



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083188

B 28 OIL

Date of the previous version: 2015-05-07

Revision Date: 2015-10-13

Version 6.01

1. IDENTIFICATION

Product identifier

Product name B 28 OIL

Other means of identification

Product Code(s) 083188

Number 7MA
Substance/mixture Substance

Recommended use of the chemical and restrictions on use

Identified uses Degreaser. 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

Flammable liquids - Category 4
Aspiration toxicity - Category 1

Label elements

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**DANGER****Hazard Statements**

Combustible liquid
May be fatal if swallowed and enters airways

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Wear protective gloves/protective clothing/eye protection/face protection

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/ container to an approved waste disposal plant

Unknown Acute Toxicity

Not applicable

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	^	100

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Additional information

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

** The exact percentage (concentration) of composition has been withheld as a trade secret****

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

General advice	If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Do not breathe dust/fume/gas/mist/vapors/spray. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. Wash contaminated clothing before reuse.
Inhalation	Consult a physician. If not breathing, give artificial respiration. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.
Ingestion	Clean mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If swallowed, call a poison control center or doctor immediately. Risk of product entering the lungs on vomiting after ingestion. Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung edema or pneumonia.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Skin contact	Not classified.
Eye contact	Not classified.
Inhalation	May be harmful if inhaled. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	May be fatal if swallowed and enters airways. Potential for aspiration if swallowed.
Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Difficulty breathing. Coughing and/ or wheezing.

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

Notes to physician	Treat symptomatically.
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<u>Suitable Extinguishing Media</u>	Carbon dioxide (CO ₂). ABC powder. Foam. Water spray or fog.
Uniform Fire Code	Combustible Liquid: III-A Blasting Agents
<u>Unsuitable Extinguishing Media</u>	Do not use a solid water stream as it may scatter and spread fire.
<u>Special Hazard</u>	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.
<u>Explosion Data</u>	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	May be ignited by friction, heat, sparks or flames.
<u>Protective Equipment and Precautions for Firefighters</u>	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. See Section 12 for additional Ecological Information.
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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.
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7. HANDLING AND STORAGE**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.
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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.
<u>Conditions for safe storage, including any incompatibilities</u>	
Technical measures/Storage conditions	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.
Materials to Avoid	Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure limits	Metalworking fluids: USA: NIOSH (REL) TWA 0.5 mg/m ³ .
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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	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.
Hand Protection	Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile 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.

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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 PROPERTIESPhysical and chemical properties

Appearance		limpid	
Color		clear	
Physical State @20°C		liquid	
Odor		Solvent	
Odor Threshold		No information available	
Property	Values	Remarks	Method
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable	
Flash point	76 °C 169 °F		ASTM D 56 ASTM D 56.
Evaporation rate		No information available	
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		No information available	
Density	760 kg/m ³	@ 15 °C	ASTM D 1298
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, kinematic	< 3 mm ² /s	@ 40 °C	ASTM D 445
Explosive properties	May form explosive mixtures with air		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		

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Other information

Specific Gravity 0.76 ASTM D 1298
 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 Heating in air. 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 Strong oxidizing agents.

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

ATEmix (oral) 5001 mg/kg
 ATEmix (dermal) 5001 mg/kg
 Inhalation
 ATEmix (inhalation-vapor) 20.1 mg/l

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics ^	LD50 > 5000 mg/kg bw (rat - OECD 401)	LD50 (24h) > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (8h) > 5000 mg/m ³ (vapour) (rat - OECD 403)

Information on toxicological effects

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Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Difficulty breathing. Coughing and/ or wheezing.
Skin contact	Not classified.
Eye contact	Not classified.
Inhalation	May be harmful if inhaled. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	May be fatal if swallowed and enters airways. Potential for aspiration if swallowed.

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

Sensitization	Not classified as a sensitizer.
Carcinogenicity	This product is not classified carcinogenic.

Mutagenicity	This product is not classified as mutagenic.
Reproductive toxicity	This product does not present any known or suspected reproductive hazards.
Aspiration Hazard	May be fatal if swallowed and enters airways.

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
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics ^	ErL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201) EbL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201)	LL50 (96h) > 1000 mg/l (Oncorhynchus mykiss - OECD 203)	EL50 (48h) > 1000 mg/l (Daphnia magna - OECD 202)	-

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
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Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics ^	NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - biomass - OECD 201) NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - growth rate - OECD 201)	NOELR (21d) = 1,22 mg/l (Daphnia magna - QSAR Petrotox)	NOELR (28d) = 0,17 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	
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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** No information available.**Mobility****Soil** Given its physical and chemical characteristics, the product generally shows low soil mobility**Air** Loss by evaporation is limited**Water** Insoluble The product spreads on the surface of the water.**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**

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DOT

UN/ID No	NA1993
Proper shipping name	Combustible liquid, n.o.s.
Hazard class	Combustible liquid
Packing Group	III
Special Provisions	IB3, T1, T4, TP1
Description	NA1993, Combustible liquid, n.o.s. (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics), Combustible liquid, III
Emergency Response Guide Number	128

TDG

UN/ID No	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Hazard class	3
Packing Group	III
Special Provisions	16
Description	UN1993, FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics), 3, III

MEX

UN/ID No	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Hazard class	3
Special Provisions	223, 274
Packing Group	III
Description	UN1993, FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics), 3, III

ICAO/IATA

UN/ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s.
Hazard class	3
Packing Group	III
Special Provisions	A3
Description	UN1993, Flammable liquid, n.o.s. (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics), 3, III

IMDG/IMO

UN/ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s.
Hazard class	3
Packing Group	III
EmS No.	F-E, S-E
Special Provisions	223, 274, 955
Description	UN1993, Flammable liquid, n.o.s. (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics), 3, III
Excepted Quantity	E1
Limited quantity	5 L

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ADR/RID

UN/ID No	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Hazard class	3
Packing Group	III
Classification Code	F1
Tunnel Restriction Code	(D/E)
Special Provisions	274, 601, 640E
Description	UN1993, FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics), 3, III, (D/E)

ADN

Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Hazard class	3
Packing Group	III
Classification Code	F1
Special Provisions	274, 601, 640E
Description	UN1993, FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics), 3, III
Hazard Labels	3
Limited quantity	5 L
Ventilation	VE01

15. REGULATORY INFORMATION**International Inventories**

The substance is 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	no
Fire Hazard	Yes
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

No information available

16. OTHER INFORMATION

NFPA	Health Hazard 1	Flammability 2	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 1	Flammability 2	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: 2015-10-13

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

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