



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083853

VULSOL B 2525

Date of the previous version: not applicable

Revision Date: 2015-08-10

Version 1

1. IDENTIFICATION

Product identifier

Product name VULSOL B 2525

Other means of identification

Product Code(s) 083853

Number 8TF

Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Soluble synthetic fluid. Metalworking fluid.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone number

Company Phone Number +1 (908) 862-9300

Emergency telephone CHEMTREC: +1 800 424 9300 (24h)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation - Category 1 - Subcategory B

Serious eye damage/eye irritation - Category 1

Skin sensitization - Category 1

Label elements

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**DANGER**

Causes severe skin burns and eye damage
May cause an allergic skin reaction

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
Specific treatment (see Section 4 on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown Acute Toxicity

No information available

Hazards not otherwise classified (HNOC)

- None known

Other information

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
2-(2-aminoethoxy)ethanol	929-06-6	10-15
Nitric acid, reaction products with cyclododecanol and cyclododecanone, by-products from, high-boiling fraction	72162-23-3	1-5
Octanoic acid	124-07-2	1-5
2-n-butyl-benzo[d]isothiazol-3-one	4299-07-4	0-1

4. FIRST AID MEASURES**First aid measures for different exposure routes****General advice**

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE. Show this material safety data sheet to the doctor in attendance. Do not get in eyes, on skin, or on clothing. In the case of skin irritation or allergic reactions see a physician.

Eye contact

Immediate medical attention is required. Call a physician immediately. Rinse thoroughly with plenty of water, also under the eyelids. Check for and remove any contact lenses. Do not rub affected area.

Skin contact

Immediate medical attention is required. Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse. Hold the burned area under cold running water for at least five minutes, or until the pain subsides.

Inhalation

Move to fresh air.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed**Skin contact**

May cause an allergic skin reaction. Causes burns.

Eye contact

Risk of serious damage to eyes.

Inhalation

Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion

Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Burning. Itching. Asthma-like and/ or skin allergy-like symptoms.

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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media The product is not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. The potential danger appears only after the evaporation of the water in the product, i.e. during fire or after accidental projection of the product on a very hot surface.

Explosion Data

Sensitivity to Mechanical Impact

Sensitivity to Static Discharge

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Other information See Section 12 for additional information.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

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Precautions for safe handling

Advice on safe handling

When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

Prevention of fire and explosion

Take precautionary measures against static discharges: Ground/bond containers, tanks and transfer/receiving equipment.

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture.

Materials to Avoid

Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Ingredients with workplace control parameters.

Exposure controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Eye/Face Protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.



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Hand Protection

Impervious butyl rubber gloves. Nitrile rubber. Fluorinated rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection

None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties**Appearance**

limpid

Color

clear blue

Physical State @20°C

liquid

Odor

Mild

Odor Threshold

No information available

Property**Values****Remarks****Method****pH**

9.7

Not applicable

pH (as aqueous solution)

solution (5 %)

Melting point/range

No information available

Boiling point/boiling range

Not applicable

Flash point

Not applicable

Evaporation rate

> 1

@ 25 °C

Flammability Limits in Air

-

No information available

upper

-

No information available

Lower

-

No information available

Vapor Pressure

No information available

Vapor density

No information available

Relative density

1.014

@ 15 °C

Density1011 kg/m³

@ 15 °C

Water solubility

soluble

Solubility in other solvents

No information available

logPow

No information available

Autoignition temperature

No information available

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Decomposition temperature No information available**Viscosity, kinematic** No information available**Explosive properties** Not explosive**Oxidizing Properties** Not applicable**Possibility of hazardous reactions** Not applicable**Other information****Freezing Point** No information available

10. STABILITY AND REACTIVITY

Reactivity No information available.**Chemical stability** Stable under recommended storage conditions.**Possibility of hazardous reactions** None under normal processing.**Conditions to Avoid** Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.**Incompatible Materials** Acids.**Hazardous Decomposition Products** None under normal use.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

Numerical measures of toxicity - Product Information

ATEmix (oral) 22810 mg/kg**ATEmix (dermal)** 17440 mg/kg**Inhalation****ATEmix (inhalation-dust/mist)** 30.9 mg/l**ATEmix (inhalation-vapor)** 403.6 mg/l

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-(2-aminoethoxy)ethanol 929-06-6	LD50 3400 mg/kg (Rat)	LD50 > 3000 mg/kg (Rabbit)	LC50 (8h) > 8.7 mg/m ³ (Rat-Vapeurs)

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Nitric acid, reaction products with cyclododecanol and cyclododecanone, by-products from, high-boiling fraction 72162-23-3	LD50 > = 5000 mg/kg (Rat)	LD50 >= 2000 mg/kg (Rabbit)	LC50 (4h) >= 4.3 mg/l (Rat)
Octanoic acid 124-07-2	LD50 >2000 mg/kg (Rat-OECD 401)	LD50 > 2000 mg/kg (Rabbit - OECD 434)	LC50 (4h) > 0.1621 mg/l (rat - vapour)
2-n-butyl-benzo[d]isothiazol-3-one 4299-07-4	LD50 > 2000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Burning. Itching. Asthma-like and/ or skin allergy-like symptoms.
Skin contact	May cause an allergic skin reaction. Causes burns.
Eye contact	Risk of serious damage to eyes.
Inhalation	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes burns.
Serious eye damage/eye irritation	Risk of serious damage to eyes.
Sensitization	May cause an allergic skin reaction.
Carcinogenicity	This product is not classified carcinogenic.

Mutagenicity	Contains no ingredient listed as a mutagen.
Reproductive toxicity	This product does not present any known or suspected reproductive hazards.
Aspiration Hazard	Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity - Product Information

No information available

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
2-(2-aminoethoxy)ethanol 929-06-6	ErC50 (72h) = 202 mg/l (static)	LC50 (96h) = > 681 mg/l (static)	EC50 (48h) = 189 mg/l Daphnia magna static	

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Octanoic acid 124-07-2	EC50 (72h) 31 mg/l (Pseudokirchnerella subcapitata - static - OECD 201)	LC50 (96h) = 310 mg/L Oryzias latipes (semi-static) LC50 (96h) = 110 mg/L Brachydanio rerio (semi-static)	EC50 (24h) = 170 mg/L Daphnia magna EC50 (48h) 128 mg/l (Hyale plumulosa)	
2-n-butyl-benzo[d]isothiazol- 3-one 4299-07-4	EC50 < 1 mg/l	LC50 < 1 mg/l	EC50 < 1 mg/l	

Chronic aquatic toxicity - Product Information

No information available

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
2-(2-aminoethoxy)ethanol 929-06-6	NOECr (72h) 62.5 mg/l (static)			
Octanoic acid 124-07-2		NOEC (21d) 0.2 mg/l (Daphnia magna - OECD 211) LOEC (21d) 0.64 mg/l (Daphnia magna - OECD 211) EC50 (21d) 0.51 mg/l (Daphnia magna - OECD 211) LC50 (21d) 20 mg/l (Daphnia magna - OECD 211)	NOEC (28d) 6.4 mg/l (Danio rerio - OECD 305 E) LC50 (28d) 9.8 mg/l (Danio rerio - OECD 305 E) NOEC (28d) 2 mg/l (Danio rerio - OECD 305 E)	

Effects on terrestrial organisms No information available.

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

logPow No information available

Component Information

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Chemical Name	log Pow
2-(2-aminoethoxy)ethanol 929-06-6	-1.89
Octanoic acid 124-07-2	3.05
2-n-butyl-benzo[d]isothiazol-3-one 4299-07-4	2.9

Mobility

Soil Given its physical and chemical characteristics, the product is generally mobile in the ground

Water soluble

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment**

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

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International Inventories

All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
2-(2-aminoethoxy)ethanol 929-06-6	X	X			
Triethanolamine 102-71-6	X	X	X		X

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16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 3	Flammability 0	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 3	Flammability 0	Physical Hazard 0	Personal protection X

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

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*** Indicates updated section

Abbreviations, acronyms**Legend**

Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH - National Institute for Occupational Safety and Health

TLV - Threshold Limit Values

PEL - Permissible Exposure Limits

IDLH - Immediately Dangerous to Life or Health concentrations

TWA - Time Weight Average

STEL - Short Term Exposure Limits

S* - Skin notation

TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet

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