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**** MATERIAL SAFETY DATA SHEET ****

Diethylaminosulfur Trifluoride
82178

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Diethylaminosulfur Trifluoride

Catalog Numbers:
AC216110000, AC216110050, AC216110250

Synonyms:

DAST

Company Identification (Europe): Acros Organics BVBA
Janssen Pharmaceuticaal 3a
2440 Geel, Belgium

Company Identification (USA): Acros Organics
One Reagent Lane
Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For information in Europe, call: 0032(0) 14575211

For emergencies in the US, call CHEMTREC: 800-424-9300

For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
38078-09-0	Diethylaminosulfur Trifluoride		253-771-2

Hazard Symbols: F C
Risk Phrases: 10 14 35

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: amber liquid. Flash Point: 23 deg C.
Warning! Flammable liquid and vapor. Water-Reactive. The
toxicological properties of this material have not been fully
investigated. This substance may form hazardous decomposition
products which may cause irritation and possible burns.
Target Organs: None.

Potential Health Effects

Eye:

No information regarding eye irritation and other potential effects
was found. May cause eye irritation and possible burns.

Skin:

No information regarding skin irritation and other potential effects
was found. May cause severe irritation and possible burns.

Ingestion:

The toxicological properties of this substance have not been fully
investigated.

Inhalation:

The toxicological properties of this substance have not been fully
investigated.

Chronic:

Not available.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes,
occasionally lifting the upper and lower eyelids. Get medical aid
immediately.

Skin:

Get medical aid immediately. Flush skin with plenty of water for at
least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.
Never give anything by mouth to an unconscious person. Get medical
aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If not
breathing, give artificial respiration. If breathing is difficult,
give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in
pressure-demand, MSHA/NIOSH (approved or equivalent), and full
protective gear. Vapors may form an explosive mixture with air.
Flammable liquid and vapor. Reacts violently with water.

Extinguishing Media:

Do NOT use water directly on fire. Use foam, dry chemical, or carbon
dioxide.

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Autoignition Temperature: Not available.
Flash Point: 23 deg C (73.40 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
NFPA Rating: Not published.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated
in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth),
then place in suitable container. Remove all sources of ignition.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use only in a well-ventilated area.
Do not allow water to get into the container because of violent
reaction. Ground and bond containers when transferring material.
Avoid contact with eyes, skin, and clothing. Empty containers retain
product residue, (liquid and/or vapor), and can be dangerous. Avoid
ingestion and inhalation. Do not pressurize, cut, weld, braze,
solder, drill, grind, or expose empty containers to heat, sparks or
open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of
ignition. Store in a tightly closed container. Store in a cool, dry,
well-ventilated area away from incompatible substances.
Refrigerator/flammables. Do not get water inside containers.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits			
Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Diethylaminosulfur Trifluoride	2.5 mg/m3 TWA (as F) (listed under ** no name **).	none listed	2.5 mg/m3 TWA (as F) (listed under ** no name **).

OSHA Vacated PELs:

Diethylaminosulfur Trifluoride:
2.5 mg/m3 TWA (listed under ** no name **)

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical
safety goggles as described by OSHA's eye and face
protection regulations in 29 CFR 1910.133 or European
Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin
exposure.

Clothing:

Wear appropriate protective clothing to prevent skin
exposure.

Respirators:

Follow the OSHA respirator regulations found in 29
CFR 1910.134 or European Standard EN 149. Always use
a NIOSH or European Standard EN 149 approved
respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:

Liquid

Color:

amber

Odor:

None reported.

pH:

Not available.

Vapor Pressure:

Not available.

Vapor Density:

Not available.

Evaporation Rate:

Not available.

Viscosity:

Not available.

Boiling Point:

30.0 - 32.0 deg C @ 3.00mmHg

Freezing/Melting Point:

Not available.

Decomposition Temperature:

Decomposes.

Solubility in water:

1.2130g/cm3

Specific Gravity/Density:

C4H10F3NS

Molecular Formula:

161.18

Molecular Weight:

**** SECTION 10 - STABILITY AND REACTIVITY ****

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Chemical Stability:
Stable under normal temperatures and pressures. Combines vigorously
or explosively with water.
Conditions to Avoid:
Contact with water.
Incompatibilities with Other Materials:
Strong oxidizing agents, strong acids, strong bases, alcohols.
Hazardous Decomposition Products:
Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen fluoride,
nitrogen.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 38078-09-0 unlisted.
LD50/LC50:
Not available.
Carcinogenicity:
Diethylaminosulfur Trifluoride -
ACGIH: A4 - Not Classifiable as a Human Carcinogen (as F) (listed
Epidemiology:
No data available.
Teratogenicity:
No data available.
Reproductive Effects:
No data available.
Neurotoxicity:
No data available.
Mutagenicity:
No data available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical
is classified as a hazardous waste.
US EPA guidelines for the classification determination are listed in
40 CFR Parts 261.3. Additionally, waste generators must consult state
and local hazardous waste regulations to ensure complete and accurate
classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: CORROSIVE LIQUID, N.O.S.*
Hazard Class: 8
UN Number: 1760
Packing Group: I
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 38078-09-0 is not listed on the TSCA inventory.
It is for research and development use only.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
Section 313
No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depleters.
This material does not contain any Class 2 Ozone depleters.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous
Substances under the CWA.
None of the chemicals in this product are listed as Priority
Pollutants under the CWA.

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None of the chemicals in this product are listed as Toxic Pollutants
under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous
by OSHA.

STATE
Diethylaminosulfur Trifluoride can be found on the following state
right to know lists: California, (listed as ** no name **),
Pennsylvania, (listed as ** no name **), Minnesota, (listed as ** no
name **).
California No Significant Risk Level:
None of the chemicals in this product are listed.
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: F C
Risk Phrases:

R 10 Flammable.
R 14 Reacts violently with water.
R 35 Causes severe burns.

Safety Phrases:
S 16 Keep away from sources of ignition - No
smoking.
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 38078-09-0: No information available.
United Kingdom Occupational Exposure Limits
CAS# 38078-09-0: OES-United Kingdom, TWA (listed as ** undefined
**): 2.5 mg/m3 TWA (inorganic, as F)

United Kingdom Maximum Exposure Limits

Canada
CAS# 38078-09-0 is listed on Canada's DSL List.
This product has a WHMIS classification of E.
CAS# 38078-09-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
CAS# 38078-09-0 (listed as ** undefined **): OEL-AUSTRALIA:TWA 2.5 mg(
F)/m3
OEL-BELGIUM:TWA 2.5 mg(F)/m3
OEL-CZECHOSLOVAKIA:TWA 1 mg(F)/m3;STEL 5 mg(F)/m3
OEL-DENMARK:TWA 2.5 mg(F)/m3
OEL-FINLAND:TWA 2.5 mg(F)/m3
OEL-FRANCE:TWA 2.5 mg(F)/m3
OEL-GERMANY:TWA 2.5 mg(F)/m3
OEL-HUNGARY:TWA 1 mg(F)/m3;STEL 2 mg(F)/m3
OEL-THE NETHERLANDS:TWA 2.5 mg(F)/m3
OEL-THE PHILIPPINES:TWA 2.5 mg(F)/m3
OEL-POLAND:TWA 1 mg(F)/m3
OEL-SWEDEN:TWA 2 mg(F)/m3
OEL-SWITZERLAND:TWA 1.8 ppm (1.5 mg(F)/m3);STEL 9.0 ppm
OEL-THAILAND:TWA 2.5 mg(F)/m3
OEL-TURKEY:TWA 2.5 mg(F)/m3
OEL-UNITED KINGDOM:TWA 2.5 mg(F)/m3

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 3/03/1998 Revision #2 Date: 3/18/2003

The information above is believed to be accurate and represents the best
information currently available to us. However, we make no warranty of
merchantability or any other warranty, express or implied, with respect to
such information, and we assume no liability resulting from its use. Users
should make their own investigations to determine the suitability of the
information for their particular purposes. In no way shall the company be
liable for any claims, losses, or damages of any third party or for lost
profits or any special, indirect, incidental, consequential or exemplary
damages, howsoever arising, even if the company has been advised of
the possibility of such damages.