

**XOF 25A**

Version 1.0      Revision Date: 07/30/2015      SDS Number: 400001004664      Date of last issue: -  
Date of first issue: 07/30/2015

**SECTION 1. IDENTIFICATION**

Product name : XOF 25A

**Manufacturer or supplier's details**

Company name of supplier : Huntsman International LLC  
Address : P.O. Box 4980  
The Woodlands,  
TX 77387  
United States of America  
Telephone : TechInfo: (281) 719-7780

E-mail address of person responsible for the SDS : MSDS@huntsman.com

Emergency telephone : Chemtrec: (800) 424-9300 or (703) 527-3887

**Recommended use of the chemical and restrictions on use**

Recommended use : Intermediate

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Acute toxicity (Oral) : Category 4  
Skin corrosion : Category 1C  
Serious eye damage : Category 1  
Acute aquatic toxicity : Category 2  
Chronic aquatic toxicity : Category 3

**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H401 Toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read

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and understood.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P273 Avoid release to the environment.

P270 Do not eat, drink or smoke when using this product.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves.

**Response:**

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage:**

P405 Store locked up.

**Disposal:**

ENV12 Dispose of waste product or used containers according to local regulations.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

**Hazardous ingredients**

Chemical Name	CAS-No.	Concentration (%)
Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.	83897-82-9	>= 60 - <= 100

**SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.  
Consult a physician.  
Show this material safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

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- If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Keep respiratory tract clear.  
Do NOT induce vomiting.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : None known.

**SECTION 5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media : No data is available on the product itself.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire fighting : No data is available on the product itself.
- Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : No hazardous combustion products are known
- No data is available on the product itself.
- Specific extinguishing methods : No data is available on the product itself.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Neutralize with chalk, alkali solution or ammonia.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapors/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
To avoid spills during handling keep bottle on a metal tray.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Do not store near acids.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters****Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

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Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles.  
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Color : brown

Odor : sulfurous

Odor Threshold : No data is available on the product itself.

pH : 2.07, Concentration: 10 g/l

Melting point : < 10 °C

Freezing point : < -18.06 °C

Boiling point : 100 °C

Flash point : > 149 °C  
Method: closed cup

Evaporation rate : No data is available on the product itself.

Flammability (solid, gas) : No data is available on the product itself.

Upper explosion limit : No data is available on the product itself.

Lower explosion limit : No data is available on the product itself.

Vapor pressure : 0.00061 hPa (40 °C)

Relative vapor density : No data is available on the product itself.

Relative density : No data is available on the product itself.

Density : 1.0208 g/cm<sup>3</sup> (25 °C)

Solubility(ies)  
Water solubility : 5.27 - 177 µg/l completely miscible (25 °C)

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Solubility in other solvents : No data is available on the product itself.

Partition coefficient: n-octanol/water : No data is available on the product itself.

Autoignition temperature : No data is available on the product itself.

Thermal decomposition : No data is available on the product itself.

Viscosity  
Viscosity, dynamic : 665.2 mPa.s (40 °C)

Oxidizing properties : None.

Self-Accelerating decomposition temperature (SADT) : No data is available on the product itself.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under normal conditions.  
No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Stable under normal conditions.  
No decomposition if stored and applied as directed.

Conditions to avoid : No data available

**SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : No data is available on the product itself.

**Acute toxicity**

Acute oral toxicity - Product : Acute toxicity estimate : 1,542 mg/kg  
Method: Calculation method

Acute inhalation toxicity : No data available

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:  
Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

Acute toxicity (other routes of administration) : No data available

**Skin corrosion/irritation****Product:**

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Remarks: Extremely corrosive and destructive to tissue.

**Serious eye damage/eye irritation****Product:**

Remarks: May cause irreversible eye damage.

**Respiratory or skin sensitization****Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Routes of exposure: Skin

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitization.

Assessment: No data available

**Germ cell mutagenicity****Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Genotoxicity in vitro : Concentration: 0 - 5000 ug/plate

Metabolic activation: with and without metabolic activation

Method: Directive 67/548/EEC, Annex V, B.4.

Result: negative

GLP: yes

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

GLP: yes

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Genotoxicity in vivo : Cell type: Somatic

Exposure time: 9 Months

Dose: 1170 mg/kg

Result: negative

GLP: yes

**Carcinogenicity**

No data available

Carcinogenicity - Assessment : No data available

**Reproductive toxicity****Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Effects on fertility : Species: Rat, male and female

Application Route: Oral

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**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Effects on fetal development : Species: Rat, female  
Application Route: Oral  
General Toxicity Maternal: NOAEL (No observed adverse effect level): 300 mg/kg body weight  
Result: No teratogenic effects.

Reproductive toxicity - Assessment : No data available

**STOT-single exposure**

No data available

**STOT-repeated exposure**

No data available

**Repeated dose toxicity****Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Species: Rat

NOAEL (No observed adverse effect level): 85 mg/kg

Application Route: Ingestion

Exposure time: 6,480 h

Method: Chronic toxicity

Repeated dose toxicity - Assessment : No data available

**Aspiration toxicity**

No data available

**Experience with human exposure**

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

**Toxicology, Metabolism, Distribution**

No data available



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**Neurological effects**

No data available

**Further information****Product:**

Remarks: No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.67 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: Fresh water  
Method: OPPTS 850.1075  
GLP: no  
Remarks: Toxic to aquatic organisms.

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 2.9 mg/l  
Exposure time: 48 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202  
GLP: yes  
Remarks: Toxic to aquatic organisms.

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Toxicity to algae : ErC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 127.9 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
GLP: yes

M-Factor (Acute aquatic toxicity) : No data available

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.23 mg/l  
Exposure time: 72 d  
Test Type: flow-through test  
Test substance: Fresh water  
GLP: yes

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GLP: no

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:  
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1.18 mg/l  
Exposure time: 21 d  
Test Type: flow-through test  
Test substance: Fresh water  
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : No data available

Toxicity to bacteria : No data available

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

Further information:  
No data available

**Persistence and degradability****Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:  
Biodegradability : Inoculum: activated sludge  
Concentration: 11.3 mg/l  
Result: Readily biodegradable.  
Biodegradation: 94 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301A

Biochemical Oxygen Demand (BOD) : No data available

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Chemical Oxygen Demand (COD) : No data available

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Stability in water : No data available

Photodegradation : No data available

Impact on Sewage Treatment : No data available

**Bioaccumulative potential****Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:  
Bioaccumulation : Species: Pimephales promelas (fathead minnow)  
Exposure time: 8 d  
Test substance: Fresh water  
Method: flow-through test  
Remarks: Bioaccumulation is unlikely.

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:  
Partition coefficient: n-octanol/water : log Pow: 5.39 - 7.84 (25 °C)  
GLP: no

**Mobility in soil**

Mobility : No data available

**Ingredients:**

Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.:  
Distribution among environmental compartments : Koc: 8063 - 373500.  
Stability in soil : No data available

**Other adverse effects**

Environmental fate and pathways : No data available

Results of PBT and vPvB assessment : No data available

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Endocrine disrupting potential : No data available

Adsorbed organic bound halogens (AOX) : No data available

**Hazardous to the ozone layer**

Ozone-Depletion Potential : Not applicable

Additional ecological information - Product : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life.  
Harmful to aquatic life with long lasting effects.

Global warming potential (GWP) : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION****International Regulation****IATA**

UN/ID No. : UN 2586  
Proper shipping name : Arylsulphonic acids, liquid  
(ALKYLBENZENE SULPHONIC ACID)  
Class : 8  
Packing group : III  
Labels : Corrosive  
Packing instruction (cargo aircraft) : 856  
Packing instruction (passenger aircraft) : 852

**IMDG**

UN number : UN 2586

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Proper shipping name : ARYLSULPHONIC ACIDS, LIQUID  
(ALKYLBENZENE SULPHONIC ACID)

Class : 8

Packing group : III

Labels : 8

EmS Code : F-A, S-B

Marine pollutant : no

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation****DOT Classification**

UN/ID/NA number : UN 2586

Proper shipping name : ARYL SULFONIC ACIDS, LIQUID  
(ALKYLBENZENE SULPHONIC ACID)

Class : 8

Packing group : III

Labels : CORROSIVE

ERG Code : 153

Marine pollutant : no

**SECTION 15. REGULATORY INFORMATION**

**TSCA - 5(a) Significant New Use Rule List of Chemicals** : Not relevant

**EPCRA - Emergency Planning and Community Right-to-Know**

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

**California Prop 65** : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**The ingredients of this product are reported in the following inventories:**

CH INV : The mixture contains substances listed on the Swiss Inventory  
: water  
: sulphuric acid

TSCA : Not On TSCA Inventory  
: Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.

DSL : This product contains the following components that are not

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on the Canadian DSL nor NDSL.

AICS : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.  
 : Not in compliance with the inventory

NZIoC : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.  
 : Not in compliance with the inventory

ENCS : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.  
 : Not in compliance with the inventory  
 : ACCN # 279880

ISHL : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.  
 : Not in compliance with the inventory

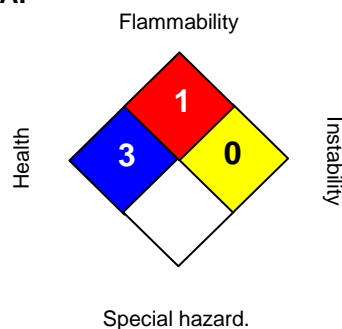
KECI : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.  
 : Not in compliance with the inventory

PICCS : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.  
 : Not in compliance with the inventory

IECSC : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.  
 : Not in compliance with the inventory  
 : Benzenesulfonic acid, dimethyl-, mono-C11-16-alkyl derivs.

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS III:**

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, \* = Chronic

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While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE. THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN

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HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

**NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM HUNTSMAN. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET SHOULD BE DIRECTED TO HUNTSMAN, MANAGER, PRODUCT SAFETY AT THE ABOVE ADDRESS.**