Safety Data Sheet

Revision Date 2025-01-16

Revision Number 15

	1. Identification				
Product identifier					
Product Name	TALON Superflow Metal Affinity Resin				
Other means of identification					
Product Code	635507				
Synonyms	No information available				
Recommended use of the chemic	cal and restrictions on use				
Identified uses	For research use only. Not for use in diagnostic procedures				
Restrictions on use	No information available				
Details of the supplier of the safe	etv data sheet				
USA: Takara Bio USA, Inc. 2560 Orchard Parkway San Jose, CA 95131, USA Phone: 800.662.2566/888.251.0 Web: www.takarabio.com	5618				
Emergency telephone	In case of emergency, call PERS (Professional Emergency Resource Services) 1-800-633-8253 (US) or 801-629-0667 (international).				
	2. Hazard(s) identification				
Product Classification Data					
Carcinogenicity	Category 1A				
Hazards not otherwise classified Not applicable	(HNOC)				
Label elements					
Danger					

Hazard statements May cause cancer



Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/clothing and eye/face protection

Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label) IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%
Ethanol	64-17-5	10 - 20

4. First-aid measures			
Description of first aid measures			
General advice	IF exposed or concerned: Get medical advice/attention.		
Inhalation	Remove to fresh air.		
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.		
Skin contact	Wash skin with soap and water.		
Ingestion	Rinse mouth.		

Most important symptoms and effects, both acute and delayed

Symptoms

...

	al attention and special treatment needed			
Note to physicians	Treat symptomatically.			
	5. Fire-fighting measures			
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.			
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.			
Specific hazards arising from the chemical	No information available.			
Explosion Data Sensitivity to mechanical impac	ct None.			
Sensitivity to static discharge	None.			
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.			

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
Other information	Refer to protective measures listed in Sections 7 and 8.
Methods and material for containme	ent and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

No information available.

.

. . .

. .

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

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

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Ethanol	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm	TWA: 1900 mg/m ³
		(vacated) TWA: 1900 mg/m ³	ç

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, suc	ch as personal protective equipment
Eye/face protection	No special protective equipment required.
Hand protection	Wear suitable gloves.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Paste / Gel Liquid	
Appearance	Pink slurry	
Color	No information available	
Odor	Alcohol	
Odor Threshold	No information available	
Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point/boiling range (°C)	No data available	None known
Flash point	No data available	Open cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic Viscosity	No data available	None known

Other information	
Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk Density	No information available

10. Stability and reactivity

Reactivity	No information available.		
Chemical stability	Stable under normal conditions.		
Possibility of hazardous reactions	None under normal processing.		
Conditions to Avoid	None known based on information supplied.		
Incompatible materials	None known based on information supplied.		

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.
Symptoms related to the physical,	chemical and toxicological characteristics
Symptoms	No information available.
Acute toxicity	

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS documentATEmix (dermal)99,999.00 mg/kgATEmix (inhalation-dust/mist)573.50 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat) 4 h
64-17-5			= 133.8 mg/L (Rat) 4 h

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation	No information available.			
Respiratory or skin sensitization No information available.				
Germ cell mutagenicity	No information available.			
Carcinogenicity	ingredients. Ma	ay cause cancer.	gen. Classification based or	۱ data available for
The table below indicates whether e				
	CGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X
A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen Occupational Safety and Health Administration of the US Department of Labor X - Present				
Reproductive toxicity	No information available.			
STOT - single exposure	No information available.			
STOT - repeated exposure	No information available.			
Aspiration hazard	No information	available.		

Interactive effects No information available.

12. Ecological information

Ecotoxicity

Other adverse effects

Harmful to aquatic life with long lasting effects.

No information available.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethanol 64-17-5	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation

There is no data for this product.

Component Information

Chemical name	Partition coefficient	
Ethanol	-0.35	
64-17-5		

Other adverse effects

No information available.

13. Disposal considerations

Waste treatment methods	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
California Hazardous Waste Status	This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

DOT

Not regulated

-.

15. Regulatory information

International Inventories

TSCA

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Ethanol	64-17-5	Present	Active

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL	
EINECS/ELINCS	
ENCS	
IECSC	

KECI	
PICCS	
AICS	

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

<u>SARA 313</u>

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (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).

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.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65	
Ethanol - 64-17-5	Carcinogen Developmental	
Cobalt - 7440-48-4	Carcinogen	

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	Х	X	Х
Cobalt 7440-48-4	Х	Х	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information					
NFPA HMIS Chronic Hazard Sta	Health hazards 3 Health hazards * 3 ar Legend *= Chronic I	Flammability Flammability Health Hazard		Instability 0 Physical hazards 0	Special hazards - Personal protection X
	abbreviations and acronyms una structure abbreviations and acronyms una structure controls/PE			neet	
TWA Ceiling	Time weighted average Maximum limit value	S *	TEL	Short term exposes Skin designation	
Agency for Toxic U.S. Environment European Food S Environmental Pr Acute Exposure (U.S. Environment U.S. Environment Food Research J Hazardous Subst International Unif National Institute Australia National NIOSH (National National Library of National Library of U.S. National Tox New Zealand's C Organization for E	Guideline Level(s) (AEGL(s)) tal Protection Agency Federal Ins tal Protection Agency High Produ ournal ance Database orm Chemical Information Databa of Technology and Evaluation (N I Industrial Chemicals Notification Institute for Occupational Safety a of Medicine's ChemID Plus (NLM of Medicine's PubMed database (I kicology Program (NTP) hemical Classification and Inform Economic Co-operation and Deve Economic Co-operation and Deve	y (ATSDR) Database ecticide, Fungicio ction Volume Ch ase (IUCLID) ITE) and Assessmer and Health) CIP) NLM PUBMED) ation Database (elopment Environ elopment High Pr	de, and Ro remicals nt Scheme CCID) ment, Hea oduction N	odenticide Act (NICNAS) alth, and Safety Publicatio	
Revision Date	2025-01-16	3			

Revision Date	2025-01-16
Revision Note	No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet