SECTION 1 : Identification of the substance/preparation and of the company / undertaking

(a) GHS product identifier
Garreco Die Spacer Thinner

(e) Emergency phone number
CHEMTREC 1-800-424-9300
CCN9105

(b) Other means of identification
NA

(c) Recommended use of the chemical and restrictions on use
For professional dental applications.

(d) Supplier's details
Garreco, LLC.
430 Hiram Road
Heber Springs, AR 72543
Phone: 1-800-334-1443

SECTION 2: Hazards identification

(a) GHS classification of the substance/mixture

Substance Name
Isobutyl Acetate

(b) Label Elements

Hazard Statements
Highly flammable liquid and vapor.

Precautionary statements

Prevention
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Wear protective gloves/protective clothing/eye protection/face protection

Response
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
In case of fire: Use dry chemical, carbon dioxide or foam to extinguish.

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

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard Symbol(s)	**Signal Word(s)**
Flame	Danger

(c) Other hazards which do not result in classification
USE WATER WITH CAUTION. Material will float and may ignite on surface of water.

SECTION 3: Composition/information on ingredients

(a) Chemical(s) Identity:		**Mixture:**
(b) Common Name:	**(c) CAS No.**	**Concentration (Percentage)**
2-methylpropyl acetate	110-19-0	100.00%

SECTION 4: First-aid measures

(a) Description of first aid measures:

INHALATION: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

EYE CONTACT: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

SKIN CONTACT: Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

INGESTION: Seek medical advice.

(b) Most important symptoms and effects, both acute and delayed:

ON SKIN: May cause skin irritation and can cause skin sensitization.

IN EYES: Liquid and vapors can cause moderate irritation. Symptoms may include tears, blurred vision and redness.

INHALATION: High concentration is irritating to the respiratory tract and may cause dizziness, headache and anesthetic effects.

INGESTION: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

(c) Indication of any immediate medical attention and special treatment needed:

IN EYES: Tears, blurred vision and redness.

INHALATION: High concentration is irritating to the respiratory tract and may cause dizziness, headache and anesthetic effects.

INGESTION: Burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

SECTION 5: Fire-fighting measures

(a) Suitable extinguishing media:

Water spray. Dry chemical. Carbon Dioxide. Foam.

(b) Special hazards arising from the chemical or mixture:

Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations.

(c) Special protective equipment and precautions for fire-fighters:

Fight fire from a protected location. Use water spray to keep fire-exposed containers cool. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

(a) Personal precautions, protective equipment and emergency procedures:

Wear appropriate personal protective equipment.

(b) Environmental precautions:

Do not release into the environment.

(c) Methods and material for containment and cleaning up:

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations

SECTION 7: Handling and storage

(a) Precautions for safe handling:

Avoid breathing high vapor concentrations. Avoid prolonged or repeated contact with skin. Use only with adequate ventilation. Wash thoroughly after handling.

(b) Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and in a well-ventilated place.

SECTION 8: Exposure controls/Personal protection

(a) Control parameters:

	ACGIH	OSHA
Chemical	**TWA**	**PEL TWA**
2-methylpropyl acetate	150 ppm	150 ppm 700 mg/m³

(b) Appropriate Engineering Controls:

Good general ventilation should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances; such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc. Provide eye bath and washing facilities.

(c) Individual protection measures:

RESPIRATORY: If engineering controls do not maintain airborne concentrations below recommended exposure limits or to an acceptable level, an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved, air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

SKIN CONTACT: For operations where prolonged or repeated skin contact may occur, chemical-resistant gloves should be worn. Contact health and safety professional or manufacturer for specific information. Observe good industrial hygiene practices.

SECTION 9: Physical and chemical properties

(a) Appearance:	Liquid
(b) Odor:	Fruity
(c) Odor threshold:	ND
(d) pH:	6.7 at 20° C
(e) Melting point / freezing point:	ND / -90° C
(f) Initial boiling point and boiling range:	117° C
(g) Flash point:	22° C (Pensky-Martens closed cup)
(h) Evaporation rate (BuAc=1):	ND
(i) Flammability:	Flammable
(j) Upper/lower flammability or explosive limits:	ND
(k) Vapor Pressure:	21 hPa (20° C)
(l) Vapor density:	4
(m) Relative density:	0.871 (20° C)
(n) Solubility:	In water 5.6 g/l (20° C)
(o) Partition coefficient: n-octanol/water:	log Pow: 2.3
(p) Auto-ignition temperature:	430° C
(q) Decomposition temperature:	ND
(r) Viscosity:	0.8 mm²/s (20° C)

SECTION 10: Stability and reactivity

(a) Reactivity:	ND
(b) Chemical stability:	Stable
(c) Possibility of hazardous reactions:	ND
(d) Conditions to avoid:	Strong oxidizing agents.
(f) Hazardous decomposition products:	Carbon Dioxide. Carbon Monoxide.

SECTION 11: Toxicological information

Acute toxicity	ND
Skin corrosion/irritation	Product has a defatting effect on skin
Serious Eye Damage / Irritation	ND
Respiratory or skin sensitization	May cause drowsiness or dizziness.
Germ cell mutagenicity	ND
Carcinogenicity	ND
Reproductive toxicity	ND
STOT-single exposure	ND
STOT-repeated exposure	ND
Aspiration Hazard	ND

(a) Exposure route: Inhalation, ingestion, skin contact and eye contact.

(b) Symptoms related to the physical, chemical and toxicological characteristics:
See above

(c) Delayed and immediate effects and also chronic effects from short and long tem exposure:
See above

(d) Numerical measures of toxicity:
Oral LD_{50}: (Rat) 13,413 mg/kg
Dermal LD_{50}: (Rabbit) 17,400 mg/kg
NOEL (Rat, Oral Study, 90 d) 316 mg/kg Read-across from a similar material

SECTION 12: Ecological information

(a) Ecotoxicity:
LC_{50} (Fish, 96 h) 17 mg/l
Acute - EC_{50} (Daphnid, 48 h) 25 mg/l , Chronic - EC50 (Daphnid, 21 d) 34 mg/l
EC_{50} (Alga, 72 h) 370 mg/l

(b) Persistence and degradability:
81 % (20 d, Ready Biodegradability: Closed Bottle Test) Readily biodegradable

(c) Bioaccumulative potential
ND

(d) Mobility in soil:
ND

(e) Other adverse effects:
ND

SECTION 13: Disposal considerations

Product:
Recommendation

Dispose of waste and residues in accordance with local authority requirements. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

SECTION 14: Transport information

(a) UN Number
UN 1213

(b) UN Proper shipping name
Isobutyl acetate

(c) Transport hazard class(es)
3

(d) Packing Group
II

(e) Environmental hazards
ND

(f) Transport in bulk
Refer to 49 CFR §173.242

(g) Other Information
NA

SECTION 15: Regulatory information

SARA Reporting Requirements: Immediate (acute) health hazard. Fire Hazard

SARA Threshold Planning Quantity: ND

TSCA Inventory Status: This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Other Federal Requirements: Classified as hazardous by OSHA.

Other Canadian Regulations: This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

State Regulatory Information: ND

SECTION 16: Other information

PREPARED BY: Kristofer Mainar
GAR QMS SDS REFERENCE: A049

HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:

Health	1
Flammability	3
Reactivity	0

REVISION NUMBER: 170412

CHANGES FROM PREVIOUS VERSION: Replaces A228. Reviewed for accuracy on 3/27/17. Added Chemtrec account number on 4/12/17.
Note: on 11/22/19 this SDS was corrected to show CHEMTREC instead of CHEMTRAC

ABBREVIATIONS

NA Not Applicable
ND Not Determined
NE Not Established
ppm parts per million
G Gallon
mg Milligram
L Liter
gm Gram
mol Mole
kg Kilogram
µ Micro
mm Millimeter
p Pico
Pa Pascals
c cento
LC Lethal Concentration
ACGIH American Conference of Governmental Industrial Hygienist
CPR Controlled Product's Regulation
DSL Canadian Domestic Substances List
NDSL Canadian Non-domestic Substance List
IARC International Agency for Research for Cancer
LD Lethal Dose
TC Toxic Concentration
TD Toxic Dose
BOD Biological Oxygen Demand
COD Chemical Oxygen Demand
Lo Lowest
ThOD Theoretical Oxygen Demand
TLm Threshold Limit
IC Inhibitory Concentration
DOC Dissolved Organic Carbon
H Hours
M Months
D Days
Y Years
W Weeks
NOEL No Observed Effect Level
NOAEL No Observed Adverse Effect Level
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
TLV Threshold Limit Value

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OFCHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED. THE ABOVE INFORMATION MAY BE BASED IN PART ON INFORMATION PROVIDED BY COMPONENT SUPPLIERS AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE OF THE MATERIAL, OR THE HAZARDS CONNECTED WITH SUCH USE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE ASSUME NO RESPONSIBILITY FOR THE RESULT OF ITS USE. THIS INFORMATION AND MATERIAL IS FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS/HER OWN DETERMINATION AS TO THE SUITABILITY OF THE MATERIAL FOR HIS/HER PARTICULAR PURPOSE AND ON THE CONDITION THAT HE/SHE ASSUME THE RISK OF HIS/HER USE THEREOF.