

## SECTION 1: IDENTIFICATION

<b>MANUFACTURED FOR:</b>	YOUNG INNOVATIONS, INC. - DBA DEFEND
<b>ADDRESS:</b>	2260 WENDT STREET
<b>CITY, STATE, ZIP:</b>	ALGONQUIN, IL 60102 USA
<b>TELEPHONE:</b>	1-800-275-0020
<b>PRODUCT ITEM NO.:</b>	VP-8400
<b>PRODUCT NAME/IDENTIFIER:</b>	DEFEND TRAY ADHESIVE
<b>COMMON NAME:</b>	N/A
<b>RECOMMENDED USE OF THE CHEMICAL &amp; RESTRICTIONS ON USE:</b>	TRAY ADHESIVE FOR DENTAL VINYL POLYSILOXANES. FOR PROFESSIONAL USE ONLY.
<b>24 HR EMERGENCY PHONE #</b>	INFOTRAC 1-800-535-5053 / OUTSIDE U.S. 1-352-323-3500

## SECTION 2: HAZARD(S) IDENTIFICATION

THE PREPARATION OF THIS DOCUMENT HAS BEEN CARRIED OUT ACCORDING TO THE U.S. OSHA HAZARD COMMUNICATION STANDARD. THEREFORE, ALL THE KNOWN HAZARDS OF THE PRODUCT OR COMPONENTS HAVE TO BE INCLUDED REGARDLESS THE POTENTIAL RISK.

### HAZARD CLASSIFICATION

FLAM. LIQ. CAT. 2: FLAMMABLE LIQUID  
 EYE IRRIT. 2: SERIOUS EYE DAMAGE/EYE IRRITATION SKIN IRRIT. 2: SKIN IRRITATION  
 STOT SE 3: SPECIFIC TARGET ORGAN TOXICITY  
 AQ. CHRONIC 2: TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

### LABEL ELEMENTS

HAZARD PICTOGRAMS:



**SIGNAL WORD:** DANGER

**HAZARD-DETERMINING COMPONENTS OF LABELLING:** TOLUENE, N-HEXANE

**HAZARD STATEMENTS:** HIGHLY FLAMMABLE LIQUID AND VAPOUR. CAUSES SERIOUS EYE IRRITATION.

MAY CAUSE DROWSINESS OR DIZZINESS. CAUSES SKIN IRRITATION.  
 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.  
 MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

### PRECAUTIONARY STATEMENTS

#### PREVENTION:

KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. NO SMOKING. KEEP CONTAINER TIGHTLY CLOSED. WASH THOROUGHLY AFTER HANDLING. WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION.

#### RESPONSE:

IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH PLENTY OF WATER AND CONSULT A PHYSICIAN IF NECESSARY. CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL.

**HAZARDS NOT OTHERWISE CLASSIFIED:** NONE.

#### OTHER HAZARDS:

RESULTS OF PBT AND NPNB ASSESSMENT.  
 PBT: N/A  
 NPNB: N/A

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

C.A.S. NO.	COMPONENT	% WT
110-54-3	N-HEXANE	< 50%
108-88-3	TOLUENE	< 50%

**SECTION 4: FIRST AID MEASURES**
**DESCRIPTION OF FIRST AID MEASURES**

**AFTER INHALATION:** SUPPLY FRESH AIR; CONSULT DOCTOR IN CASE OF COMPLAINTS. IN CASE OF UNCONSCIOUSNESS PLACE PATIENT STABLY IN SIDE POSITION FOR TRANSPORTATION.

**AFTER SKIN CONTACT:** REMOVE CONTAMINATED CLOTHING. INSTANTLY WASH WITH WATER AND SOAP AND RINSE THOROUGHLY. WASH CONTAMINATED CLOTHING BEFORE REUSE. IF IRRITATION PERSISTS, CONSULT A DOCTOR.

**AFTER EYE CONTACT:** RINSE OPENED EYE FOR SEVERAL MINUTES UNDER RUNNING WATER. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IF SYMPTOMS PERSIST, CONSULT A DOCTOR.

**AFTER INGESTION:** GET MEDICAL ADVICE/ATTENTION. INDUCE VOMITING ONLY IF INDICATED BY THE DOCTOR. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON, UNLESS AUTHORISED BY A DOCTOR.

**FURTHER INFORMATION:** NONE.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:**

SEE SECTION 11 FOR SYMPTOMS AND EFFECTS CAUSED BY THE SUBSTANCES.

**SECTION 5: FIRE FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA**

CO<sub>2</sub>, CHEMICAL POWDER OR FOAM. FOR PRODUCT LOSS OR LEAKAGE THAT HAS NOT CAUGHT FIRE, WATER SPRAY CAN BE USED TO DISPERSE FLAMMABLE VAPOURS AND PROTECT THOSE TRYING TO STEM THE LEAK. USE FIRE EXTINGUISHING METHODS SUITABLE TO SURROUNDING CONDITIONS.

**EXTINGUISHING MEDIA TO AVOID**

DO NOT USE JETS OF WATER. WATER IS NOT EFFECTIVE FOR PUTTING OUT FIRES BUT CAN BE USED TO COOL CONTAINERS EXPOSED TO FLAMES TO PREVENT EXPLOSIONS.

**SPECIAL HAZARDS ARISING FROM COMBUSTION**

EXCESS PRESSURE THAT MAY BE FORMED IN CONTAINERS EXPOSED TO FIRE HAS THE RISK OF EXPLOSION. DO NOT BREATHE COMBUSTION PRODUCTS.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

IN THE EVENT OF FIRE AND/OR EXPLOSION DO NOT BREATHE FUMES. USE WATER SPRAY JET TO PROTECT PERSONNEL AND TO COOL ENDANGERED CONTAINERS. WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE SUIT. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. DO NOT ALLOW RUN-OFF FROM FIRE-FIGHTING TO ENTER DRAINS OR WATER COURSES.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

REMOVE ALL SOURCES OF IGNITION IF THERE IS NO HAZARD. REMOVE PERSONS FROM DANGER AREA. AVOID CONTACT WITH EYES AND SKIN. DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY. WEAR SUITABLE PROTECTIVE CLOTHING (INCLUDING PERSONAL PROTECTION EQUIPMENT REFERRED TO SECTION 8).

**ENVIRONMENTAL PRECAUTIONS**

AVOID RELEASE TO THE ENVIRONMENT. DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.

**METHODS FOR CLEANING UP/COLLECTING**

COLLECT MECHANICALLY INTO A SUITABLE CONTAINER. THE PRODUCT MAY BE ABSORBED BY LIQUID-BINDING MATERIAL (SAND, DIATOMITE, ACID BINDERS). WASH SPILL AREA WITH ALCOHOL OR WATER AND SOAP.

**SECTION 6: ACCIDENTAL RELEASE MEASURES (CONT.)**
**REFERENCE TO OTHER SECTIONS**

SEE SECTION 7 FOR INFORMATION ON SAFE HANDLING. SEE SECTION 8 FOR INFORMATION ON PERSONAL PROTECTION EQUIPMENT. SEE SECTION 13 FOR DISPOSAL INFORMATION.

**SECTION 7: HANDLING AND STORAGE**
**PRECAUTIONS FOR SAFE HANDLING**

KEEP AWAY FROM HEAT, SPARKS AND NAKED FLAMES; DO NOT SMOKE OR USE MATCHES OR LIGHTERS. WITHOUT ADEQUATE VENTILATION, VAPOURS MAY ACCUMULATE AT GROUND LEVEL AND, IF IGNITED, CATCH FIRE EVEN AT A DISTANCE, WITH THE DANGER OF BACKFIRE. AVOID BUNCHING OF ELECTROSTATIC CHARGES. DO NOT EAT, DRINK OR SMOKE DURING USE. REMOVE ANY CONTAMINATED CLOTHES AND PERSONAL PROTECTIVE EQUIPMENT BEFORE ENTERING PLACES IN WHICH PEOPLE EAT. AVOID LEAKAGE OF THE PRODUCT INTO THE ENVIRONMENT.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

**STORAGE:** 10-25°C (50-77°F)

**REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES:** STORE ONLY IN ORIGINAL RECEPTACLES.

**INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY:** NOT REQUIRED.

**FURTHER INFORMATION ABOUT STORAGE CONDITIONS:**

STORE IN A WELL-VENTILATED PLACE KEEP FAR AWAY FROM SOURCES OF HEAT, NAKED FLAMES AND SPARKS AND OTHER SOURCES OF IGNITION. KEEP CONTAINER TIGHTLY SEALED.

**SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION**
**CONTROL PARAMETERS**
**OCCUPATIONAL EXPOSURE LIMITS**

IN CASE A COMPONENT IS SHOWN IN SECTION 3 BUT IT DOES NOT APPEAR IN THE TABLE BELOW, THERE ARE NOT ANY AVAILABLE DATA FOR THIS COMPONENT.

C.A.S. NO.	COMPONENT		LIMIT
110-54-3	N-HEXANE	WEL	TWA (8H): 20 PPM STEL: -
108-88-3	TOLUENEOEL	OEL	TWA (8H): 50 PPM STEL (15MIN): 100 PPM

OEL: OCCUPATIONAL EXPOSURE LIMIT. TLV: THRESHOLD LIMIT VALUE.

STEL: SHORT-TERM EXPOSURE LIMIT.

TWA: TIME-WEIGHTED-AVERAGE.

WEL: WORKPLACE EXPOSURE LIMITS

**EXPOSURE CONTROL**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

**GENERAL PROTECTIVE AND HYGIENE MEASURES:**

THE USUAL PRECAUTIONARY MEASURES ARE TO BE ADHERED TO WHEN HANDLING CHEMICALS. MAKE SURE THAT THE WORKPLACE IS WELL AIRED THROUGH EFFECTIVE LOCAL ASPIRATION.

AVOID CONTACT WITH EYES AND SKIN.

WASH HANDS BEFORE BREAKS AND AT THE END OF WORK. IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING. KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED.

**EYE PROTECTION:** TIGHT SEALING SAFETY GLASSES.

**PROTECTION OF HANDS:**

WEAR PROTECTIVE GLOVES. TO PROTECT THE WEARER, GLOVES MUST BE THE CORRECT FIT AND BE USED PROPERLY. THE GLOVE MATERIAL HAS TO BE IMPERMEABLE AND RESISTANT TO THE PRODUCT/ THE SUBSTANCE/ THE PREPARATION.

**SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION (CONT.)**
**MATERIAL OF GLOVES**

THE SELECTION OF THE SUITABLE GLOVES DOES NOT ONLY DEPEND ON THE MATERIAL, BUT ALSO ON FURTHER MARKS OF QUALITY AND VARIES FROM MANUFACTURER TO MANUFACTURER. AS THE PRODUCT IS A PREPARATION OF SEVERAL SUBSTANCES, THE RESISTANCE OF THE GLOVE MATERIAL CANNOT BE CALCULATED IN ADVANCE AND HAS THEREFORE TO BE CHECKED PRIOR TO THE APPLICATION.

**PENETRATION TIME OF GLOVE MATERIAL**

THE EXACT BREAK THROUGH TIME HAS TO BE FOUND OUT BY THE MANUFACTURER OF THE PROTECTIVE GLOVES AND HAS TO BE OBSERVED.

**RESPIRATORY PROTECTION:** RESPIRATORY PROTECTION IS NECESSARY AT INSUFFICIENT VENTILATION, EXPOSURE LIMIT OVERSHOOT AND/OR INSUFFICIENT EXHAUST.

USE: POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) / FILTERING DEVICE (FULL MASK OR MOUTHPIECE) WITH FILTER ABEK1/ABEK2.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**
**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE:	FLUID
COLOUR:	N-HEXANE
ODOUR / ODOUR THRESHOLD:	TOLUENOEL
CHANGE IN CONDITION:	
MELTING POINT/MELTING RANGE:	UNDETERMINED
BOILING POINT/BOILING RANGE	> 60 °C
FLAMMABILITY (SOLID, GASEOUS):	NOT DETERMINED.
EXPLOSION LIMITS:	
LOWER:	0,8 VOL. %
UPPER:	8,0 VOL. %
FLASH POINT:	NOT DETERMINED.
AUTO-IGNITION TEMPERATURE:	> 260 °C
DECOMPOSITION TEMPERATURE:	NOT DETERMINED.
PH VALUE:	N/A
VISCOSITY:	
DYNAMIC:	NOT DETERMINED.
KINEMATIC:	NOT DETERMINED.
SOLUBILITY IN / MISCIBILITY WITH:	
WATER:	INSOLUBLE.
PARTITION COEFFICIENT N-OCTANOL/WATER (LOG VALUE):	NOT DETERMINED.
VAPOUR PRESSURE:	N/A
DENSITY:	0,8 G/CM3.
RELATIVE DENSITY:	NOT DETERMINED
NANOFORM PARTICLE CHARACTERISTICS:	NOT DETERMINED
NANOFORM SOLUBILITY:	NOT DETERMINED
PARTITION COEFFICIENT N-OCTANOL / WATER:	NOT DETERMINED

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (CONT.)**
**OTHER INFORMATION**

INFORMATION WITH REGARD TO PHYSICAL HAZARD CLASSES: NO FURTHER RELEVANT INFORMATION AVAILABLE.

OTHER SAFETY CHARACTERISTICS: NO FURTHER RELEVANT INFORMATION AVAILABLE.

**SECTION 10: STABILITY AND REACTIVITY**
**REACTIVITY:** NO FURTHER RELEVANT INFORMATION AVAILABLE.

**CHEMICAL STABILITY**
**THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED:** NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS.

**HAZARDOUS DECOMPOSITION PRODUCTS:** THE VAPOURS MAY FORM EXPLOSIVE MIXTURES WITH THE AIR.

**CONDITIONS TO AVOID:** AVOID OVERHEATING. AVOID ALL SOURCES OF IGNITION. AVOID EXPOSURE TO AIR AND HUMID.

**INCOMPATIBLE MATERIALS:** STRONG ACIDS, STRONG OXIDISING AGENTS.

**HAZARDOUS DECOMPOSITION PRODUCTS:** IN THE EVENT OF THERMAL DECOMPOSITION OR FIRE, GASES AND VAPOURS THAT ARE POTENTIALLY DANGEROUS TO HEALTH MAY BE RELEASED.

**SECTION 11: TOXICOLOGICAL INFORMATION**

IT IS REQUIRED BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD TO INCLUDE ALL THE KNOWN HAZARDS OF THE PRODUCT OR COMPONENTS INCLUDED REGARDLESS THE POTENTIAL RISK.

ALL THE INFORMATION PRESENTED BELOW CORRESPONDS TO THE UNCURED COMPONENTS INCLUDED IN THE PRODUCT. ONCE THE PRODUCT IS MIXED ACCORDING TO THE INSTRUCTIONS FOR USE IT IS SAFE FOR ITS INTENDED USE.

**INFORMATION ON TOXICOLOGICAL EFFECTS:** ACUTE TOXICITY:

CHEMICAL NAME	EXPOSURE ROUTE(S)	METHOD	SPECIES	VALUE
N-HEXANE	ORAL		RAT	LD50 2000MG/KG
	DERMAL		-	-
	INHALATION		-	-
TOLUENE	ORAL		RAT	LD50 5580MG/KG
	DERMAL		RABBIT	LD50 >12124MG/KG
	INHALATION		INHALATION	D50 28,1/MG/L 4H

**PRIMARY IRRITANT EFFECT:**
**ON THE SKIN:** IRRITANT.

**ON THE EYE:** IRRITANT.

**ADDITIONAL TOXICOLOGICAL INFORMATION**
**SEVERE EFFECTS AFTER REPEATED OR PROLONGED EXPOSURE:** -

**INFORMATION ON OTHER HAZARDS**
**ENDOCRINE DISRUPTING PROPERTIES:** NO FURTHER RELEVANT INFORMATION AVAILABLE.

**OTHER INFORMATION:** NO FURTHER RELEVANT INFORMATION AVAILABLE.

**SECTION 12: ECOLOGICAL INFORMATION**
**TOXICITY**
**AQUATIC TOXICITY:**

CHEMICAL NAME	EXPOSURE ROUTE(S)	SPECIES	VALUE
N-HEXANE	ACUTE FISH TOXICITY	PIMEPHALES PROMELAS	LC50 2,5 MG/L/96H*
TOLUENE	ACUTE FISH TOXICITY	ONCORHYNCHUS	LC50 5,5 MG/L/96H*

**PERSISTENCE AND DEGRADABILITY:** NO FURTHER RELEVANT INFORMATION AVAILABLE.

**BIOACCUMULATIVE POTENTIAL:**
**PARTITION COEFFICIENT N-OCTANOL/WATER**

CAS NO.	CHEMICAL NAME	LOG POW
110-54-3	H-HEXANE	3,9
108-88-3	TOLUENE	2,73

**MOBILITY IN SOIL**
**ADDITIONAL ECOLOGICAL INFORMATION:**
**GENERAL NOTES:**

DO NOT ALLOW PRODUCT TO REACH GROUND WATER, WATER BODIES OR SEWAGE SYSTEM.

**RESULTS OF PBT AND NPNB ASSESSMENT PBT:** N/A

**VPVB:** N/A

**ENDOCRINE DISRUPTING PROPERTIES:** NO FURTHER RELEVANT INFORMATION AVAILABLE

**OTHER ADVERSE EFFECTS:** NO FURTHER RELEVANT INFORMATION AVAILABLE.

**SECTION 13: DISPOSAL CONSIDERATIONS**
**WASTE TREATMENT METHODS**

**RECOMMENDATIONS:** MUST NOT BE DISPOSED TOGETHER WITH HOUSEHOLD GARBAGE. DO NOT ALLOW TO REACH SEWAGE SYSTEM.

**UNCLEANED PACKAGING RECOMMENDATIONS:** DISPOSAL MUST BE CARRIED OUT IN ACCORDANCE TO THE LOCAL AND NATIONAL REGULATIONS CURRENTLY IN FORCE.

**SECTION 14: TRANSPORT INFORMATION**

UN-NUMBER ADR/RID, IMDG, IATA	UN1268
UN PROPER SHIPPING NAME ADR/RID, IMDG, IATA	PETROLEUM DISTILLATES, N.O.S.
TRANSPORT HAZARD CLASS(ES) ADR/RID, IMDG, IATA CLASS	3
PACKING GROUP ADR, /RID, IMDG, IATA	II
ENVIRONMENTAL HAZARDS: MARINE POLLUTANT	YES
SPECIAL PRECAUTIONS FOR USER	N/A
MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS	N/A
TRANSPORT/ADDITIONAL INFORMATION	-
UN "MODEL REGULATION"	-

**SECTION 15: REGULATORY INFORMATION**

THIS PRODUCT IS CLASSIFIED AS A MEDICAL DEVICE UNDER US REGULATIONS THE PRODUCT IS A MEDICAL DEVICE ACCORDING TO EC DIRECTIVE 93/42/EEC

**SECTION 16: ADDITIONAL INFORMATION****CAUTION: PRODUCT FOR PROFESSIONAL USE ONLY**

THE INFORMATION PROVIDED ABOVE IS BASED ON OUR PRESENT KNOWLEDGE AND EXPERIENCE. THIS SAFETY DATA SHEET REFERS EXPLICITLY TO THE PRODUCT INDICATED AND COMPRISES NO GUARANTEE OF PARTICULAR QUALITY. ANY USE OF THIS PRODUCT IN ANY WAY NOT INDICATED ON THIS SAFETY DATA SHEET WILL BE EXCLUSIVELY UNDER THE USER'S RESPONSIBILITY

**NFPA HAZARD CLASSIFICATION**

**HEALTH: 2 FLAMMABILITY: 3 INSTABILITY: 0 SPECIAL HAZARDS: NONE**

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS ARE DESIGNED FOR USE BY EMERGENCY RESPONSE PERSONNEL TO ADDRESS THE HAZARDS THAT ARE PRESENTED BY SHORT-TERM, ACUTE EXPOSURE TO A MATERIAL UNDER CONDITIONS OF FIRE, SPILL, OR SIMILAR EMERGENCIES. HAZARD RATINGS ARE PRIMARILY BASED ON THE INHERENT PHYSICAL AND TOXIC PROPERTIES OF THE MATERIAL BUT ALSO INCLUDE THE TOXIC PROPERTIES OF COMBUSTION OR DECOMPOSITION PRODUCTS THAT ARE KNOWN TO BE GENERATED IN SIGNIFICANT QUANTITIES.

ISSUE DATE: 10/04/2023

SUPERSEDES SDS: N/A