



## 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**

<b>General advice</b>	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.
<b>Eye contact</b>	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.
<b>Skin contact</b>	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.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	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**

<b>Skin contact</b>	May cause an allergic skin reaction. Causes burns.
<b>Eye contact</b>	Risk of serious damage to eyes.
<b>Inhalation</b>	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Ingestion</b>	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Symptoms</b>	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**                      None.  
**Sensitivity to Static Discharge**                      None.

**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

<b>Advice on safe handling</b>	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.
<b>Prevention of fire and explosion</b>	Take precautionary measures against static discharges: Ground/bond containers, tanks and transfer/receiving equipment.
<b>Hygiene measures</b>	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

<b>Technical measures/Storage conditions</b>	Keep away from food, drink and animal feedingstuffs. Keep in a bonded 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.
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<b>Materials to Avoid</b>	Acids.
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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

<b>Exposure limits</b>	Ingredients with workplace control parameters.
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### Exposure controls

<b>Engineering Measures</b>	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.
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### Individual protection measures, such as personal protective equipment

<b>General Information</b>	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.
<b>Eye/Face Protection</b>	If splashes are likely to occur, wear: Safety glasses with side-shields.
<b>Skin and body protection</b>	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.

<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
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**Physical and chemical properties**

Appearance	limpid
Color	clear blue
Physical State @20°C	liquid
Odor	Mild
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
pH (as aqueous solution)	9.7	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	
Density	1011 kg/m <sup>3</sup>	@ 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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<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Explosive properties</b>	Not explosive
<b>Oxidizing Properties</b>	Not applicable
<b>Possibility of hazardous reactions</b>	Not applicable
<b>Other information</b>	

<b>Freezing Point</b>	No information available
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**10. STABILITY AND REACTIVITY**

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

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information.
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**Information on likely routes of exposure**

<b>Principle Routes of Exposure</b>	Inhalation, Ingestion, Eye contact, Skin contact.
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**Numerical measures of toxicity - Product Information**

<b>ATEmix (oral)</b>	22810 mg/kg
<b>ATEmix (dermal)</b>	17440 mg/kg
<b>Inhalation</b>	
<b>ATEmix (inhalation-dust/mist)</b>	30.9 mg/l
<b>ATEmix (inhalation-vapor)</b>	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 <sup>3</sup> (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**

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

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

<b>Mutagenicity</b>	Contains no ingredient listed as a mutagen.
<b>Reproductive toxicity</b>	This product does not present any known or suspected reproductive hazards.
<b>Aspiration Hazard</b>	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**

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

Revision Date: 2015-08-10

Revision Note: \*\*\* 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