SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083868

VULSOL B 7710 S

Date of the previous version: not applicable **Revision Date:** *2015-08-28* **Version** *1*

1. IDENTIFICATION

Product identifier

Product name VULSOL B 7710 S

Other means of identification

Product Code(s) 083868

Number 8D7
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses 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 2
Serious eye damage/eye irritation - Category 2
Skin sensitization - Category 1
Effects on or via lactation

Label elements

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WARNING

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause harm to breast-fed children

Precautionary Statements - Prevention
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
Obtain special instructions before use
Do not breathe dust/fume/gas/mist/vapors/spray
Avoid contact during pregnancy/while nursing
Do not eat, drink or smoke when using this product

Precautionary Statements - Response
Specific treatment (see Section 4 on this label)
IF exposed or concerned: Get medical advice/attention
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Skin
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal
Dispose of contents/ container to an approved waste disposal plant

Unknown Acute Toxicity
3.53289501% of the mixture consists of ingredient(s) of unknown toxicity

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 %
Chlorinated paraffins, C14-17	85535-85-9	5-10
2-amino-2-methylpropanol	124-68-5	5-10
hexadec-1-ene	629-73-2	5-10
Nitric acid, reaction products with cyclododecanol and cyclododecanone, by-products from, high-boiling fraction	72162-23-3	1-5
12-Hydroxystearic acid, oligomers, reaction products with stearic acid	58128-22-6	0-1
3-iodo-2-propynyl butylcarbamate	55406-53-6	<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.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Do not rub affected area. Check for and remove any contact lenses. Get medical attention immediately if symptoms occur.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. May cause an allergic skin reaction. Get medical attention immediately if symptoms occur.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water. If swallowed, do not induce vomiting - seek medical advice.

Protection of First-aiders Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Most important symptoms/effects, acute and delayed

Skin contact Causes skin irritation. May cause an allergic skin reaction. Avoid contact with skin and clothing.

Eye contact Causes serious eye irritation. Avoid contact with eyes.

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

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Ingestion May cause harm to breast-fed children. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Itching. Burning. Disorientation.

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

Notes to physician Treat symptomatically. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Foam. Carbon dioxide (CO_2). ABC powder.

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.

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 Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

Other information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

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Methods for cleaning up

Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. 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).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. 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.

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 out of reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. 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

Contains no substances with occupational exposure limit values.

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.

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Individual protection measures, such as personal protective equipment

General Information	Protective engineering solutions should be implemented and in use before personal protective equipment is considered.
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.
Hand Protection	Protective gloves. Impervious gloves. 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	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	amber
Physical State @20°C	liquid
Odor	Mild
Odor Threshold	No information available

Property	**Values**	**Remarks**	**Method**
pH		Not applicable	
pH (as aqueous solution)	8.82	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	

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Vapor Pressure		No information available
Vapor density		No information available
Relative density	1.023	@ 15 °C
Density	1023 kg/m³	@ 15 °C
Water solubility		soluble
Solubility in other solvents		No information available
logPow		No information available
Autoignition temperature		No information available
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, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.

Incompatible Materials Acids.

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

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)	11412 mg/kg
ATEmix (dermal)	9649 mg/kg
Inhalation	
ATEmix (inhalation-dust/mist)	23.2 mg/l

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ATEmix (inhalation-vapor) 119 mg/l

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chlorinated paraffins, C14-17 85535-85-9	LD50 > 2000 mg/kg (Rat)	LD50 > 2.5 ml/kg (Rat) = > 2800 mg/kg (Rat)	LC50 (1h) > 48170 mg/m³ (Rat - Vapour) = > 48.17 mg/l
2-amino-2-methylpropanol 124-68-5	= 2900 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	
hexadec-1-ene 629-73-2	LD50 > 2000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	LC50 (4h) > 5 mg/l (Rat)
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)
12-Hydroxystearic acid, oligomers, reaction products with stearic acid 58128-22-6	LD50 > 2000 mg/kg (Rat)		
3-iodo-2-propynyl butylcarbamate 55406-53-6	LD50 1470 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	LD50 (4h) 1.5 mg/l (Rat - Particulate)

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Itching. Burning. Disorientation.

Skin contact Causes skin irritation. May cause an allergic skin reaction. Avoid contact with skin and clothing.

Eye contact Causes serious eye irritation. Avoid contact with eyes.

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

Ingestion May cause harm to breast-fed children. 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 Irritating to skin.
Serious eye damage/eye irritation Irritating to eyes.
Sensitization May cause an allergic skin reaction.
Carcinogenicity This product is not classified carcinogenic.

Mutagenicity This product is not classified as mutagenic.
Reproductive toxicity May cause harm to breastfed babies.
Aspiration Hazard Not classified.

12. ECOLOGICAL INFORMATION

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Ecotoxicity

Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Chlorinated paraffins, C14-17 85535-85-9	EC50(72h) > 3.2 mg/l (OECD 201-Pseudokirchnerella subcapitata)	LC50 (96h) > 5000 mg/L (Alburnus alburnus)	EC50 (48h) = 0.006 mg/l (Daphnia magna)	
2-amino-2-methylpropanol 124-68-5	EC50 (72h) = 520 mg/L Desmodesmus subspicatus	LC50 (96h) = 190 mg/L Lepomis macrochirus (static)	EC50 (48h) = 193 mg/L Daphnia magna	
hexadec-1-ene 629-73-2	EL50 (72h) > 1000 mg/l (Skeletonema costatum - static) EC50 (72h) 1 - 1.8 mg/l (Pseudokirchnerella subcapitata - static - OECD 201) EC50 (72h) > 0.00093 mg/l (Pseudokirchnerella subcapitata - static - OECD 201) EL50 (72h) > 1000 mg/l (Pseudokirchnerella subcapitata - static - OECD 201) EL50 (72h) > 5600 mg/l (Skeletonema costatum - static)	LC50 (96h) > 1.5 mg/l (Oncorhynchus mykiss - OECD 203)	EC50 (48h) 0.56 - 1 mg/l (Daphnia magna - OECD 202) EL50 (48h) < 1000 mg/l (Daphnia magna - OECD 202) EC50 (48h) 4.4 mg/l (Daphnia magna - static - OECD 202) EL50 (48h) > 1000 mg/l (Daphnia magna - OECD202) EC50 (48h) > 0.0028 mg/l (Daphnia magna - semi static - OECD 202)	
Nitric acid, reaction products with cyclododecanol and cyclododecanone, by-products from, high-boiling fraction 72162-23-3			EC50 (48h) >= 120 mg/l (Daphnia magna)	
12-Hydroxystearic acid, oligomers, reaction products with stearic acid 58128-22-6	EC50 (72h) 29671 mg/l (Skeletonema costatum)		LC50 (48h) 1614 mg/l (Acartia tonsa)	
3-iodo-2-propynyl butylcarbamate 55406-53-6	EC50 (72h) 0.022 mg/l Scenedesmus subspicatus	LC50 (96h) 0.067 mg/l Rainbow trout	EC50 (48h) 0.16 mg/l Daphnia magna	

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

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Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Chlorinated paraffins, C14-17 85535-85-9	NOEC(72h) 0.1 mg/l (OECD 201-Pseudokirchnerella subcapitata)	NOEC (21d) 0.01 mg/l (Daphnia magna - OECD 202)		

Effects on terrestrial organisms No experimental data available .

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

logPow No information available

Component Information .

Chemical Name	log Pow
Chlorinated paraffins, C14-17 85535-85-9	6
hexadec-1-ene 629-73-2	8.1
3-iodo-2-propynyl butylcarbamate 55406-53-6	2.81

Mobility

Soil No information available

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Should not be released into the environment. Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

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14. TRANSPORT INFORMATION

DOT	Not regulated
Marine pollutant	PP - This product contains a chemical which is listed as a severe marine pollutant according to DOT.
TDG	Not regulated
MEX	Not regulated
ICAO/IATA	Not regulated
IMDG/IMO	Not regulated
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
ADR/RID	Not regulated
Environmental hazard	Yes
ADN	Not regulated

15. REGULATORY INFORMATION

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.

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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
2-amino-2-methylpropanol 124-68-5	X	X	X	
Triethanolamine 102-71-6	X	X	X	

16. OTHER INFORMATION

NFPA	**Health Hazard** 2	**Flammability** 0	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 2	**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

Revision Date: 2015-08-28
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
IDHL - Immediately Dangerous to Life or Health concentrations
TWA - Time Weight Average
STEL - Short Term Exposure Limits
S* - Skin notation
TSCA - Toxic Substance Control Act

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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