Germany.

Listed Name(s): Methylethylketonperoxid

Kenn-Number: 1108

State of Classification: VwVwS.

German Water Hazard Classification (WGK) Number: 1.

==== Miscellaneous Regulations or Advisory Lists ====

STOR Storage/Handling/Environment

URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (03 Oct 2007).

Spillage Disposal: Chemical protection suit including self-contained breathing apparatus. Collect leaking and spilled liquid in sealable plastic containers as far as possible. Do NOT absorb in sawdust or other combustible absorbents.

Storage: Store only if stabilized. Well closed.

TRANS Transportation/Packaging/Labeling

URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (03 Oct 2007).

UN Hazard Class: 5.2

UN Subsidiary Risks: 1 and 8

UN Packing Group: II.

HTU Hazard, Toxicology, and Use Information

Human Data

Skin / Eye Irritant

Tumor data (RTECS)

HHAZ Health Hazards

URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (03 Oct 2007).

Occupational exposure limits: TLV: 0.2 ppm (Ceiling value.) MAK not established. NIOSH REL: C 0.2 ppm (1.5 mg/m<sup>3</sup>).

Routes of Exposure: The substance can be absorbed into the body by inhalation and by ingestion.

Inhalation Risk: A harmful concentration of airborne particles can be reached quickly when dispersed.

Effects of Short-Term Exposure: The substance is corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion.

RTECS No: EL9450000.

HPV High Production Volume Chemicals

Internet: [oecd.org](http://www.oecd.org), October 2009.

This substance is listed on the 2007 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

HPV High Production Volume Chemicals

2004 OECD List of High Production Volume Chemicals

URL:<http://www.oecd.org> (Nov 2004).

This substance is listed on the 2004 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

HPV High Production Volume Chemicals

ICCA Working List <http://www.cefic.org/activities/hse/mgt/hpv/hpvinit.htm> (Aug 2003).

This substance is listed on the ICCA Main Working List of High Production Volume Chemicals. This substance is considered HPV or otherwise of interest in two or more regions (i.e. North America, Europe, or Japan). This list is sponsored by the International Council of Chemical Associations (ICCA).

HPV High Production Volume Chemicals

2000 OECD List of High Production Volume Chemicals

URL:<http://www1.oecd.org/ehs/HPV.HTM> (Feb 2001).

This substance is listed on the 2000 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

HPV High Production Volume Chemicals

1990 U.S. HPV Challenge Program Chemical List. URL:

<http://www.epa.gov/chemrtk/hpvchmlt.htm> (18 Dec 2002).

## CHEMLIST/HCHEMLIST

This substance is listed on the U.S. HPV Challenge Program Chemical List. This substance was manufactured/imported into the United States in amounts equal to or greater than one million pounds per year. This chemical is otherwise being handled under the Organization for Economic Co-operation and Development (OECD) HPV Screening Information Data Set (SIDS) Program. This chemical has a fully sponsored commitment under the HPV Challenge Program.

## PROP Chemical/Physical Properties

URL: <http://www.cdc.gov/niosh/ipcs/icstart.html> (03 Oct 2007).

Physical State; Appearance: Colorless liquid, with pungent odor.

Chemical Dangers: Heating may cause violent combustion or explosion. On combustion, forms toxic and corrosive gases. The substance is a strong oxidant and reacts violently with combustible and reducing materials, amines, metals, strong acids, strong bases, causing fire and explosion hazard.

Boiling point (decomposes): >80°C

Relative density (water = 1): 1.10-1.17

Solubility in water: very poor.

## SIDS OECD Screening Information Data Set Project

OECD SIDS Chemicals <http://www1.oecd.org/ehs/sidstable/index.htm> (Feb 2002).

The Screening Information Data Set (SIDS) program operated under the auspices of the Organization for Economic Cooperation and Development (OECD) is a voluntary cooperative international testing program that began in 1989. The SIDS program is focused on developing base level test information on approximately 600 poorly characterized international HPV chemicals. The SIDS data are used to "screen" the chemicals and set priorities for further testing or risk assessment/management activities. This substance is an HPV chemical for which a SIDS is available.

## TLV ACGIH Threshold Limit Values

American Conference of Governmental Industrial Hygienists Threshold Limit Values and Biological Exposure Indices for 1999

Listed Name(s): Methyl ethyl ketone peroxide

Ceiling (0.2 ppm)

## TRNTP National Toxicology Program Technical Reports List

NTP Technical Report Series (available from NTIS)

Listed Name(s): Methyl ethyl ketone peroxide.

## MISC Miscellaneous Regulations

Chem. Regul. Rep. 28 #12:344 (22 Mar 2004).

The Resource Conservation and Recovery Act and the Hazardous Materials Transportation Uniform Safety Act were possibly violated by three Idaho men including the former owner of Ponderosa Paint. It is alleged that the men were storing hazardous waste in rusted and leaking drums.

==== U.S. State Regulations ====

## SIL State of Illinois Right-to-Know Toxic Substances List

List discontinued per Illinois Department of Labor, Safety Inspection and Education Division (01 Jul 1997).

Illinois Register, Section 205, Table A, Toxic Substances List (1991)

Listed Name(s): Methyl ethyl ketone peroxide.

## MASS Massachusetts Right-to-Know

Internet: [mass.gov/dos/rtkbulletin](http://mass.gov/dos/rtkbulletin).

Only Massachusetts public sector agencies (city, state, or county) are required to comply with Massachusetts Right-to-Know Law (M.G.L. 111F).

## MASS Massachusetts Right-to-Know

Massachusetts Substance List for Right-to-Know Law (Apr 93).

General Law C.111F, Chapter 30A (28 Jun 84); 105 CMR 670.000, Appendix A

Listed Name(s): 2-Butanone peroxide; Methyl ethyl ketone peroxide.

First Listed: Apr 1993.

## SMN Minnesota Right-to-Know

Internet: [health.state.mn.us](http://health.state.mn.us) (July 2010).

This substance is listed on the Minnesota Hazardous Substances List.

## SMN Minnesota Right-to-Know

<http://www.revisor.leg.state.mn.us/arule/5206/0400.html> (21 Jun 2002).

This substance is listed on the Minnesota Hazardous Substances List

Listed Name(s): Methyl ethyl ketone peroxide.

## SNJ New Jersey Right-to-Know

Internet: [web.doh.state.nj.us/rtkhsfs](http://web.doh.state.nj.us/rtkhsfs) (August, 2010).

## CHEMLIST/HCHEMLIST

This substance is listed on the 2010 New Jersey Environmental Hazardous Substance List.

- SNJ New Jersey Right-to-Know  
New Jersey Department of Health Hazard Right-to-Know Program Hazardous Substance List, December 1989.  
Special Health Hazard Code(s): None  
Common Name(s): METHYL ETHYL KETONE PEROXIDE; 2-BUTANONE PEROXIDE; 2-BUTANONE, PEROXIDE
- SNY New York Hazardous Substances Release and Bulk Storage  
Internet: [dec.ny.gov/regs/15587.html](http://dec.ny.gov/regs/15587.html) (2010).  
This substance is listed on the New York State List of Hazardous Substances.
- SNY New York Hazardous Substances Release and Bulk Storage  
New York State Department of Environmental Conservation Division of Environmental Remediation  
URL: <http://www.dec.state.ny.us/website/regs/597.htm>. Effective date: 15 JUL 1988.  
This substance is listed on the New York State List of Hazardous Substances.  
Listed name(s): Methyl ethyl ketone peroxide.  
Reportable Quantity (pounds): Air: 10  
Land/Water: 1  
Note: Acutely hazardous substance.  
Last amended: 11 Aug 1994.
- SPA Pennsylvania Right-to-Know  
Pennsylvania Department of Labor and Industry Hazardous Substance List 1989.  
Listed Name(s): 2-BUTANONE, PEROXIDE  
Special Health Hazard Code(s): (E) Environmental Hazard
- SRI State of Rhode Island Right-to-Know  
Internet: [ri.gov/DLT/righttoknow](http://ri.gov/DLT/righttoknow) (2010).  
This substance is listed on the Rhode Island Hazardous Substance List.
- SRI State of Rhode Island Right-to-Know  
URL: <http://www.dlt.state.ri.us/webdev/osha/subcas.htm> (03 Nov 2003).  
This substance is listed on the Rhode Island Hazardous Substance List.  
Listed name(s): Ethyl methyl ketone peroxide; Methyl ethyl ketone peroxide.

**In North America**

CAS  
STN North America  
P.O. Box 3012  
Columbus, Ohio 43210-0012 U.S.A.

CAS Customer Center:  
Phone: 800-753-4227 (North America)  
614-447-3700 (worldwide)  
Fax: 614-447-3751  
E-mail: [help@cas.org](mailto:help@cas.org)  
Internet: [www.cas.org](http://www.cas.org)

**In Europe**

FIZ Karlsruhe  
STN Europe  
P.O. Box 2465  
76012 Karlsruhe  
Germany  
Phone: +49-7247-808-555  
Fax: +49-7247-808-259  
E-mail: [helpdesk@fiz-karlsruhe.de](mailto:helpdesk@fiz-karlsruhe.de)  
Internet: [www.stn-international.com](http://www.stn-international.com)

**In Japan**

JAICI (Japan Association for International Chemical Information)  
STN Japan  
Nakai Building  
6-25-4 Honkomagome, Bunkyo-ku  
Tokyo 113-0021, Japan  
Phone: +81-3-5978-3601 (Technical Service)  
+81-3-5978-3621 (Customer Service)  
Fax: +81-3-5978-3600  
E-mail: [support@jaici.or.jp](mailto:support@jaici.or.jp) (Technical Service)  
[customer@jaici.or.jp](mailto:customer@jaici.or.jp) (Customer Service)  
Internet: [www.jaici.or.jp](http://www.jaici.or.jp)