

Quick Reference Card

CAS Roles in CASM/CAplusSM

CAS roles are powerful CAS indexing terms that allow you to search for precise information on substances. Roles are assigned to every indexed substance and to controlled index terms for classes of compounds. You can search specific roles and super roles; all are listed on the last page of this card.

The PREP (Preparation) role is assigned for documents from 1907 to the present. Most other CAS roles are available for documents from 1967 to date. You can search roles in all of the CA/CAplus family of databases.

Find references to the therapeutic use or toxic effects of dimethyl sulfoxide (CAS Registry Number 67-68-5).

Step 1: In a CA/CAplus database, search the CAS Registry Number[®] followed by a slash and a code for the role. Separate multiple roles by commas without spaces.

Step 2: Display some answers. Roles display as codes along with their names in the Role (RL) field within the Index Term (IT) field.

```
=> FILE CAPLUS
```

```
=> S 67-68-5/THU,ADV
```

```
52288 67-68-5
1699044 THU/RL
2915 67-68-5/THU
      (67-68-5 (L) THU/RL)
52288 67-68-5
1131001 ADV/RL
      689 67-68-5/ADV
      (67-68-5 (L) ADV/RL)
```

```
L1      3554 67-68-5/THU,ADV
```

```
=> D HITRN 1-2
```

```
L1 ANSWER 1 OF 3554 CAPLUS COPYRIGHT 2013 ACS on STN
```

```
IT 67-68-5, Dimethyl sulfoxide
```

```
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
      (artificial neural network anal. of data from multiple in vitro assays
      for prediction of skin sensitization potency of chems.)
```

```
L1 ANSWER 2 OF 3554 CAPLUS COPYRIGHT 2013 ACS on STN
```

```
IT INDEXING IN PROGRESS
```

```
IT 67-68-5, Dimethyl sulfoxide
```

```
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological
      study); USES (Uses)
      (quality-stable dapsone gel and its preparation method)
```

Find references on the synthetic preparation of fullerenes.

Step 1: Search CAS REGISTRYSM for CAS Registry Numbers of the substances of interest.

Step 2: In a CA/CAPLUS database, search the REGISTRY L-number answer set (L1), followed by a slash and the role code (SPN for synthetic preparation). You can supplement this strategy by also searching the roles assigned to appropriate index terms for classes of compounds (FULLERENES). Append the index term for a class of compounds with a slash and the role code.

```
=> FILE REGISTRY

=> S FULLERENE/CNS
L1      32568 FULLERENE/CNS

=> FILE CAPLUS

=> S L1/SPN OR FULLERENES/SPN
      43129 L1
      2771552 SPN/RL
      5859 L1/SPN
          (L1 (L) SPN/RL)
      17259 FULLERENES/CT
      2771552 SPN/RL
      3053 FULLERENES/SPN
          (FULLERENES/CT (L) SPN/RL)
L2      7236 L1/SPN OR FULLERENES/SPN

=> D TI HIT 3,15
L2 ANSWER 3 OF 7236 CAPLUS COPYRIGHT 2013 ACS on STN
TI Method of producing 1'-[2"-(methylthio)ethyl]-
1'-[s-alkylcarbothioyl]-(c60-ih) [5,6]fullero[2',3':1,9]cyclopropanes
IT Fullerenes
RL: IMF (Industrial manufacture); RCT (Reactant);
SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)
      (preparation of (methylthio)ethyl[s-alkylcarbothioyl]-
      (c60-ih) [5,6]fullero[2',3':1,9]cyclopropanes)
IT 1380511-65-8P 1380511-69-2P 1380511-70-5P 1380511-71-6P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation);
PREP (Preparation)
      (preparation of (methylthio)ethyl[s-alkylcarbothioyl]-
      (c60-ih) [5,6]fullero[2',3':1,9]cyclopropanes)

L2 ANSWER 15 OF 7236 CAPLUS COPYRIGHT 2013 ACS on STN
TI A Series of Inorganic Solid Nitrogen Sources for the Synthesis of Metal
Nitride Clusterfullerenes: The Dependence of Production Yield on the
Oxidation State of Nitrogen and Counter Ion
IT Fullerenes
RL: SPN (Synthetic preparation); PREP (Preparation)
      (endohedral; nitrogen sources for preparation of
      trimetallic scandium nitride clusterfullerenes)
```

Online thesaurus for CAS roles

To use the online thesaurus, enter a term in the EXPAND or SEARCH command followed by the plus sign (+) and the relationship code followed by /RL. The following relationship codes are available:

ALL (for all associated terms including NOTE)
BT (for all broader terms)
HIE (for all broader and narrower terms)
NOTE (for role definitions)
NT (for narrower terms)

What roles are available for preparation?

Step 1: Expand on a term followed by +ALL/RL to display the definition of the term (NOTE), plus all broader and narrower terms.

```
=> FILE CAPLUS
```

```
=> E PREPARATION+ALL/RL
```

```
E1 5719538 --> Preparation/RL
```

```
E2 5719538 PREP/RL
```

```
NOTE Vol. 1 (1907) to present -  
Assigned to a substance in studies of  
the synthesis of the substance as a  
distinct chemical entity, formed with  
preparative intent, via a chemical,  
biochemical, or nuclear reaction. The  
recovery, purification, separation,  
or other intentional formation with  
preparative intent of a desired  
substance also receives a PREP role.
```

```
E3 96191 NT1 Bioindustrial Manufacture/RL
```

```
E4 214871 NT1 Biosynthetic Preparation/RL
```

```
E5 76446 NT1 Byproduct/RL
```

```
E6 831621 NT1 Industrial Manufacture/RL
```

```
E7 173906 NT1 Preparation, Unclassified/RL
```

```
E8 443315 NT1 Purification or Recovery/RL
```

```
E9 2771552 NT1 Synthetic Preparation/RL
```

```
***** END *****
```

For more information

Enter HELP ROLES and HELP THESAURUS at an arrow prompt in CA/CAPLUS.

CAS Roles⁽¹⁾

ANST Analytical Study

ANT	Analyte
AMX	Analytical Matrix
ARG	Analytical Reagent Use
ARU	Analytical Role, Unclassified

BIOL Biological Study

ADV	Adverse Effect, Including Toxicity
AGR	Agricultural Use
BAC	Biological Activity or Effector, Except Adverse (2)
BCP	Biochemical Process (3)
BMF	Bioindustrial Manufacture
BOC	Biological Occurrence (2)
BPN	Biosynthetic Preparation
BPR	Biological Process (2)
BSU	Biological Study, Unclassified
BUU	Biological Use, Unclassified
COS	Cosmetic Use (3)
DGN	Diagnostic Use (3)
FFD	Food or Feed Use
NPO	Natural Product Occurrence (3)
PAC	Pharmacological Activity (3)
PKT	Pharmacokinetics (3)
THU	Therapeutic Use

CMBI Combinatorial Study (3)

FORM Formation, Nonpreparative

FMU	Formation, Unclassified
GFM	Geological or Astronomical Formation

NANO Nanomaterial (4)

OCCU Occurrence

BOC	Biological Occurrence (2)
GOC	Geological or Astronomical Occurrence
NPO	Natural Product Occurrence (3)
OCU	Occurrence, Unclassified
POL	Pollutant

PREP Preparation (5)

BMF	Bioindustrial Manufacture
BPN	Biosynthetic Preparation
BYP	Byproduct
IMF	Industrial Manufacture
PNU	Preparation, Unclassified (6)
PUR	Purification or Recovery
SPN	Synthetic Preparation

PROC Process

BCP	Biochemical Process (3)
BPR	Biological Process (2)
GPR	Geological or Astronomical Process
PEP	Physical, Engineering, or Chemical Process
REM	Removal or Disposal

PRPH Prophetic Substance (8)

RACT Reactant or Reagent (3,7)

RCT	Reactant (7)
RGT	Reagent (3)

USES Uses

AGR	Agricultural Use
ARG	Analytical Reagent Use
BUU	Biological Use, Unclassified
CAT	Catalyst Use
COS	Cosmetic Use (3)
DGN	Diagnostic Use (3)
FFD	Food or Feed Use
MOA	Modifier or Additive Use
NUU	Other Use, Unclassified (9)
POF	Polymer in Formulation
TEM	Technical or Engineered Material Use
THU	Therapeutic Use

Specific roles that are not associated with any super roles:

MSC	Miscellaneous
PRP	Properties

- (1) Super roles have 4-letter codes. Specific roles have 3-letter codes. Under each super role are listed the specific roles that are retrieved when you search that super role.
- (2) Used from CA Vol. 66 (1967) to Vol. 135 (2001).
- (3) Used starting with CA Vol. 136 (2002).
- (4) Used starting with CA Vol. 116 (1992).
- (5) The PREP super role has been added to records back to 1907.
- (6) Used from CA Vol. 66 (1967) to Vol. 145 (2006).
- (7) Searching the RCT role retrieves references from CA Vol. 66 (1967) to the present. Searching the RACT super role retrieves references with RCT or RGT references starting with CA Vol. 136 (2002).
- (8) Used starting with records from 2003 to the present.
- (9) Starting in 2002, the searchable text for the NUU role changed from NONBIOLOGICAL USE, UNCLASSIFIED/RL to OTHER USE, UNCLASSIFIED/RL. Search NUU/RL to retrieve records from CA Vol. 66 (1967) to the present.

Note: The roles CPN, CPS, CRG, CRT, CST, CUS, DEV, DMA, EPR, MFM and PYP are no longer in use, but have been mapped to current roles.



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