

# STN<sup>®</sup> Quick Reference Card

## CAS Roles in CA<sup>SM</sup>/CAplus<sup>SM</sup>

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<sup>®</sup> 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 REGISTRY<sup>SM</sup> 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      6337222  --> Preparation/RL
E2      6337222      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      114463   NT1  Bioindustrial Manufacture/RL
E4      251784   NT1  Biosynthetic Preparation/RL
E5      96003    NT1  Byproduct/RL
E6      1003751  NT1  Industrial Manufacture/RL
E7      528951   NT1  Purification or Recovery/RL
E8      3286444  NT1  Synthetic Preparation/RL
***** END *****
```

## For more information

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

# CAS Roles<sup>(1)</sup>

## 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
BPN	Biosynthetic Preparation
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

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
PUR	Purification or Recovery
SPN	Synthetic Preparation

## PROC Process

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

## PRPH Prophetic Substance (7)

## RACT Reactant or Reagent (3,6)

RCT	Reactant (6)
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 (8)
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) 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).
- (7) Used starting with records from 2003 to the present.
- (8) 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. The roles BOC, BPR and PNU have been eliminated and are no longer searchable, but have been replaced by broader roles when appropriate.

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