

# **PFAS CAS instructional sheet**

This instructional sheet shows emissions inventory reporters how to read Safety Data Sheets (SDS) to determine whether the materials used at their facility contain Per- and polyfluoroalkyl substances (PFAS) that the air portion of the <u>PFAS Monitoring Plan</u> is requesting facilities to report.

Each material used at a facility has a Safety Data Sheet (SDS). These generally take the form found in the Occupational Safety and Health Administration's (OSHA's) <u>Safety Data Sheets communication</u>. Figure 1 (below) contains an example SDS. Section 3 of the SDS will contain a list of chemical ingredients and possibly will include the Chemical Abstracts Service (CAS) number for each ingredient.

### Does the material contain reportable PFAS?

Figure 1: SDS Example

For each ingredient:

- 1. Locate the <u>CAS Number</u> for each ingredient, found in Section 3 of the SDS. If there is no CAS number, then search an online tool by Chemical Name (see instructions below).
- Compare CAS Number from step 1 to the pollutants identified as "PFAS Monitoring Plan, OTM-45" in MPCA's list of <u>reportable air toxics</u> (Air Toxics List sheet, Notes for Group column).
- If the CAS Number is in MPCA's list, then estimate air emissions of the compound and report them to MPCA via <u>e-Services</u>.

Manufacturer			Page: 2		
SAFETY DATA SHEET		Revision Date: 1/1/2023			
			Print Date: 1/1/2023		
		SDS	Number: 000000XXXXXXX		
Product Name			Version: 1.1		
SECTION 2 (continued). HAZARDS ID	ENTIFICATION				
	IF exposed or cond Storage: Store locked up. Disposal: Dispose of content plant.	cerned: Get medical advice/ at s/ container to an approved w	tention. aste disposal		
Other hererde					
Other hazards					
None known.					
SECTION 3. COMPOSITION/INFORM	ATION ON INGRE	DIENTS			
Substance / Mixture :	Mixture				
Chemical nature : Defatter					
Hazardous components	$\frown$				
Chemical Name	CAS-No.	Classification	Concentration (%)		
Triethylene glycol monomethyl ether, borate	30989-05-0	Not a hazardous substance or mixture.	40.00		
TRIETHYLENE GLYCOL MONOBUTYL ETHER	143-22-6	Eye Dam. 1; H318	17.99		
POLYOXYETHYLENE MONOBUTYL ETHER	9004-77-7	Eye Dam. 1; H318	13.00		
TETRAETHYLENE GLYCOL	112-60-7	Not a hazardous	10.00		

## **Determine CAS number if not found in SDS**

If there is no CAS number listed for an ingredient, then use an online tool like <u>NIH's PubChem</u> or <u>EPA's Comptox</u> to determine the CAS number for the ingredient.

For example, if the Chemical Name is "N-Methyl perfluorooctane sulfonamidoacetic acid" in Section 3 of the SDS, then enter it into the NIH PubChem search field and click the search icon (a magnifying glass) as in Figure 2.

#### Figure 2: NIH PubChem search webpage

$\leftarrow \rightarrow$ C & $\bigstar$	O A https://pubchem.ncbi.nlm.ni	h.gov	
An official website of the United	States government Here is how you know	·	
NIH National Libra	ry of Medicine		
PubChem	About Docs Submit	Contact	
		Explore Chemistry	
		Quickly find chemical information from authoritative sources	
		N-Methyl perfluorooctane sulfonamidoacetic acid $\qquad imes$	Q
		Compound	
		N-Methylperfluorooctanesulfonamidoethanol	
		n-methylperfluorooctanesulfonamide	
		N-Ethylperfluorooctanesulfonamide	
		Quickly find chemical information from authoritative sources     N-Methyl perfluorooctane sulfonamidoacetic acid   ×     Compound     N-Methylperfluorooctanesulfonamidoethanol	Q

Select the blue link at the top of the first result box shown in Figure 3.

#### Figure 3: NIH PubChem search result webpage

C 🙆 🕅 O A https://pubchem.ndbinhm.nh/gov/Mquery=N-Methyl perfluorooctane sulfonamidoacetic add		合	
💁 An official website of the United States government Hitzt is how you know 🗸			
Netional Library of Medicine National Center for Biotechnology Information			
PubChem About Docs Submit Contact			
SEARCH FOR		/	<
N-Methyl perfluorooctane sulfonamidoacetic acid		×	
Treating this as a text search.		$\square$	1
Compositions Substanties Set of the set of	<u>*</u>	Download	
2355-31-9; NMeFOSAA: 2-(N-Methylperfluorooctanesulfonamido)acetic acid; N-methylperfluorooctane sulfonamidoacetic acid; Glycine,	50	Search in Entrez	
N-[11,22,3,3,44,5,56,6,7,7,8,8,8-heptadecafluorooctyl]sulfonyl]-N-methyl-:		ACTIONS ON RESULTS WITH ID TYPE: Compounds	
IUPAC Name: 2-(11.2.2.3.3.4.5.5.6.6.7.7.8.8.9-heptadecafluorooctylsulfony((methyl)amino)acetic acid IuPAC Name: 2-(11.2.2.3.3.4.4.5.5.6.6.7.7.8.8.9-heptadecafluorooctylsulfony((methyl)amino)acetic acid Isomeric SMLESC, NUCCI-0/005(=0)C=0/C(C(C(C)C(C)(D)P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(		Push to Entrez	
LOUP - OUDURTRANING UNTERVIEW	\$	Save for Later	
Inc.nikey: Qu/Uniterim/Whitem-Unite/PACU34-94 InChi: InChi=15;/C11H6F17NO45;(c1-29(2-3(30)31)34(32.33))11(27.28)9(22.23)7(18.19)5(14.15)4(12.13)6(16.17)8(20.21)10(24.25)26/n2H2.1H3.(H.30.31)		Linked Data Sets	
Inchiney: Cardination/Anton-Uniterviol/194-94 InChi: InChi=15)C11H6F17NQ45(c1-29(2-3(30)31)34(32.33)11(27.28)9(22.23)7(18.19)5(14.15)4(12.13)6(16.17)8(20.21)10(24.25)26(h2H2.1H3.(H.30.31) Create Date: 2007-12-05	10		

On the resulting screen, scroll down to Locate the CAS Number under section "2.3.1 CAS" as seen in Figure 4.

#### Figure 4: NIH PubChem compound summary CAS number location

