DYNA-BRUTE INTRO W/ZONE DEFENSE

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : DYNA-BRUTE INTRO W/ZONE DEFENSE

Material number : PW00269P2

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE

Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

For SDS Information : Compliance Services - 877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation : CHEMTREC: 800-424-9300 - All Calls Recorded.

Emergency In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	clear, pale straw
Odour	characteristic

GHS Classification

Flammable liquids : Category 4
Skin sensitisation : Category 1
Aspiration hazard : Category 1

GHS label elements

Hazard pictograms



Exclamation mark

nealth hazard

Signal word : Danger

Hazard statements : H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention**:

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

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P272 Contaminated work clothing should not be allowed out of

the workplace.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/doctor.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P331 Do NOT induce vomiting.

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before

reuse

P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/container in accordance with local

regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Distillates (petroleum), hydrotreated light	64742-47-8	>= 90 - < 100
d-limonene	5989-27-5	>= 3 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

Get medical attention.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.

Wash off immediately with plenty of water for at least 15

minutes.

Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.

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Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

DO NOT induce vomiting unless directed to do so by a

physician or poison control center.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed

Effects are dependent on exposure (dose, concentration,

contact time).

Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash. Symptoms may include difficulty breathing, coughing, wheezing, throat irritation, and tightness/closure of airway.

Aspiration may cause pulmonary oedema and pneumonitis.

May be fatal if swallowed and enters airways.

May cause an allergic skin reaction.

Review section 2 of SDS to see all potential hazards.

Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry chemical

Water

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

Carbon dioxide (CO2)

Carbon monoxide

Smoke

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored

separately in closed containments.

Use a water spray to cool fully closed containers.

Special protective equipment

for firefighters

Wear self-contained breathing apparatus for firefighting if

necessary.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Environmental precautions : Use personal protective equipment.

Ensure adequate ventilation.

: Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains, inform

respective authorities.

Methods and materials for containment and cleaning 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.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of aerosol.

Do not breathe vapours or spray mist.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Conditions for safe storage :

: No smoking. Keep in a well-ventilated place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.

Materials to avoid : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum),	64742-47-8	TWA	500 ppm	OSHA Z-1

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hydrotreated light			2,000 mg/m3	
		TWA	400 ppm	OSHA P0
			1,600 mg/m3	
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		PEL	5 mg/m3	CAL PEL
		(particulate)		
d-limonene	5989-27-5	TWA	30 ppm	US WEEL

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Access to clean water to rinse eyes must be available, options

include: eye wash stations or showers, or eye wash bottles

with pure water. Safety glasses

Skin and body protection : Impervious clothing

Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear, pale straw
Odour : characteristic
Odour Threshold : No data available
pH : Not applicable
Melting point/freezing point : No data available

Boiling point : $177 \,^{\circ}\text{C}$ Flash point : $61.11 \,^{\circ}\text{C}$

Method: closed cup

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Evaporation rate : < 1

Upper explosion limit : No data available
Lower explosion limit : No data available

Vapour pressure : 0.8 hPa

Relative vapour density : No data available

Density : 0.826 g/cm3

Bulk density : No data available

Solubility(ies)

Water solubility : slightly soluble

Solubility in other solvents : soluble

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available
Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available
Viscosity, kinematic : 4.4 mm2/s (20.0 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: Vapours may form explosive mixture with air.

No decomposition if stored and applied as directed.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition

products

: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical : None known.

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Condition

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration,

contact time).

Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash. Symptoms may include difficulty breathing, coughing, wheezing, throat irritation, and tightness/closure of airway.

Aspiration may cause pulmonary oedema and pneumonitis.

May be fatal if swallowed and enters airways.

May cause an allergic skin reaction.

Review section 2 of SDS to see all potential hazards. Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Acute toxicity

Product:

Acute dermal toxicity : Acute toxicity estimate : 2,673 mg/kg

Method: Calculation method

Components:

Distillates (petroleum), hydrotreated light:

Acute oral toxicity : LD50 Rat: > 5,000 mg/kg

Acute inhalation toxicity : LC50 Rat: > 4.6 mg/l

Exposure time: 6 h

Acute dermal toxicity : LD50 Rat: > 2,000 mg/kg

d-limonene:

Acute oral toxicity : LD50 Oral Rat: 4,400 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: > 5,000 mg/kg

Skin corrosion/irritation

Product:

Remarks: May irritate skin.

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Serious eye damage/eye irritation

Product:

Remarks: Contact with eyes may cause irritation.

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Components:

d-limonene:

Classification: May cause sensitisation by skin contact.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

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Product:

Partition coefficient: n-

octanol/water Components:

: Remarks: No data available

d-limonene :

Partition coefficient: n-

octanol/water

: log Pow: 4.232

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks This product neither contains, nor was manufactured

with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

+ B).

Additional ecological

information

: Not applicable

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

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Transportation Regulation: IATA (Cargo Air):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification

requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Respiratory or skin sensitisation

Aspiration hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of

California to cause cancer, birth defects, or any other

reproductive harm.

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The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL

TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information

NFPA:

HEALTH	2
FLAMMABILITY	2
INSTABILITY	0
SPECIAL HAZARD.	

^{0 =} not significant, 1 = Slight,

HMIS III:

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0

^{0 =} not significant, 1 = Slight,

OSHA - GHS Label Information:

^{2 =} Moderate, 3 = High

^{4 =} Extreme

^{2 =} Moderate, 3 = High 4 = Extreme, * = Chronic

SAFETY DATA SHEET DYNA-BRUTE INTRO W/ZONE DEFENSE

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Hazard pictograms





Signal word Hazard statements

Combustible liquid. May be fatal if swallowed and enters airways. May cause an allergic

skin reaction.

Precautionary statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF ON SKIN: Wash with plenty of soap and water. Do NOT induce vomiting. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to

extinguish.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with local regulation.

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