SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revi	sion number: 1		Revision date: 10/03/2018	
SECTION 1: Identification of the su	ubstance/mixture and of	the company/undertaking		
1.1 Product identifiers				
Product name:	3-Pentanone			
Product code:	P0061			
1.2 Relevant identified uses of the subs		advised against		
Identified uses:	Reagents.			
1.3 Details of the supplier of the safety Supplier:	data sheet			
TCI EUROPE N.V.				
Boerenveldseweg 6				
Haven 1063				
B-2070 Zwijndrecht				
Telephone: +32(0)3 735 07 00				
E-mail: sales-eu@tcichemicals.	.com			
1.4 Emergency telephone number:	+32(0)70 245 245			
SECTION 2: Hazards identification				
2.1 Classification of the substance or m	nixture			
Flammable liquids		Category 2		
Specific target organ toxicity - Sing	Ile exposure [Category 3]	Respiratory tract irritation, Narcotic effects		
	_			
Signal word	Danger			
Hazard statements	H225-Highly flammable liquid and vapour. H335-May cause respiratory irritation. H336-May cause drowsiness or dizziness.			
Precautionary statements		at/sparks/open flames/hot surfaces No smoki	ng.	
	P261-Avoid breathing mist			
	P280-Wear protective glov			
	P303+P361+P353-IF ŎN \$	SKIN (or hair): Take off immediately all contam	inated clothing. Rinse skin	
	with water or shower.			
		ALED: Remove person to fresh air and keep co	omfortable for breathing. Call a	
	POISON CENTER or doct	5		
		: Use dry chemical or dry sand to extinguish.		
Supplemental hazard information	EUH066: Repeated expos	ure may cause skin dryness or cracking.		
2.3 Other hazards				
Results of PBT and vPvB assessmer				
PBT:	Not applicable			
vPvB:	Not applicable			
SECTION 3: Composition/informat	ion on inaredients			
3.1 Substances	ion on ingrouionto			
Components:	3-Pentanone			
Percent:	>98.0%(GC)			
CAS RN:	96-22-0			
EC-No:	202-490-3			
Synonyms:	Diethyl Ketone, Propione			

Chemical Formula:

F

3-Pentanone

C5H10O

SECTION 4: First aid measures	
4.1 Description of first aid measures	S
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Call a POISON CENTER or doctor/physician.
Ingestion:	Call a POISON CENTER or doctor/physician. Rinse mouth.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

^{4.2} Most important symptoms and effects, both acute and delayed No data available

^{4.3} Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures		
5.1 Extinguishing media		
Suitable extinguishing media:	Dry chemical, foam, carbon dioxide.	
Unsuitable extinguishing media:	Water (It may scatter and spread fire.)	
5.2 Special hazards arising from the substance or mixture	Carbon dioxide, Carbon monoxide	
5.3 Advice for firefighters	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment	
SECTION 6: Accidental release mea	asures	
6.1 Personal precautions, protective equipment and emergency procedures	Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc	
6.2 Environmental precautions	Prevent product from entering drains	
6.3 Methods and materials for containment and cleaning up	Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.	
6.4 Reference to other sections	For disposal see section 13.	
SECTION 7: Handling and storage		
7.1 Precautions for safe handling	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfacesNo smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing.	
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Store locked up. Store away from incompatible materials such as oxidizing agents. Air-sensitive	
7.3 Specific end use(s)	No further relevant information available.	

SECTION 8: Exposure controls	s/personal protection	
8.1 Control parameters		
ACGIH TLV(TWA):	200 ppm	
ACGIH TLV(STEL):	300 ppm	
8.2 Exposure controls	Install a closed system or local exhaust. Also install safety shower and eye bath.	
Respiratory protection:	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.	
Hand protection:	Impervious gloves.	
Eye protection:	Safety goggles. A face-shield, if the situation requires.	
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.	

SECTION 9: Physical and chemical	properties
9.1 Information on basic physical and clientical	
Physical state (20°C):	Liquid
Form:	Clear
Colour:	Colorless - Almost colorless
Odour:	Acetone-like
Odour threshold:	2.0 ppm
pH:	No data available
Melting point/freezing point:	No data available
Boiling point/range:	102°C
Flash point:	13°C
Evaporation rate(Butyl Acetate=1):	No data available
Flammability(solid, gas):	No data available
Flammability or explosive limits:	
Lower:	1.6%
Upper:	3%
Vapour pressure:	2.0kPa/20°C
Vapour density:	3.0
Relative density:	0.82
Solubility(ies):	
[Water]	Soluble (47g/L, 20°C)
[Other solvents]	
Miscible:	Ether, Alcohols
Soluble:	Acetone, Carbon tetrachloride, Heptane
Partition coefficient:	0.99
n-octanol/water:	
Autoignition temperature:	452°C
Decomposition temperature:	No data available
Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available
9.2 Other safety information	No data available
SECTION 10: Stability and reactivit	y
10.1 Reactivity	No data available
40.0 Chamical stability	Ctable under annen son ditione

10.2 Chemical stability	Stable under proper conditions.
10.3 Possibility of hazardous reactions	No special reactivity has been reported.
10.4 Conditions to avoid	Spark, Open flame, Static discharge
10.5 Incompatible materials	Oxidizing agents, Strong bases

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on toxicological effect	S
Acute Toxicity:	ihl-rat LCLo:8000 ppm/4H
	ipr-rat LDLo:1250 mg/kg
	orl-rat LD50:2140 mg/kg
	skn-rbt LD50:20 mL/kg
Skin corrosion/irritation:	skn-rbt 410 mg open MLD
Serious eye damage/irritation:	eye-rbt 50 mg MOD
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	mrc-smc 14800 ppm
	sln-smc 14800 ppm
Carcinogenicity:	
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
RTECS Number:	SA8050000

SECTION 12: Ecological informat	ion	
12.1 Toxicity		
Fish:	No data available	
Crustacea:	No data available	
Algae:	No data available	
12.2 Persistence and degradability	No data available	
12.3 Bioaccumulative potential	3	
12.4 Mobility in soil		
Log Pow:	0.99	
Soil adsorption (Koc):	75	
Henry's Law (PaM 3/mol):	9.0	
12.5 Results of PBT and vPvB assess	ment	
PBT:	Not applicable	
vPvB:	Not applicable	
12.6 Other adverse effects	No data available	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system but exert extra care in igniting as this material is highly flammable. Observe all federal, state and local regulations when disposing of the substance

SECTION 14: Transport informat	ion	
14.1 UN number	1156	
14.2 UN proper shipping name		
ADR/RID	Diethyl ketone	
IMDG/IMO	Diethyl ketone	
ICAO/IATA	Diethyl ketone	
14.3 Transport hazard class(es)		
ADR/RID	3: Flammable liquid	
IMDG/IMO	3: Flammable liquid	
ICAO/IATA	3: Flammable liquid	
14.4 Packaging group		
ADR/RID	II	
IMDG/IMO	11	
ICAO/IATA	II	
14.5 Environmental hazards		
Marine pollutant	-	
14.6 Special precautions for user	No data available	
SECTION 15: Regulatory informa		
15.1 Safety, health and environmenta	al regulations/legislation spe	
Water Hazard Classes (WGK) :		Class 1 - Low hazard to waters
Substance of Very High Concern REACH Regulations (EC) No.190		Not listed
15.2 Chemical safety assessment		A chemical safety assessment has not been carried out.
SECTION 16: Other information		
Prepared by:	TCI EUROPE N.V.	
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This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

End of Safety Data Sheet